Ana Isabel Pires Beato  Alves de Melo

Estruturas de governança e sistemas de gestão de desempenho em universidades: um estudo comparativo entre o Reino Unido e Portugal

Governance structures and performance management systems in universities: a comparative study between the UK and Portugal
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Dissertação apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Doutor em Ciências Sociais (Doutoramento Europeu), realizada sob a orientação científica da Doutora Cláudia Sofia Sarrico Ferreira da Silva, Professora Associada com Agregação do Departamento de Gestão do Instituto Superior de Economia e Gestão da Universidade Técnica de Lisboa e co-orientação da Doutora Zoe Jane Radnor, Professor, Cardiff Business School, Cardiff University.

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In loving memory of my beloved grandparents, Maria do Céu and António Beato, who were a true example of life, strength, character, dignity and wisdom. Thank you very much for your unconditional love and support and for giving me some of the happiest memories of my life.
o júri

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Writing a thesis is a wonderful and inspiring experience, full of frustrating and depressing moments, but also insightful and joyful ones. Luckily, I did not wander this path alone, having the privilege of sharing the voyage with a number of people that contributed to the shaping and completion of the current study. All these people served as a source of inspiration and deserve my sincere appreciation.

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À semelhança do que aconteceu em muitas instituições públicas, as universidades têm enfrentado pressões crescentes para mudar, tendo de repensar as suas formas de governança e de gestão, dando mais ênfase à implementação de sistemas de gestão do desempenho (SGD). Apesar de existirem vários estudos sobre o desempenho, estes têm ignorado o uso dado à informação recolhida. Além disso, e apesar de terem ocorrido várias reformas na governança destas instituições, existem ainda poucos estudos que relacionam a governança e o desempenho. Assim, esta pesquisa visa explorar a forma como as universidades medem, reportam e gerem o desempenho e como as estruturas de governança se relacionam com estas práticas. Para alcançar o objetivo proposto, um estudo comparativo entre universidades britânicas e portuguesas foi realizado. Os dados foram recolhidos através da utilização de uma metodologia qualitativa, sendo os métodos utilizados a análise documental e entrevistas semi-estruturadas a membros dos órgãos de governo e gestão de cada instituição. A análise dos dados mostrou a inexistência de um sistema completamente integrado de gestão de desempenho (SGD) em ambas as instituições, essencialmente devido à falta de práticas de gestão de desempenho. De facto, apesar de alguns dos entrevistados terem reportado o "uso positivo" de dados sobre o desempenho, alguns relataram o "não uso" desses dados, principalmente em relação ao desempenho individual, e outros o "mau uso" dessa informação, tendo sido reportadas práticas de gaming e deturpação dos resultados. Como forma de ultrapassar alguns destes problemas, verificou-se a co-existência de duas estruturas de governança: uma 'formal', da qual fazem parte todos os órgão de governo, com um valor mais 'simbólico'; e uma estrutura 'paralela', constituída por órgãos mais âgeis, que gerem a universidade no dia a dia. Verificou-se terem sido vários os fatores a afetarem, negativa e positivamente, os SGD em ambas as instituições, tendo sido rotulados de "inibidores" e "determinantes", respetivamente. A pesquisa mostrou que, apesar de as estruturas de governança serem importantes para a implementação e funcionamento de um SGD, há outros fatores que precisam de ser levados em consideração, nomeadamente, o nível de comunicação e o nível de envolvimento dos atores no processo. Estes dois fatores são considerados relevantes para a integração bem sucedida de práticas de medição, reporte e gestão de desempenho. Esta integração, juntamente com outras mudanças que ocorreram em termos de governança, contribuirá certamente para que se passe de um sistema em que se governa o desempenho para um sistema em que se governa para o desempenho.
Similarly to what happened in many public organisations, universities have been facing increasing pressures to change, having to rethink their traditional forms of governance and management, putting a new emphasis on the implementation of performance management systems (PMS). Although there are several studies on performance, these have not focused on the use of performance information. Moreover, and even though a lot of changes happened in the governance of these institutions, there are few studies that relate governance and performance. Thus, this research aims at exploring how universities are measuring, reporting and managing performance and how governance structures relate to it. To achieve the research aim, a comparative study between Portuguese and British universities was conducted. Data was collected through the use of a qualitative methodology, being the methods used documentary analysis and semi-structured interviews to members of each institution’s governing and management bodies.

Data analysis showed the inexistence of a fully integrated performance management system (PMS) at both institutions, mainly due to the lack of management practices. Indeed, despite some reports on the ‘positive use’ of performance information in both cases, some interviewees reported the ‘non-use’ of the data collected, especially in relation to individual performance, and others the ‘misuse’ of that data, with practices of gaming and misrepresentation being reported. In order to overcome some of these problems, data showed the co-existence of two governance structures in both universities: a ‘formal’ structure, composed of all the governing bodies, with a more ‘symbolic’ role; and a ‘parallel’ structure, composed of more agile bodies that manage the university on a daily basis.

Several factors were perceived to affect, either negatively or positively, PMS in both institutions, being labelled ‘inhibitors’ and ‘determinants’, respectively. The research showed that even though structures are important for the implementation and functioning of PMS, there are other factors that need to be taken into consideration when building a PMS, namely the level of communication and the level of involvement of different actors in the process. These two factors are regarded as particularly relevant for the integration of measurement, reporting and management practices. This integration of practices, together with other changes that started to occur in terms of governance, will most likely contribute to the desired move from performance management to performance governance, where instead of governing performance, institutions will be governing for performance.
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Abbreviations

A3ES – National Agency for the Evaluation and Accreditation of Higher Education
AQSC – Academic Quality and Standards Committee
ASDAR – Administrative and Service Departments Annual Review
BSC – Balanced Scorecard
CCADUA – Evaluation Coordination Council
CNAAA – Council for National Academic Awards
CNAVES – National Council for the Evaluation of Higher Education
CRUP – Council of Rectors of the Portuguese Universities
DARO – Development and Alumni Relations Office
DIMAS – Statistical Survey to Graduates and Students Enrolled in Higher Education
DLHE – Destination of Leavers in Higher Education Survey
ECIU – European Consortium of Innovative Universities
EHEA – European Higher Education Area
ENQA – European Association for Quality Assurance in Higher Education
EU – European Union
EUA – European University Association
EURASHE – European Association of Institutions of Higher Education
FCT – Foundation for Science and Technology
FUP – Foundation of Portuguese Universities
GPEARI – Planning, Strategy, Evaluation and International Relations Office
HEFCE – Higher Education Funding Councils for England
HEI – Higher Education Institution
HEQC – Higher Education Quality Council
HESA – Higher Education Statistics Agency
ISB – International Student Barometer
KPI – Key Performance Indicator
MCTES – Ministry of Science, Technology and Higher Education
NPM – New Public Management
NSS – National Students' Survey
OECD – Organisation for Economic Co-operation and Development
PI – Performance Indicator
PMS – Performance Management System
PSRBs – Professional, Statutory and Regulatory Bodies
QAA – Quality Assurance Agency
QUAR – Evaluation and Accountability Framework
RAE – Research Assessment Exercise
RAIDES – Survey to the Record of Enrolled Students and Graduates in Higher Education
RJIES – Legal Regime of Higher Education Institutions
SGQ – Quality Assurance System
SIADAP – System for the Evaluation of Performance within Public Administration
UA – University of Aveiro
UFC – Universities Funding Council
UGC – University Grants Committee
UK – United Kingdom
US – United States
UW – University of Warwick
Introduction
"The greater danger for most of us lies
not in setting our aim too high and falling short;
but in setting our aim too low, and achieving our mark."
Michelangelo

"His promises were, as he then was, mighty;
But his performance, as he is now, nothing."
William Shakespeare

The nature of public services has changed over the years, mainly induced by new
government orientations and social, economic and technological changes. In fact, when
the institutions of bureau-professional control that existed in most countries started to be
challenged, there were a considerable number of initiatives aimed at restructuring public
service organisations by implementing a new form of management, more concerned with
the organisation and coordination of services towards an increased efficiency in service
delivery (Bleiklie et al. 2000; Mwita 2000; Pollitt 2003). In order to explain the reforms that
took place in many countries, some authors came up with concepts such as
'managerialism' (Aucoin 1990; Pollitt 1990), 'New Public Management' (NPM) (Hood
1991), 'market-based public administration' (Lan and Rosenbloom 1992), the 'post-
bureaucratic paradigm' (Barzelay 1992), or 'entrepreneurial government' (Osborne and
Gaebler 1992). The key features of the reinvention of the public sector were: "a focus on
management, not policy, and on performance appraisal and efficiency; (...) the use of
quasi-markets and contracting out to foster competition; cost cutting; and a style of
management which emphasizes, amongst other things, output targets, limited-term
contracts, monetary incentives and freedom to manage" (Rhodes 1991: 1). These new
management ideas put the focus on making the public sector more competitive and
responsive to citizens' needs by offering "value for money, choice flexibility, and
transparency" (OECD 1993: 9).

Similarly to what happened in many public organisations, universities also faced
increasing pressures to change their 'traditional' nature (Amaral and Magalhães 2002).
According to the existing literature, several exogenous forces have contributed to the urge
to reform these institutions. Among these are the following: first, the shift from being 'Ivory
Towers', inhabited by scholars with the liberty to pursue knowledge in a rigorous and
critical way, enjoying the independence of mind that came from autonomy and intellectual
freedom (Barry et al. 2001; Czarniawska and Genell 2002), to being deliverers of mass higher education (Halsey 1995); second, the increasing difficulty of exclusively financing the institutions with public funds; third, European policies; and finally, the emergence of new approaches to public policy, such as NPM (Hood 1991; Shattock 1999; Chevaillier 2002; Salter and Tapper 2002).

In order to address the environmental change, many universities started to rethink their traditional forms of organisation, governance and management, and implemented new strategies that put an emphasis on the introduction of effective co-ordination and control systems, needed to improve organisational performance (Clark 1998; Vilalta 2001; De Boer 2003). As a result, the university culture has increasingly moved towards a market-driven enterprise culture, largely reflecting the new management models that have spread throughout the public sector (Ackroyd and Ackroyd 1999). To several authors (e.g. Meek 2000; Etzkowitz 2003), a trend to reorganise and restructure modern universities as entrepreneurial universities emerged.

Since the public is now devoting more attention, time and money to performance measurement and management (Pollitt and Bouckaert 2000), universities are increasingly urged to demonstrate that there have been improvements in their performance and that their goals and objectives are being attained. This has made it crucial for effective performance measurement and management approaches to be developed and applied (Bovaird and Loffler 2002). As a result, performance management systems (PMS) have been implemented in some universities and many of these institutions started moving from traditional models of participative management towards more corporate models of management (Vilalta 2001). In several countries, a battery of performance indicators (PIs) was developed, mostly by government initiatives, to monitor the quantitative aspects of performance (Cave et al. 1988). It was the beginning of what Neave called the 'Evaluative State' regarding higher education (Neave 1988). Universities would be granted more managerial autonomy, in return for increased accountability.

The growing interest for performance enhancement, both in the private and public sectors, led to prolific research, especially on the topic of performance measurement, and to the development of numerous performance measurement frameworks (e.g. Fitzgerald et al. 1991; Kaplan and Norton 1992; Neely and Adams 2001). Some higher education researchers also studied this topic, looking mainly at the selection and use of PIs (e.g.
Goedegebuure et al. 1990; Johnes and Taylor 1991; Cave and Hanney 1992; Tam 2001; Tambi et al. 2008) or at the development, implementation and/or analysis of quality assurance mechanisms (e.g. Brennan and Shah 1997; Brown 2004; Filippakou and Tapper 2010; Langfeldt et al. 2010; Shah et al. 2011; Stensaker et al. 2011). Only more recently, there has been an interest in studying performance management in higher education (e.g. Simmons 2002; Talib 2003; Adcroft and Willis 2005; Broad et al. 2007; Arena et al. 2009; Breakwell and Tytherleigh 2010; Haapakorpi 2011).

Thus, it is believed that too much attention has been put on how to measure performance or on how to build quality mechanisms, often forgetting to look at what is considered to be the most important part of the process: what is being done with the performance data collected during the measurement process, and who or what may be influencing those practices.

Moreover, and even though there were also considerable changes in the governance of universities, motivated by the reforms that occurred in most higher education systems, there are very few studies that look at governance and performance (Knott et al. 2004; Aghion et al. 2009). The interest in relating these two concepts became even more relevant when several scholars (e.g. Bouckaert and Halligan 2008b; Sarrico 2010; Halligan et al. 2012) predicted a move to a new mode of governance, called by some as 'Network Governance' (e.g. Klijn 2005) and by others 'New Public Governance' (e.g. Osborne 2006). Bouckaert and Halligan (2008b), even speak of a move from 'performance management' to 'performance governance'.

Thus, drawing upon literature on performance management and literature on governance, applied to the context of higher education, this research is aiming to explore how universities are measuring, reporting and managing performance and how governance structures relate to it, thus bringing new insights into governance and performance management literature, and contributing to the literature on public management, applied to the context of higher education.

Performance is looked at from a systems perspective, adapting Bouckaert and Halligan's (2008b) performance management framework to higher education, and three dimensions of analysis are used – measurement, reporting and management. Governance structures are analysed by using a new analytical framework, which is composed of an 'outer ring',
comprising the external coordination mechanisms of higher education – the state, the market and Europe –, and an 'inner ring', integrating the key actors in the governance and management of universities – the four Estates (Academic, Administrative, Student and External Representatives). The proposed framework extends Clark's (1983) Triangle of Coordination to other internal stakeholders of the university, revisiting the concept of the university's Estates proposed by Neave and Rhoades (1987).

In order to accomplish the aforementioned research aim, this thesis is organised in eight chapters. In Chapter 1, the traditional nature of public services and the reasons that have led to a reinvention of public sector organisations are looked at, followed by a similar analysis, but applied to the context of higher education. Chapter 2 is dedicated to understanding how universities are governed and managed. First, the concepts of 'governance' and 'management' are defined and the main changes that have happened in higher education in relation to these issues are analysed. Then, a systemic view of higher education is presented, examining both the external environment and the main internal and external stakeholders. Finally, a new framework to analyse governance structures in higher education is introduced. In Chapter 3, the increased interest in performance management is explored; the concepts of performance measurement, reporting and management are clarified; performance is analysed from a systems point of view and some performance management models are presented; and, finally, an integrative model representing a performance management system for higher education is introduced. At the end of Chapter 3, a summary of the literature review conducted in the first three chapters is presented, explaining the choice of research topic in light of the gaps found in the literature and presenting the research questions and objectives. Chapter 4 is dedicated to the research design. First, it introduces the different research paradigms available to researchers and explains why a phenomenological paradigm and an interpretative approach were preferred over others. Then, it displays the reasons behind the choice of a qualitative methodology and a case study design, justifying the selection of the two cases – the University of Warwick in the UK and the University of Aveiro in Portugal. Finally, the research methods used to collect data are presented and the techniques employed to treat and analyse that data are displayed. In Chapter 5, the British higher education system is introduced, namely its history, governance and management, main evaluation exercises and funding system; the University of Warwick is characterised in terms of history, student and staff numbers, and finances; and the findings that resulted
from the fieldwork conducted for seven months at that university are displayed. The structure of Chapter 6 is very similar to the one of Chapter 5. The Portuguese higher education system is introduced, in relation to the same issues mentioned before; the University of Aveiro is characterised; and the findings that resulted from the fieldwork conducted for six months are displayed. In Chapter 7, a cross-case analysis is presented and the most important findings that arose from the research are discussed, confronting them with the existing literature, in light of the four research questions delineated at the end of the literature review. Finally, in Chapter 8, the main conclusions of the research are revealed; the contribution to knowledge and to practice are explained; the main limitations of the research are discussed; and possible future lines of work are proposed.
1

The changing nature of public services: the case of higher education
New government orientations and economic, technological and social changes modified the nature of public services. The fiscal conditions imposed by the European Union (EU) on member countries to reduce public spending, the absence of a managerial attitude, and the need to hold someone responsible for not achieving organisational pre-established goals or for not being able to control costs, led to an increased interest in the transference of management practices from the private into the public sector (Pollitt and Bouckaert 2000; Doherty and Horne 2001).

Also in higher education, there has been a questioning of its 'traditional' nature, a decrease in public support, both politically and financially, and accusations of having insufficient responsiveness, effectiveness and efficiency. As a result, higher education institutions (HEIs) were increasingly urged to develop and apply management approaches (De Boer 2003; Santiago et al. 2006).

Understanding the way HEIs are governed and managed today and how they are coping with growing pressures to restructure, improve performance and introduce control mechanisms, would not be possible without setting the context, that is, without looking at the changes that have occurred in public services, in a more general way, and, more specifically, in higher education. This is what will be done in the present chapter.

This chapter is organised in the following manner: first, the traditional nature of public services will be looked at; second, the reasons that have led to a restructuring of public organisations will be described, focusing on the emergence of a new model of public management; finally, the context of higher education will be researched further, exploring, first, its traditional nature and, later, the changes that have taken place in this sector.
1.1. The traditional nature of public services

The nature of public services has changed over time, along with the organisation and type of intervention of the state.

By the end of the nineteenth century, the role of the state was minimal in many countries. Most current public services were either private or charity services (Osborne and McLaughlin 2002). The state, which practiced a 'laissez-faire' policy, was little involved in the supply of social services (Ackroyd 1995).

After the Second World War, most Western governments were anxious to avoid a return to high levels of poverty and unemployment. They started to intervene by rationalising many public services and introducing subsidies and price controls in others. It was the 'welfare state' era, characterised by a compromise between the principles of inequality (market-driven) and equality (state guaranteed citizenship). It was a time guided by: a mixed economy, based on the Keynesian principles of macroeconomic planning; a benevolent role of the state in managing the economy; and public spending on social and welfare services. Governments were believed to have an important role in the correction of market failures and the social obligation to provide social security, education, health care, and other infrastructures, increasing the need for public services' management (Ackroyd 1995; Clarke and Newman 1997; Doherty and Horne 2001; Osborne and McLaughlin 2002).

The post-war 'welfare state' was structured by a commitment to two modes of coordination: the bureaucratic, exerted by administrators, characterised by top-down relations; and the professional, integrated by experts' advices in decision-making (Baldridge 1971). The decoupling of bureaucratic and professional structures was mainly influenced by the works of Woodrow Wilson and Frederick Taylor, in the United States (US), and Max Weber, in Germany (Hughes 2003; van Bockel and Noordegraaf 2006).

In 1887, Wilson wrote in his famous article *The Study of Administration* that there should be a clear separation of politics from administration. According to this author, public

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1 Keynesian economics advocates government intervention, or demand-side management of the economy, to smooth out the bumps in business cycles and achieve full employment and stable prices. To stimulate the economy, government intervention should take the form of government spending and tax breaks. To curb inflation, government should cut spending and raise taxes.
administration had everything to do with the "detailed and systematic execution of public law, (...) [being] the broad plans of governmental action (...) not administrative" (Wilson 1887). To him, political issues should be treated by politicians and administrative issues should be executed by professionals (Wilson 1887).

Frederick Taylor argued, in his monograph The Principles of Scientific Management, written in 1911, that "the best management is a true science, resting upon clearly defined laws, rules and principles, as a foundation" (Taylor 1967). He defended, among other principles, the standardisation of work, which meant finding the 'one best way of working', the division of the work into routine tasks, and systematic control (Taylor 1967). Even though scientific management principles were first put forward for the private sector, they were later applied to the public sector, mainly because the theory advocated the replacement of ad hoc decision-making by efficiency and science (Hughes 2003).

Influenced by Wilson's (1887) earlier plea for separating 'administration' from 'politics', Max Weber formalised ways of organising collective action and stressed the relevance of acting impersonally within a strict 'bureaucratic' framework, creating what became known as the 'bureaucratic paradigm', often referred to as the 'old orthodoxy', the 'old-time religion' or simply 'traditional public administration'.

To Weber (1964), the bureaucratic type of organisation was characterized by: a clearly defined hierarchy; impersonal and abstract division of tasks; well defined procedures and rules for all thinkable situations; contractually fixed salaries for officials, who did not own their positions or the means of production; a regular career and a fixed job for the bureaucratical worker; and selection and promotion based on each worker's technical competence. Based on these principles, Weber believed bureaucracy constituted the most efficient response to the problems created by the development of the 'capitalistic system' and observed tendencies of bureaucratisation, not only within private sector enterprises, but also in the army, the church, and universities (Giddens 1972; Abrahamsson 1993).

Picking up some of Weber's ideas, mainly concerning the degree of division of tasks (more centralised or decentralised) and the way tasks were coordinated (defining the prime coordination mechanism), Mintzberg (1979) identified five types of structural configurations, resulting from the different combinations of the elements mentioned above. The five structures were: the simple structure; the machine bureaucracy; the professional
bureaucracy; the divisionalised form; and adhocracy. Mintzberg’s structural configurations also depended on the role played by the different parts of the organisation. According to Mintzberg (1979), these were: the ‘strategic apex’, constituted by full-time top managers responsible for the entire organisation; the ‘operating core’, which was the basis of the organisation, where people did the basic work (production of goods or service delivery); the ‘middle line’, a hierarchy of authorities between the apex and the core (middle management); the ‘techno-structure’, often directed towards standardisation of the work (staff); and the ‘support team’, which supported the organisational logistic.

The part of the organisation that played the most important role, the dominant coordination mechanism, and the degree of decentralisation, would place, according to Mintzberg (1979), organisations within one of the five ‘ideal’ structural configurations.

In the simple structure, the strategic apex had the key position, forcing vertical and horizontal centralisation (here the manager had a strong power position); in the machine bureaucracy, the technostructure had the key role, leading to the standardisation of working processes; in the professional bureaucracy, the operating core had the main position, forcing professionalisation; in the divisionalised form, based on the standardisation of the output, the middle-line had the key role; and, finally, in adhocracy, the support structure had the key position, sometimes together with the operating core, forcing cooperation (it was based on mutual adjustment).

As stated above, after the Second World War, and until the mid-1970s, a bureaucratic and professional configuration prevailed. According to Mintzberg (1979: 348), "[the] structural configuration sometimes called Professional Bureaucracy [was] common in universities, general hospitals, school systems, public accounting firms, social work agencies, and craft production firms".

This system reinforced the autonomy of practitioner groups and represented a highly decentralised approach to managing, leaving professionals to manage themselves, and using managers only for routine administration, mediation and keeping records of allocations between different groups of practitioners. Trust in professional self-regulation manifested itself not only in the willingness to accept a high level of professional involvement in the process of policy formulation, but also by the absence of control.
adopted by the central government towards regulating professional practice (Kirkpatrick et al. 2005).

By the 1980s, governments were not convinced that the traditional model of administration, based on bureaucracy and professionalism, provided an effective form of management for public services, when compared to the private sector, and started to implement changes as a result (Hughes 2003). In Section 1.2, the factors that have pressured governments to reform public services and the changes that have taken place in those services will be discussed.

1.2. The emergence of a new model of public management

Several issues contributed to the disenchantment with the skills and capabilities of public services. Pollitt and Bouckaert (2000) pointed out the main factors that, according to them, led to the process of reform in many countries. These are: global economic forces; socio-demographic change; national socio-economic policies; new management ideas; party political ideas; and pressure from citizens. Let us look closer at each one of them.

First, significant shifts happened in the economy, forcing governments to respond (Peters 1996). The fiscal crisis in most OECD countries in the 1980s and 1990s, triggered by the first oil shock of the 1970s, led to severe constraints, as tax revenues declined in a relative sense (Pollitt and Bouckaert 2000; Pollitt 2003; Kirkpatrick et al. 2005). More recently, the late 2000s financial crisis affected the entire world economy, with higher detriment in some countries than others. These economic shifts showed that it is no longer sustainable to maintain high levels of public spending for a long period of time.

Secondly, a demographic change occurred in almost all industrialised countries. In fact, in the last decades, there has been a disturbing decrease of the 'economically active' population, motivated by an ageing society and by high unemployment rates. Not surprisingly, this has had a severe impact on government revenue, aggravating the fiscal crisis of the state (Peters 1996; Pollitt and Bouckaert 2000; Kirkpatrick et al. 2005).

Thirdly, the increasing influence of supra-national bodies led to legislative or policy changes at the national level. For example, in the mid- and late-1990s, EU member states had to struggle to meet Maastricht 'convergence criteria'. This put downward pressure on
public spending, leading, at least in the short-term, to higher unemployment rates (Pollitt and Bouckaert 2000; Bovaird and Loffler 2002; Hughes 2003).

Fourthly, the emergence, over the last two decades, of new management approaches and techniques, such as Total Quality Management or benchmarking, generated many ideas on how to change the management of public services (Pollitt and Bouckaert 2000).

Fifthly, pre-defined ideas of political parties, which can be more or less ideologically charged, may influence the way they govern. For example, in the 1980s and 1990s, the doctrine that was influential in a number of countries, such as the United Kingdom (UK) and the US, was 'privatisation', leading to the need to reduce the public sector's size (Pollitt and Bouckaert 2000; Hughes 2003).

Finally, the public reaction against public spending, demanding a more efficient and effective public service (especially the political left) or a shrinking of the government (mainly the political right), has also had an impact (Peters 1996). In fact, many citizens were unhappy, since they believed some services were delivered in an inequitable way and that civil servants were not as efficient and productive as they should be (Pollitt and Bouckaert 2000; Kirkpatrick et al. 2005). The legitimacy of established modes of professional organising started to be challenged, since, despite their claims of neutrality and impartiality, the welfare professions were helping to produce relations of power and inequality. Concerns about the accountability of the professions and the extent to which they could be trusted to manage public services independently of external control emerged (Kirkpatrick et al. 2005).

When the institutions of bureau-professional control that existed in most countries started to be challenged, there were a considerable number of initiatives aimed at restructuring public service organisations by implementing a new management more concerned with the organisation and coordination of services towards an increased efficiency in service delivery (Bleiklie et al. 2000; Mwita 2000; Pollitt 2003; Kirkpatrick et al. 2005).

In order to classify and explain the reforms that took place in many countries, some authors came up with concepts such as 'managerialism' (Aucoin 1990; Pollitt 1990), 'NPM' (Hood 1991), 'market-based public administration' (Lan and Rosenbloom 1992), the 'post-bureaucratic paradigm' (Barzelay 1992) or 'entrepreneurial government' (Osborne and
Gaebler 1992). Table 1 summarises the main ideas of these new public management paradigms.

**Table 1 – Summary of the ideas of the new public management paradigms**

<table>
<thead>
<tr>
<th>Paradigms</th>
<th>Authors</th>
<th>Components/Assertions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerialism</td>
<td>Aucoin 1990 and Pollitt 1990</td>
<td>1) Market and market-like environments are more effective regulators than the state; 2) Market and market-like organisations are more efficient than public sector organisations; 3) Organisations need to respond to environmental changes; 4) Market mechanisms rely heavily upon the merits of individual choice.</td>
</tr>
<tr>
<td>Market-based public administration</td>
<td>Lan and Rosenbloom 1992</td>
<td>To provoke a substantive debate between advocates of new governance and traditionalists in public administration, Lan and Rosenbloom present a framework for comparing old and new ideas and observe that the chief aim of market based public administration approach is that public administration can achieve its historic quest for both efficiency and responsiveness to the public through competitive market-like practices.</td>
</tr>
<tr>
<td>Post-bureaucratic paradigm</td>
<td>Barzelay 1992</td>
<td>Maintains similar goals of market-oriented, customer-driven, and entrepreneurial reforms. It is geared towards executive and political leadership and providing results of value to an empowered customer of public services.</td>
</tr>
</tbody>
</table>
Although all these paradigms brought new ideas on how to restructure public service organisations in order to increase efficiency in service delivery, two of them – Managerialism and NPM – became more prominent in the literature of public management, being also the ones most commonly referred to in the higher education literature. Therefore, in the following sub-sections (1.2.1 and 1.2.2), these two approaches will be looked at in more detail.

1.2.1. Managerialism

The concept of 'managerialism' was brought up for the first time in 1941, by James Burnham. In his book, *The Managerial Revolution*, Burnham argued that capitalism was disappearing and being substituted by 'managerialism'. In his view, a new social class – the managerial class – was emerging, and replacing capitalists, the old ruling class (Burnham 1941).

Even though this notion had already been presented in the 1940s, 'managerialism' only gained expression during the 1980s, with the governments of Margaret Thatcher in the UK and Ronald Reagan in the US. That is why some authors classify it as 'new managerialism' (e.g. Deem 1998; Reed 2002; Kirkpatrick et al. 2005).

Authors like Pollitt (1990), Trow (1994), Clarke and Newman (1997), Meek (2003), and Deem and Brehony (2005) perceive 'managerialism' as an ideology. According to Meek (2003), there is a difference between management and 'managerialism'. This author states that while 'management' can be seen as a "set of good or best practices in running an organisation (...) ['managerialism' is a set of] ideological principles and values that a group of actors imposes on another in an attempt to control their behaviour" (Meek 2003: 11). To Trow (1994: 11) the 'ism' points to "an ideology, to a faith or belief in the truth of a set of ideas which are independent of specific institutions".

Amaral et al. (2003a) state that 'managerialism's main concern is to reach the maximum efficiency (measured by the output/input ratio) and performance, either individual or institutional. According to these authors, this ideology is based on a set of assertions: first, market and market-like environments are more effective regulators than the state; second, market and market-like organisations are more efficient than public sector organisations;
third, organisations need to respond to environmental changes; and fourth, market mechanisms rely heavily upon the merits of individual choice.

Therefore, this ideological model of governmental and institutional order, which represents the response to changes in the economic, political and social environments across the public sector, emphasises the import of ideas and practices from the private world of business into the world of public service. It pursues efficiency and effectiveness in the field of service delivery and advocates labour force restructuring in order to facilitate teamwork and flexibility (Johnson and Deem 2003; Deem and Brehony 2005). Finally, it is also associated with new kinds of imposed external accountability, including the widespread use of "marketisation, performance management, league tables, developed budgets and targets" (Brehony and Deem 2005: 396).

Even though the term 'managerialism' has been used by many authors, including in the field of higher education, to explain the administrative reforms that have taken place in the public sector of many OECD countries, NPM has been the most widely used designation, at least over the last three decades.

1.2.2. New Public Management

A well-known definition of NPM was presented by Hood (1991: 4-5), who defines the main components of the doctrine that has spread from the late 1970s onward:

- 'Hands-on professional management' in the public sector – active, visible and discretionary control of organisations from named persons at the top;
- Explicit standards and measures of performance – definition of goals, targets, indicators of success, preferably expressed in quantitative terms, especially for professional services;
- Greater emphasis on output controls – resource allocation and rewards linked to measured performance; breakup of centralized bureaucracy-wide personnel management;
- Shift to disaggregation of units in the public sector – break up of formerly 'monolithic' units. Unbundling of U-form management systems into corporatized
'units around products', operating on decentralized 'one-line' budgets and dealing with one another on an 'arms-length' basis;

- **Shift to greater competition in the public sector** – move to term contracts and public tendering procedures;

- **Stress on private-sector styles of management practice** – move away from military-style 'public service ethic'; greater flexibility in hiring and rewards; greater use of public relations techniques;

- **Stress on greater discipline and parsimony in resource use** – cutting direct costs; raising labour discipline; resisting union demands; limiting 'compliance costs' to business.

The components of NPM can be traced back to Public Choice Theory, on the one hand, and 'managerialism', on the other (Hood 1991; Ferlie et al. 1996). According to the Public Choice Theory, people are assumed to be well-informed maximizers with logically consistent preferences and a self-regarding behaviour (Dunleavy 1991). The Managerialist approach states that government would be more efficient if it would be run like the private sector.

In fact, in these 'post-bureaucratic' organisations, economic efficiency is a central belief. The private sector is seen as better than the public sector, market mechanisms and strategic behaviour are preferred to bureaucracy, and performance-based pay systems are considered superior to wage distribution based on seniority and collective rights (Bleiklie et al. 2000; Reed 2002).

These 'post-modern' organisations look a lot different from the traditional bureaucracy. They are decentralised (power has been transferred from a central body to sub-units or operational agencies, e.g. Next Steps in the UK), leadership is team based (information must be available at all levels of the organisation), and the nature of hierarchy has changed (Clegg and Hardy 1996). More attention is paid to clients, since it is believed public service organisations will learn to deliver better results, and clients will notice the change and experience increased satisfaction (Pollitt and Bouckaert 2000). Moreover, public organisations are increasingly interested in developing better methods for long-term planning and strategic management. These incorporate the definition of the organisation's mission, looking ahead to the achievement of goals and objectives, and the choice of the...
best strategy to accomplish the planned objectives (Donnelly et al. 2000; Hughes 2003). In these 'reformed' organisations, managers are also given a much greater role in policy-making, in the organisation and coordination of services, and in the consideration of efficiency in service delivery, essentially at the expense of politicians and service professionals (Bovaird and Loffler 2002; Kirkpatrick et al. 2005).

Therefore, it could be argued that the emergence of these new management ideas have contributed to put the focus on making the public sector more competitive and public administration more responsive to citizens' needs (OECD 1993).

After having replaced public administration as the main paradigm of public policy implementation and public services delivery, NPM started to be criticised by several authors. To Hood (1995) and Kickert (1997), for example, the geographic extent of NPM is limited to Anglo-American, Australasian and some Scandinavian arenas, whilst public administration remains dominant elsewhere. Ferlie et al. (1996) argue that NPM is not one phenomenon or paradigm, but a cluster of several. Rhodes (1997) states that NPM is limited and one-dimensional in its ability to capture and contribute to the management and governance of public services and of public service organisations in an increasingly plural and pluralist world.

In an attempt to provide a more comprehensive and integrated approach to the study and practice of public policy implementation and public services delivery, some authors (e.g. Rhodes 1996; Jones et al. 1997; Goldsmith and Eggers 2004; Osborne 2006; Provan and Kenis 2008) developed new conceptual tools. The conceptual tool developed by Osborne (2006) – New Public Governance (NGP) – will be explored in the next section.

1.2.3. New public governance

In an effort to predict the 'shadow of the future', as Bouckaert and Halligan (2008b) portray the difficulty in defining the successor of NPM, Osborne (2006) describes NPG. According to Osborne (2010), NPG is rooted firmly within organisational institutional and network theory. Whereas NPM may result in hollow state models (Bouckaert and Halligan 2008b), NGP allows for a:
"plural state, where multiple interdependent actors contribute to the delivery of public services, and a pluralist state, where multiple processes inform the policy-making system. Drawing upon open natural systems theory, it is concerned with the institutional and external environmental pressures that enable and constrain public policy implementation and the delivery of public services within such a plural and pluralist system. As a consequence of these two forms of plurality, its focus is very much upon inter-organizational relationships and upon the governance of processes, stressing service effectiveness and outcomes that rely upon the interaction of [public service organisations] with their environment" (Osborne 2010: 9).

Osborne (2010) believes NPG to be "both a product of and a response to the increasingly complex, plural and fragmented nature of public policy implementation and service delivery in the twenty-first century" (ibid: 9).

Similarly to what happened in many public organisations, HEIs have also faced increasing external pressures aimed at institutional change (Amaral and Magalhães 2002). The next section will provide an overview of some of the changes that have occurred in this sector.

1.3. Higher education: what has changed?

The university, understood as a complex social system, has had a considerable survival capacity, when compared to other organisations. In fact, modern universities have very similar characteristics to the first universities created (Paris, Bologna or Oxford), founded in the XII and XIII centuries. Kerr (1982: 152) states that "about eighty-five institutions in the Western world established by 1520 still exist in recognizable forms, with similar functions and with unbroken histories, including the Catholic church, the Parliaments of Isle of Man, of Iceland, and of Great Britain, several Swiss cantons, and seventy universities."

But even if many universities maintain the same procedures and characteristics they had when they were established, they had to adapt to the new forces that are reshaping higher education. In fact, Amaral and Magalhães (2001: 7) argue that:

"Universities are among the oldest institutions of Western European history, and if they have some common internal procedures and characteristics (...) and demand a certain autonomy, all of which conveys the idea of continuity, their history, on the contrary, is in many ways the archetype of institutional adaptation."
In the next sub-sections, a brief history of universities will be presented, as well as the characteristics of the first universities that were created; then, the forces that led universities to change or to adapt to new demands and the features of the 'modern university' will be displayed.

1.3.1. The traditional nature of higher education

Cobban (1992: 1245) argues that "the university is one of the most important institutional legacies which the modern world has inherited from medieval Europe".

The first European medieval institutions considered universities were established in Italy, France, and England in the late 11th and the 12th centuries. According to Barnett (1994), among these institutions are the University of Bologna (created in 1088), the University of Paris (founded around 1119), later associated with the Sorbonne, and the University of Oxford (created between 1167 and 1185). The oldest Portuguese university is the University of Coimbra, founded in 1290.

The earliest universities created in Europe by the twelfth century, were defined by Cobban (1975: 32) as:

"A guild organization of masters or students or of masters and students combined, having a high degree of juridical autonomy, the right to elect its own officers, statutory making powers, and a communal seal. It had the drawing strength to attract students from a wide area and, in addition to arts, offered instruction in at least one of the superior faculties of law, theology or medicine, maintaining a nucleus of regent masters to meet diverse teaching requirements."

Therefore, the essence of the medieval university was the academic guild organised for the mutual protection of its members and for the supervision of teaching. But these 'academic corporations' were soon the recipients of imperial, royal, papal and communal privileges (Cobban 1992). In fact, many of the medieval universities in Western Europe were born under the aegis of the Roman Catholic Church, usually as cathedral schools or by papal bull as 'Studia Generali'.

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2 The Latin term that most accurately described the medieval university was studium generale. Studium indicated a school where there were organised facilities for study, and generale referred to the ability of the school to attract students from beyond the local region (Cobban 1992).
Even if subjected to heavy secular control, the later medieval universities were far freer than earlier universities. As a matter of fact, in the later medieval period, "the European episcopate had come to an acceptance of the principle that the core and essence of a university was its autonomy" (Cobban 1992).

The development of the modern university can be placed at the end of the eighteenth and the beginning of the nineteenth centuries (Frijhoff 1992). According to several authors (e.g. Neave and van Vught 1994; Amaral and Magalhães 2002), the idea of the modern university was mainly influenced by: the reforms of Wilhelm von Humboldt in Prussia; and Napoleon I's reorganisation of the French higher education system (1808).

To von Humboldt, universities "should safeguard and guarantee the institutional autonomy and the search for knowledge 'for the sake of knowledge itself'" (Bleiklie et al. 2000: 40). Therefore, academic autonomy was individual and not institutional. The relationship with the state was that of a partnership, in which the university advanced culture and learning, acting as a cultural entity. The state provided the legislative framework conditions within which universities operated, and also prevented potential external factions and interests that could endanger the pursuit of knowledge (Neave and van Vught 1994). Thus, the basic assumption of Humboldt's idea of university was the "central importance of knowledge and its institutionalisation, freed from church or state tutelage, and from pressures of social and economic demands" (Amaral and Magalhães 2002: 4).

Academic autonomy in the Napoleonic University was more restrictive, since there was a formal administrative control over the appointment and promotion of academics, regarded as corps d'état, and a close control over programmes and courses. Thus, teaching and learning were not independent from the state (Neave and van Vught 1994).

Despite the substantial differences between the two concepts of autonomy, Neave and van Vught (1994: 271) state:

"Irrespective of whether state control involved an element of partnership or was wholly based on a principle of subordination and upward administrative accountability, academic autonomy was not simply a matter of protecting the freedoms of teaching and learning. It was also a question of protecting the modernizing sector of society against the pressures, claims and special pleading of vested interests and inherited privilege".
Universities were assumed to be agents of "national reconstruction, allied with the overhaul of recruitment to the apparatus of state" (*ibid*: 268). To Amaral and Magalhães (2002) that meant that, apart from being the main source of manpower for the state sector, universities were supposed to turn students into model and active citizens. Plus, they were expected to play an important role in the "project of forcing the national political identity through the preservation and enhancement of the national culture (...) [contributing to the] consolidation of the nation-state" (*ibid*: 3).

The relationship between the state and universities, both in the Humboldtian and Napoleonic models, was described by van Vught (1989) as the 'state control model'. This model was characterised by a strong authority of the state, which, in order to help the university to pursue its mission, protected academic freedom, and a relatively strong position of the academic oligarchy within universities. The state regulated the curriculum, the degree requirements, the access conditions, and the appointment and remuneration of academic staff, among others, while the academic community maintained a considerable authority in the regulation of internal university affairs, especially education and research. Therefore, there was a double authority, exerted by academics and state bureaucrats/politicians (Braun and Merrien 1999).

The Humboldtian idea of university, first applied to the University of Berlin, was extremely influential in many countries, and, according to Amaral and Magalhães (2002: 4), "it is still viewed by academics as an ideal form of the research university". However, over the last few decades, higher education faced increasing external pressures aimed at institutional change. The next section will describe these pressures and provide an overview of the changes that have occurred in this sector.

### 1.3.2. Pressures and changes in higher education

As discussed in the previous section, for many years, universities were regarded as respected institutions in the eyes of society. Traditionally, they emphasised self-improvement and collegial- and self-accountability. However, in the last decades, their governance, authority and status started to be questioned, in many countries, especially due to the changes that have occurred in higher education (Brennan and Shah 2000). Mora (2001: 95) argues that:
"Institutions that date back to the Middle Age have experienced the most significant shift in their entire history. They have gone from training a selected elite to educating a large proportion of the population, under what has come to be called the mass system of higher education. As a result of new demands being made, higher education's objectives have changed significantly."

In fact, new forces reshaped higher education. According to some literature (Shattock 1999; Amaral and Magalhães 2002; Chevaillier 2002; Salter and Tapper 2002), the most relevant factors that have contributed to the urge to reform HEIs were: the shift from an elite to a mass higher education system, expanding the student numbers, and bringing in new types of students requiring new types of courses; cuts in state funding, making it difficult to finance institutions exclusively with public funds; the replacement of the state by the private sector as the main employer of graduates; the emergence of new approaches, such as NPM, which emphasise market regulation; greater competition between institutions; and the political awareness of the increasing difficulty of centrally managing the definition of 'useful knowledge', especially in increasingly complex systems.

As a result, there have been external pressures to: democratise the access to higher education (the move towards mass higher education); contain costs; be accountable for the money spent; increase productivity; improve the quality of teaching and research; and develop the third mission and show its impact on society.

Moreover, the signing of the Bologna Declaration in 1999 put more pressure on many European states to establish national quality frameworks and on HEIs to introduce quality assurance mechanisms. The Ministers responsible for higher education from twenty-nine European countries (including Portugal and the UK) signed this declaration on the 19th of June 1999, one year after the Sorbonne Declaration. They agreed on important joint objectives for the development of a coherent and cohesive European Higher Education Area (EHEA) by 2010, being the main objective not to harmonise national education systems but rather to provide tools to connect them. This meant that, by 2010, higher education systems in European countries should be organised in such a way that: it should be easy to move from one country to the other (within the EHEA), for the purpose of further study or employment; and more people from non-European countries would

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3 In 1998, four countries – France, Germany, Italy and the United Kingdom – signed the Sorbonne Declaration. This declaration provided the necessary push towards the Bologna Declaration and indicated the main goals of the European Higher Education Area.
come to study and/or work in Europe, given the increased attractiveness of the EHEA. This Area should provide Europe with a broad, high quality and advanced knowledge base, and ensure the further development of Europe as a stable, peaceful and tolerant community.

Forty-six countries in the wider Europe and several international organisations worked towards establishing the EHEA, with the Ministers responsible for higher education in these countries meeting every second year to measure progress and set priorities for action. On the follow-up meetings new decisions were made. In Bergen, in 2005, the Ministers of Education agreed to the Standards and Guidelines for Quality Assurance in the EHEA drafted by the European Association for Quality Assurance in Higher Education (ENQA), in co-operation with the European University Association (EUA), the European Association of Institutions of Higher Education (EURASHE) and the European Students' Union (ESU, former ESIB). In the London meeting, in 2007, the Ministers of Education established the European Quality Assurance Register for Higher Education (EQAR), based on a proposal drafted by ENQA, EUA, EURASHE and ESU. And, in 2009, the Ministers of Education held another meeting in Leuven, opening the way to the implementation of a ranking system, in a section entitled 'Multidimensional Transparency Tools':

"We note that there are several current initiatives designed to develop mechanisms for providing more detailed information about higher education institutions across the EHEA to make their diversity more transparent. We believe that any such mechanisms, including those helping higher education systems and institutions to identify and compare their respective strengths, should be developed in close consultation with the key stakeholders" (Communiqué 2009).

Within this trend, the European Commission funded two projects: U-Map and U-Multirank. Kaiser and Jongbloed (2010: 1) describe these projects: "[While] the U-Map project provides a mapping of institutions, the U-Multirank project aims at a ranking of institutions". These recent developments will most likely lead to a ranking of European universities and to the implementation of a stratified EHEA.

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4 These were: the European Commission, the Council of Europe, the European University Association (EUA), the European Association of Institutions of Higher Education (EURASHE), the European Students' Union (ESU, former ESIB), the UNESCO European Centre for Higher Education (UNESCO-CEPES), the European Association for Quality Assurance in Higher Education (ENQA), the Union of Industrial and Employers' Confederations of Europe (UNICE), and the Education International Pan-European Structure.
With all the changes that have happened in the last decades, the university culture has increasingly moved towards a market-driven enterprise culture, largely reflecting the new management models that have spread throughout the public sector (Ackroyd and Ackroyd 1999). The state started to lose control in favour of market-driven decision-making. State regulation was seen as excessive, and the market appeared as the solution to all the problems of inefficiency and ineffectiveness resulting from that regulation (Amaral and Magalhães 2001). There was a move from the 'state control model' to the 'state supervision model' (van Vught 1989). According to the latter model, usually found in countries with an Anglo-Saxon tradition, the authority is divided between the internal administration of universities and a strong academic community. To Braun and Merrien (1999: 17):

"Typically, one finds a stronger position of deans, university presidents and the administration in comparison to most European universities, as well as a considerable influence of the Board of Trustees [in some countries]. The state only supervises the system in terms of assuring academic quality and the maintenance of a certain level of accountability".

Van Vught (1989) rejected the logic of the market, in favour of the logic of a quasi-market, since he considers that governments always play a certain role.

The introduction of the concepts of quasi-market and privatisation as mechanisms to enhance efficiency and effectiveness had a profound impact on universities. To Amaral and Magalhães (2002: 6), "education is no longer seen as a social right; it has become a service". Students started to be seen as customers or clients and HEIs viewed as service providers that want to meet their clients' needs and expectations (Meek 2003).

To Neave (1998), the passage from the 'state control model' to the 'state supervision model' explains the rise of what he called the 'evaluative state'. While, in small elite higher education systems, exclusiveness was generally sufficient to justify claims for quality to society, the changes facing higher education – massification, cuts in funding and diversification – pressured institutions towards more accountability. This has led to a growing emphasis on the implementation of more explicit and systematic mechanisms for quality assessment and management within universities (Brennan and Shah 2000; Vilalta 2001), and on the development of performance measurement and management approaches.
Before looking at the issue of performance management and analysing, in detail, the way HEIs are dealing with pressures to introduce performance management practices, it is essential to understand the way HEIs are governed and managed. This analysis will be carried out in the next chapter.
Governance and management in higher education
In order to comprehend the way universities are governed and managed, this chapter is structured in the following way: first, the concepts of 'governance' and 'management' will be defined; the major changes that have happened in higher education in terms of governance and management will be looked at; and the main typologies of governance systems developed to explain those changes and to deal with country differences and with the complexity of national governance arrangements will be displayed. Secondly, the patterns of the distribution of power of different higher education systems will be analysed. Thirdly, HEIs will be looked at as organisations. Their unique characteristics will be highlighted; the main internal and external stakeholders will be examined; the major governance models that attempt to explain the way universities are governed and managed will be outlined; and institutional behaviour will be looked at through the lens of neo-institutionalism. Finally, a new framework to analyse governance structures in higher education will be presented.

2.1. The concepts of governance and management

Interest in university governance is of long-standing and remains a contested subject and one that is still evolving to fit a changing environment (Shattock 2006). Even though there are several definitions of governance, usually varying according to the theoretical and/or ideological approach adopted (Osborne 2010) or to the level of analysis (e.g. national, local, institutional, sub-unit or discipline) (Reed et al. 2002), a simple definition would be to say that governance is not so much about what organisations do but about how they do it.

It is important to distinguish governance from related terms such as 'management', 'administration' and 'leadership'.

"Management of many is the same as management of few. It is a matter of organisation."
Sun Tzu

"To do great things is difficult; but to command great things is more difficult."
Friedrich Nietzsche
To Gallanher (2001: 1):

"Governance is the structure of relationships that bring about organisational coherence, authorised policies, plans and decisions, and account for their probity, responsiveness and cost-effectiveness. Leadership is seeing opportunities and setting strategic directions (…). Management is achieving intended outcomes through the allocation of responsibilities and resources, and monitoring their efficiency and effectiveness. Administration is the implementation of authorised procedures and the application of systems to achieve agreed results."

In a broader sense, governance can be considered to incorporate leadership, management and administration. According to Marginson and Considine (2000: 7):

"Governance is concerned with the determination of values inside universities, their systems of decision-making and resource allocation, their mission and purposes, the patterns of authority and hierarchy, and the relationship of universities as institutions to the different academic worlds within and the worlds of government, business and communities, without".

For the purpose of this research, this broader definition of governance will be adopted.

The next section will explore the changes that have occurred in the governance and management of higher education.

### 2.2. Changes in the governance and management of higher education

Many authors (e.g. Baldridge 1971; Mintzberg 1989) argue that, up to the late 1980s, and similarly to what happened in other public service organisations (see Section 1.1), HEIs presented a bureau-professional structure, characterized by the co-existence of two types of authority: the bureaucratic, put forth by administrators, and the professional, exerted by academics, who had a central role in the functioning of universities.

These two basic organisational structures (the academic and the administrative) were ruled by two separate concepts of organisational relationships: the collegiate and the hierarchical/bureaucratic. Kogan (1999: 264) defines the 'collegium' as a "group of academics of equal decision-making power acting together to determine standards of entry and accreditation, to share collective resources, and to determine divisions of labour and reward systems". Under the collegiate system, academics are accountable to their
peers. Under the bureaucratic system, decisions are taken hierarchically and there are generally a series of norms and principles on which the functioning of the system rests (Villarreal 2001), in the framework of the rule of law.

When these 'traditional' models of university governance started to be considered unfit for rapidly changing environments, more entrepreneurial strategies and structures were perceived to be needed in many countries (De Boer and Goedegebuure 2001). This move from bureaucratic and collegial models of governance towards more managerial ones has, arguably, created opposition and tension between managerial and professional norms (Amaral et al. 2003a; Lapworth 2004).

The biggest reforms took place in countries associated with the Anglo-Saxon model of system-level governance. For Australia and the UK, these reforms were not isolated to a particular public sector, but were a component of a much broader rethinking and restructuring of the role and function of government (Amaral et al. 2002).

In order to explain the changes that have occurred in terms of governance and to deal with the inter-country variation and the complexity of national governance arrangements in higher education (Braun 1999a), several authors (e.g. Clark 1983; van Vught 1989; McNay 1995; Braun 1999b) developed typologies of governance systems. Amongst the first and the most often-cited ones is Burton Clark's (1983) *Triangle of Coordination*.

The triangle represents the three powers operating in higher education, which are, according to Clark (1983), responsible for the coordination and control of its activities: the state, the market, and the academic oligarchy (see Figure 1)\(^5\).

To Clark (1983), advanced industrial countries develop different forms of coordination of higher education, which are located between the three axes: a more market-like coordination (like the US), a more state-induced coordination (e.g. Sweden), and a form of coordination based on the rule of academic oligarchy (e.g. Italy).

\(^5\) In his analysis, Clark separates the state authority into two components – the bureaucratic and the political – considering the possibility of a 'four-sided triangle' (McNay 1995).
Figure 1 – Burton Clark’s Triangle of Coordination

Source: Adapted from Clark (1983), who did not position Portugal in the Triangle.

To Clark (1983), Sweden would be closer to the extreme state coordination, since it developed a strong capacity for state officials and allied interest groups to reverse the strong power and privileges of professors.

France would be located further down away from the state extreme and more towards oligarchy, since, "despite a strong and competent ministry, the continuing situation, [had] something of the character of a standoff between the formally superior powers of the central officials and the capacities of university personnel to ward off, reshape, and attenuate state-imposed rules and policies" (Clark 1983: 142).

Italy would be closer to the extreme of the academic oligarchy, since "its prestigious and powerful national academic oligarchs traditionally have been more than a match for a relatively impotent bureaucracy" (ibid: 143).

Japan was considered a complex case. Even though, on the one hand, national coordination was formally left largely to ministerial officials; on the other, the chair system, mixed with certain Japanese characteristics of loyalty and cohesiveness, gave senior professors a strong power base (Clark 1983).

The US would be closer to the market extreme, since American academics were poorly represented in the control structure (Clark 1983).
The UK would be nearer the academic oligarchy, because of the extensive role played by intermediate bodies, such as the University Grants Committee (UGC), in which academics were dominant. Clark (1983: 143) argued that "even after the significant increase in state power that has occurred since the mid-1960s, deliberate coordination in Britain [remained] a blend of the bureaucratic and the professional".

Although Portugal was not in Burton Clark's original Triangle of Coordination, its position in the triangle could be justified by the Portuguese legal framework, which traditionally has been very rigid, and by the organisational models adopted (Rosa 2003). To Conceição et al. (1998), Portuguese HEIs could be characterised by a strong weight of the academic oligarchy, a considerable importance of the state authority, and some distance from the market forces.

Since the publication of Clark's triangle in 1983 several other typologies referring to this triangle were developed (e.g. van Vught 1989; Becher and Kogan 1992; McDaniel 1996). One of the most often quoted studies on governance of the last years was developed by van Vught (1989), who reduces Clark's three-dimensional space of governance to a two-dimensional one. This author suggests that a differentiation should be made between a 'state control model' and a 'state supervision model'. He does not consider the category of the market, since, according to him, universities do not function according to the logic of a market, but rather to the logic of a quasi-market where government always plays a certain role (van Vught 1989).

The 'state control model', characterised by a strong authority of state bureaucracy, on the one hand, and a relatively strong position of the academic oligarchy within universities, on the other, was, according to van Vught (1989), present in most European states. The 'state supervision model', characterised by a weaker authority of the state bureaucracy, could be mainly found in Anglo-Saxon countries (van Vught 1989). According to the 'state supervision model', authority is divided between a strong academic community and the internal administration of universities. The state only supervises the system in terms of assuring academic quality and the maintenance of a certain level of accountability (Braun and Merrien 1999).

Some authors (e.g. Braun 1999a; Braun and Merrien 1999) criticised van Vught's (1989) model for reducing governance to the role the state plays in the governance of
universities. To these authors, this model did not take into account, for example, the differences between the governance system of the UK and the US, which belonged, according to van Vught (1989), to the 'supervisory state model'. To Braun (1999a), the governance model proposed by van Vught (1989) was not differentiating sufficiently and should not exclude the market dimension from the analysis, since this was considered important for the intended differentiation between higher education systems.

Another criticism made to van Vught's (1989) model was the non-inclusion of new managerialism as a new form of governance (Braun and Merrien 1999). To Braun (1999a), van Vught (1989) did not see the 'state supervision model' as a shift in the belief system of governments nor as a shift in the governance of universities, regarding it as a model that always existed in Anglo-American countries.

In an attempt to overcome some of the shortcomings pointed out to van Vught's (1989) model, Braun (1999a) gave another perspective. According to him, higher education systems in the beginning of the 1980s could be classified into three groups: the 'collegium model', the 'oligarchic-bureaucratic model' and the 'market model'. The first model, characterised by the predominance of the cultural belief system, the autonomy in substantive matters, and the minor role of the state in the regulation of internal matters, offers the most freedom for universities (he gives English universities in the early 1980s as an example). The 'oligarchic-bureaucratic model' does not lend freedom in procedural matters to universities, since it is constrained by administrative calculus of the state (e.g. West Germany, France, Italy, Switzerland and the Netherlands). The 'market model' (e.g. US) is "based on the predominance of the utilitarian belief system, while substantive freedom might be lower in public universities in comparison with the European universities" (Braun 1999b: 248).

Taking into account the different reform attempts under the pressure of NPM, Braun (1999b) distinguishes between two different models: a more 'efficiency-oriented model' and a more 'client/market-oriented model'. According to him, the first emerged in most of the former oligarchic-bureaucratic countries (Germany, France, Italy and Switzerland). The 'client/market-oriented model', characterised by decentralisation, privatisation and attempts to create an attitude of client orientation in public and quasi-public institutions, emerged in countries like the US, the UK and the Netherlands. To Braun (1999b: 248),
"the switch in England's governance model from a 'collegium' to a 'market-oriented managerialism model' has been without no doubt the most radical."

Having presented the concept of governance and the changes that have occurred in the governance and management of higher education, leading to the development of typologies of governance systems, it is important to understand how the patterns of the distribution of power vary between higher education systems and over time. This will enable a better comprehension of the functioning of the two higher education systems that will be looked at within the scope of this research: the British and the Portuguese.

2.3. General patterns of the distribution of power in higher education systems

Notwithstanding its extreme importance, Clark's (1983) framework does not explore the strength of HEIs as autonomous organisations. In fact, none of the vertices of the triangle represents the top management levels of HEIs. The introduction of this 'power' became increasingly important with the transition from a 'state control model' to a 'state supervision model' (see Section 1.3.2). This shift led to a transfer of power from the state to HEIs, especially to the top management level of these institutions (Kells 1992).

Kells (1992) introduced this 'power' based on a model proposed by Clark and Youn (1976), and analysed the general patterns of the distribution of power in three higher education systems – the US, the UK and Continental Europe (Figure 2).

In the case of the US, power was concentrated at the top of the institution, both in public and private organisations, even if there were some variations due, for example, to age and prestige. To Kells (1992), there was always a strong sense of individualism and the fear of centralised power in the US, and this was, according to him, reflected in the nature of institutions. These institutions were diverse and there was a lack of control over education at national and federal level. "The result is a large system with numerous institutions, few common standards, great flexibility and diversity in a highly competitive, market-related environment" (ibid: 21). American HEIs were chartered by the state and legally controlled by what was normally called a 'Board of Trustees'. This board hired its academics and executives in almost every State.
In the UK, there existed a considerable power in the faculties, some executive capacity, and a strong government influence, exerted by a planning and a funding body (see Figure 2). Each university was responsible for its own management, deciding on issues related with the recruitment of academics and the curricula offered (Neave and van Vught 1994). To Kells (1992), for a long time, the British higher education system remained a relatively small, elite one, with common high academic standards enforced by the faculties across institutions through an exemplary external examiner system. Nevertheless, by the middle of the twentieth century, the higher education system had become costly and with little systematic regulation over large institutional issues. Neither government regulation nor the regulation of university councils were effective. Peer control in disciplines affected the form and content of the curriculum and, via peer review, the sponsor of research funds. Nevertheless, it did not regulate programmes or institutions (Kells 1992).

In Continental Europe, there were, during most part of the twentieth century (some changes happened in the last decades), two sources of power, neither of them in the hands of the university as an organisation (see Figure 2). To Kells (1992), the general pattern was for centralised definition of degree standards, tight control over new programmes, and total (or essentially total) financial support of the university by the state.

**Figure 2 – General patterns of the distribution of power in higher education systems in the middle of the twentieth century**

*Source: Kells (1992: 21)*
Within this framework, an independent set of faculties, with power to function largely as they choose within the boundaries of their statutes, operated as a counterbalancing force. Even if most of the academics had tenure guaranteed, usually through civil servant status, they had the freedom and the responsibility to teach with very little control. They controlled their own programmes and structures with little if any *post hoc* regulation by the state, by the university and by their colleagues, with the exception of the peer review of any sponsored project's research funds (Kells 1992). As Harman (1992) stated, within the 'continental mode' of governance, authority was shared by faculty guilds and state bureaucracy.

The last quarter of the twentieth century brought, according to Kells (1992), fundamental changes to several countries, changing the patterns of power and regulation of the three profiles described in Figure 2. Figure 3 displays those changes.

![Figure 3](image)

**Figure 3 – Changes in the distribution of power in higher education systems from the middle to the end of the twentieth century**

*Source*: Kells (1992: 24)

Note: Dotted lines represent the mid-twentieth century alignments.

In the US, the push for increased accountability and the economic press on HEIs and their faculties (schools and departments) led, according to Kells (1992), to a relatively small
increase in the power exerted by the government and to a decrease in the executive power and the power exerted by faculties.

In the UK, the reforms introduced by the Thatcher government in the 1980s led to major changes in the distribution of power within the British higher education system. The replacement of the UGC by the Universities Funding Council (UFC), a government-responsive funding body, increased the power of the government in HEIs and contributed to the increase (although not as substantially) of the power of the vice-chancellor and other university executives. There was also a loss of power and influence by most faculties, since they were put under pressure to be productive and to find income in an entrepreneurial-like environment (Kells 1992).

Some Continental European countries adopted systems where government guides at a distance the activities of each higher education system, leaving the institutions with the power to manage their affairs and respond to the needs of their clients and to contribute to the national or regional economic, political and social development: "Power has shifted demonstrably, but far from entirely, from ministries to institutions and to their leaders" (Kells 1992: 25).

Having analysed the way power is distributed in different higher education systems and the way it has evolved over time, the next section will look at HEIs as organisations. Being the focus of this research to explore the way governance structures relate to performance management systems, it is considered extremely important to understand how HEIs are organised and structured, before looking at performance related issues.

2.4. Universities as organisations

Higher education institutions are complex organisations, often employing and training more people than some of the largest companies. Moreover, they share some unique characteristics that distinguish them from other organisations. These features affect the issues of leadership and management in academic settings and make it difficult to find a single governance and management model that is perfectly adapted to these environments. Maassen and van Vught (1992) point out the characteristics that make HEIs unique:
• The handling of knowledge is the most crucial activity in universities (Clark 1983);
• The knowledge areas form the basic ‘building blocks’ of a HEI. Consequently, the typical organisational structure of universities is fragmented and its specialised cells are only loosely coupled;
• Decision-making power is spread across a large number of units and actors;
• Innovations in universities mainly have a ‘grassroots’ character. Sudden, comprehensive, and major changes are rare and extremely difficult to occur, because of the diffusion of power and the fragmentation of tasks (Clark 1983);
• Authority is located at the lower levels of the organisation (with academic professionals). At the level of the institutional administration, authority is rather weak (this is more common in HEIs in Continental Europe).

To van Vught (1988: 16), these characteristics limit, to a large extent, "the capacity of institutional planners to steer the professional experts in traditional bureaucratic ways".

Indeed, the rise of ideals such as 'academic freedom', which is commonly built into most HEIs, seems to have helped to create in-built resistance to management control, and seems to have limited the influence of institutional and corporate management upon the basic activities in the institution (Lockwood 1985).

Additionally, because of the multiplicity, ambiguity and complexity of goals of a university, "there is no way that anyone can assess the degree of goal achievement. No one knows if any or all the stated goals are accepted by significant groups within the system, and with what priority" (Clark 1983: 19). Due to these facts, it is difficult to maintain management and leadership at universities in the traditional sense of administration (Cohen and March 1974).

Although these aspects are relevant and should be taken into consideration when management is discussed and practiced in academic settings, it is not believed that all kinds of governance and management practices are impossible or irrelevant in the academic context. First, many of the features mentioned seem to be changing in different countries (at least there have been strong pressures for such a change, as discussed in Section 1.3.2). Second, it can be argued that academics already carry out a number of managerial roles when, for example, they are responsible for resources, curricula or
supervision of students. Thus, it seems that sometimes academics who reject a managerial label "take too narrow a definition of the term" (Kekäle 2005).

Birnbaum (1988) argues that in order to learn how HEIs work they have to be seen as organisations, as systems, and as inventions. When they are studied as organisations, they are seen as "groups of people filling roles and working together toward the achievement of common objectives within a formal social structure" (ibid: 1). When they are looked at as systems, particular roles and structures are less important, being the focus on the dynamics through which the whole and the parts interact. Finally, social systems, such as HEIs, have to be seen as symbolic inventions that exist because people believe in them.

The next section will present a systemic view of higher education, since this will be the one adopted for the purpose of this research. Looking at higher education as an open system will contribute to an understanding of the environment surrounding HEIs and the interactions between these institutions and the multiple subsystems. Moreover, it will enable the identification of the main internal and external stakeholders of HEIs, which have a major role in the way these institutions are governed and managed.

2.4.1. A systemic view of higher education

Being complex social systems, universities are in constant interaction with the surrounding environment, which is essential for their functioning. This environment comprises all the institutions and factors which are external to the organisation, but that might influence its activity.

Adopting a systemic view to look at universities, Conceição et al. (1998) applied Kast and Rosenweig's (1972) concepts of environmental suprasystem and organisational subsystems (goals and values, technical, structural, psychosocial and managerial) to HEIs:

- **Environmental suprasystem** – composed of the characteristics of the environment that surrounds HEIs and by the way this environment relates to the various subsystems and influences their structure and way of acting;
- **Goals and values subsystem** – related to the values of each individual or group and to the delineated goals, which will characterise the relationship between HEIs and society and influence strategic decision-making processes. These values and objectives, if accepted and shared by all or, at least, by the dominant groups, will become organisational values and goals;

- **Technical subsystem** – represented by knowledge and by the capabilities and techniques needed to develop processes and tasks;

- **Structural subsystem** – translated into the organisational structures of HEIs, mainly in terms of degree of centralisation and specialisation;

- **Psychosocial subsystem** – related to the organisational climate and to the way individuals and groups interact and influence the structure and functioning of the organisation;

- **Management subsystem** – built by the communication, coordination and control mechanisms of the organisation. It is linked to the distribution of resources and delegation of power. This subsystem has an integrative function within HEIs.

Based on this typology, Conceição et al. (1998) showed how each subsystem is in constant communication with the environmental suprasystem and with other subsystems (see Figure 4).

![Figure 4 – Systemic vision of a university](source: Adapted from Conceição et al. (1998: 186).
Given that the frontiers between the organisation and its environment are often blurry – for example, alumni may be part of the university or of its surrounding environment; or, an organisation can strategically influence its environment – it is important, according to Conceição et al. (1998) to distinguish between two types of environments: a more general one, and a specific one. The general environment is composed of all the environmental factors that affect every organisation in a homogeneous way, and whose impact is not decisive for the survival of those organisations. It includes, for example, a country’s economic growth and the cultural level of the population. The specific environment is composed of all the elements that directly affect the organisation's capability to be effective and to fulfil its goals. Thus, the latter environment comprises both environmental aspects and internal and external stakeholders (Conceição et al. 1998).

The concept of ‘stakeholder’ was popularised by Freeman (1984), in his book Strategic Management: A Stakeholder Approach. In that work, he defined 'stakeholder' as "any group or individual who can affect or is affected by the achievement of the organisations objectives" (ibid: 46). Amaral and Magalhães (2002) use a similar, broad definition, considering a stakeholder "a person or entity with a legitimate interest in higher education and which, as such, acquires de right to intervene" (ibid: 2).

Amaral and Magalhães (2002) define two categories of stakeholders of higher education: internal and external. To these authors, 'internal stakeholders' are the members of the academic community, meaning those who participate in the daily life of universities (students, academic staff and non-academic staff); and 'external stakeholders' are those members that have an interest in higher education, even though they come from outside the university, that is, the representatives of the 'outside world' in university governance (these include the state, employers, taxpayers, parents, international organisations, among others). Figure 5 displays the internal stakeholders of a university and some of the most influent external stakeholders.
The objectives and strategies of each group will depend on each university's characteristics. Nevertheless, some features seem to be common to every HEI: the increasing control exerted by professional associations, through mechanisms of degree accreditation; the increasing demands of students, who seek not only a degree, but also a job guarantee (Conceição et al. 1998); and the power exerted by international organisations, such as the European Commission.

Amaral and Magalhães (2002) argue that the recent changes taking place in higher education (see Section 1.3.2) indicate a loss of influence of internal stakeholders and a bigger role for external stakeholders. The latter have arguably become more powerful in the face of change, since their presence is believed to make HEIs more responsive to environmental needs and changes.

Having looked at higher education from a systemic point of view has helped to understand that HEIs are in permanent interaction with the general environment and to comprehend who are the main internal and external stakeholders of these institutions. Given that not every HEI is organised or managed in the same manner, it is now important to identify the different models that seek explanations for the way these institutions are governed and managed.
2.4.2. Governance models

Higher education literature has produced several models, both analytical and managerial, that provide a vehicle for understanding how universities are governed and managed. Rhoades (1992: 1377) argues that "governance models in the higher education literature are grounded in conceptions of authority, of legitimate rules".

Miller (1995) proposes the categorisation of higher education governance models into four groups:

- **Rational models** – these models assume that HEIs are composed of rational individuals, who will have access to relevant information for decision-making and who, through a process of reasoned discussion, will come to an agreement about the goals and strategies to achieve them. In its more simplistic form, these models make the fundamental assumption of consensus. Within this group, two models can be found: the 'bureaucratic model' and the 'collegial model'.

- **Models that emphasise ambiguity** – these models see the management of HEIs as an ambiguous, paradoxical and disorganised arena. They consider that, in each institution, there are several problems and solutions that are not necessarily articulated and that there is a group of actors that proposes solutions. There are also occasions where the institution itself has to take measures as an answer to situations of crisis or to pressures exerted by particular individuals or groups. Two models are integrated into this group: the 'garbage can model' and the 'organised anarchy model'.

- **Political models** – these models emphasise the political and interactionist aspects of the relationship between individuals and groups that constitute HEIs. They place less emphasis on the HEI as an institutional entity. The 'political arena model' fits into this group.

- **Mixed models** – these models attempt to include aspects of other models in either a sequential (Enderud 1977) or a systemic perspective (Becher and Kogan 1992).

In the next sections, the models incorporated in each of the four groups will be explored further. These are: the Bureaucratic Model, the Collegial Model, the Garbage Can Model, the Organised Anarchy Model, the Political Arena Model, and mixed models.
2.4.2.1. **Bureaucratic Model**

This model is based on Max Weber's (1964) analysis on bureaucracy and rational legal authority, which was discussed in detail in Section 1.1.

To Miller (1995: 97), a bureaucratic organisation "has a formal organizational structure, specified roles with a hierarchy, and a clear chain of command with formalized written regulations and procedures. The authority of the official – in the case of universities, an administrator or academic – will rest on the holding of an office rather than personal charisma or traditional reverence". In the pure form, a bureaucratic organisation pursues rationally justified goals, being its activities related to the attainment of those goals.

Given that this model is not flexible enough to make the necessary adjustments to a changing environment, it has been losing its power inside HEIs. Miller (1995) argues that bureaucratic models tend to be more influential when the situation is relatively stable. However, under conditions of severe cutbacks or rapid growth, the stresses of adaptation may unveil disagreements about the goals of the university, which will not be solved by rational discussion.

Nevertheless, many universities still display characteristics of the bureaucratic model in their governance and management.

2.4.2.2. **Collegial Model**

Similarly to bureaucracy, collegiality also embodies aspects of rationality, especially since both models share the assumption that through the exercise of reason consensus will be reached. The main difference between the bureaucratic model and the collegial model is that the emphasis of the collegial model is on equality and democratic discussion, while hierarchy and subordination are the characteristics of bureaucratic forms (Miller 1995).

The terms collegium and collegiality are often used in higher education. Sanders (1973) argues that collegiality is marked by mutual respect for each other's opinions; by an agreement on what good scholarship is; and by a willingness to be judged by peers.

That means that, within the collegial model, almost every decision concerning the institution is discussed in senates, councils and assemblies, where a group of academics
of equal decision-making power seats. The chief representing the group – rector or vice-chancellor – is elected from within a body of peers (Clark 1983).

Within this model, the influence exerted by certain individuals over others is related to the technical skills and knowledge demonstrated. In the bureaucratic model this influence is related to the place occupied in the hierarchy of the institution.

To Clark (1983), the collegial model is the professors' preferred way to run a university, since it gives them time to express their opinions. However, being a model where ideas come from the bottom to the top, collegial meetings often take too long, delaying the decision-making process and not leaving enough room for strategic decisions to be made.

2.4.2.3. Garbage Can Model

According to this model, proposed by Cohen, March and Olsen in 1972, there is no careful consideration of choices or strategy, like in the rational models. It considers that there are a variety of actors in the university who have problems or propose solutions and that there are occasions when the organisation has to make decisions in response to particular pressures or crises. At this juncture, ad hoc meetings occur within 'the garbage can' and there is an outcome (Cohen et al. 1972). Therefore, governance and decision-making take place through a 'garbage can' process in which problems, solutions, participants and choice opportunities are dumped together (Rhoades 1992).

To Walford (1987: 133), in this model, "the sequence of actions is not predetermined and there is a discontinuous flow of problems, solutions, participants and choice opportunities without there necessarily being any 'logical' or one to one relationship between these four elements".

2.4.2.4. Organised Anarchy Model

In a book entitled Leadership and Ambiguity, published in 1974, Cohen and March identify a type of organisation they term as 'organized anarchy'. According to them, this type of organisation has the following characteristics (Cohen and March 1974):
• An ambiguity of goals, with inconsistent and ill-defined preferences and a multiplicity of objectives;

• Activities such as teaching, consulting and other forms of professional service have ambiguous processes. While there are some regularities of procedure, the activities to be performed remain an art, learned by experience, trial and error, imitation and inventions born of necessity;

• The members of the organisation differ in the degree of time and effort they devote to its concerns. The degree of participation is not specified by an organisational chart, but by the issues addressed, the choices to be made, timing and temperament;

• The decisions made often secure only partial and erratic attention from participants, and a major share of the attention devoted to a particular issue is tied less to its content than its symbolic significance and its impact on group esteem;

• It takes a great deal of force and energy to get anything changed. There is a tendency to continue with the policies, procedures and patterns of the past;

• The data necessary for informed decision-making is not commonly collected (perhaps because of the unclear technology) and not well disseminated (because of the fluidity of participation).

The Organised Anarchy Model regards the university as a very loosely structured institution, in contrast to private organisations or government departments. According to this model, universities are disconnected organisations that, apparently, have few consensual objectives. These institutions are formed by autonomous groups little articulated between them, which act according to the moment and to different factors, such as individual preferences.

The defenders of this model do not ignore the fact that universities are composed of individuals and groups that act in order to maximise their utility; they simply consider that the institution, as a whole, does not have clearly defined goals (Cohen and March 1974).

To Miller (1995), this could be a reasonable description of interactions in the 1960s and 1970s. But, according to him, by the 1980s, with increasing government control and
reduced resources, the political aspects of university governance and the increased managerial control emerged, transforming this model into an anachronistic one.

2.4.2.5. Political Arena Model

The emergence of a political model of university management was accepted by key actors – academics, administrators and managers – in universities during the 1980s. This model assumes that individuals are motivated by self-interest and that any analysis must take into due account power relations and differences in interests. The most well-known political model is the Political Arena Model, proposed by Baldridge (1971).

Baldridge (1971) applied the expression 'political arena' to universities, since, according to him, these institutions are the synthesis of conflicts and power relations between the different agents, resulting their function from the articulation and integration of conflicting and divergent behaviours.

Baldridge et al. (1978) distinguish six assumptions about the political process, which would apply to the interactions in and of a university:

- There is a lot of uncertainty and, for much of the time, most people are not involved in the policy process;
- Individuals who spend continuous time and effort over particular issues are effective in influencing and controlling policy. In general they are predominantly senior administrative and academic staff, usually the vice-chancellor or president and the registrar;
- Universities are composed of different interest groups with different interests and goals, which are likely to come into conflict, unless there are plentiful resources;
- Conflict is normal, not being necessarily dysfunctional;
- The power and authority of the formal bureaucratic system within the university will be modified and changed by the political action of interest groups;
- Interest groups are located both inside and outside the university (the stakeholders referred to in Section 2.4.1 – see Figure 5), and there are some external groups,
such as political parties or trade unions, that have a powerful influence on what happens inside the university.

According to Miller (1995: 102), "Baldridge's model is useful in analysing the political processes and management of universities during stress or crisis (...) [and] when there are severe reductions in resources or major reorganizations".

Miller (1995) also argues that since this model concentrates on showing the explicit political processes and identifies the importance of conflict, negotiation and control of resources between competing interest groups, it minimizes the existence of implicit power relations that operate in the environment.

Birnbaum (1988) argues that each one of the models that have been presented represents an idealised version of how HEIs are organised and administered. However, in the real world, it would not be easy to find institutions matching one exact model of governance. They will most likely present more characteristics of one of the models over the others, always or during a certain period of time, being probably necessary to interrelate some concepts and models. Some more sophisticated analyses of university organisation recognise that different models will reveal different aspects of the university (Enderud 1977; Birnbaum 1988; Becher and Kogan 1992).

2.4.2.6. Mixed models

One way to accommodate different models is to relate them as a sequence, like Enderud (1977) did. In some cases, one might see certain decisions proceeding through a sequence of ambiguity, political activity, collegiality and bureaucracy. In other cases, the dominance of one form and the style of management over another and hence the applicability of a particular model, will depend on a balance of power and influence of particular actors, individuals and groups (Miller 1995).

In 1988, Birnbaum proposed a new model of governance that looks at HEIs as 'cybernetic institutions' that are based on systems of negative feedback, which detect and correct errors so that when something happens that is moving in the wrong direction, something else automatically happens, bringing it back on course (Birnbaum 1988). According to
him, "coordination is provided not by one omniscient and rational agent but by the spontaneous corrective action of the [university's] parts" (ibid: 179).

In cybernetic systems, organisation subsystems respond to a limited number of inputs to monitor their operation and correct and adjust what is necessary; thus, organisational responses are not based on measuring or improving outputs, but they focus on inputs (Birnbaum 1988).

Since HEIs are open systems in contact with the external environment (see Section 2.4.1), when there is a problem in the exterior that affects the organisation, inputs send a signal that will be compared to previous established criteria (Birnbaum 1988).

Birbaum (1988) argues that this model does not substitute the other models previously presented. It just tries to integrate them in order to understand complex systems such as HEIs.

In 1992, Becher and Kogan presented a model that helps the understanding of the relationship between different levels of reality – individual, basic unit, university and state. These authors distinguish between two modes of relating to the academic or the university as an organisation, which they argue can be analytically distinguished but which, in practice, are not that easily separated. The first mode, the 'normative mode', relates to the monitoring and maintenance of mode values – what people in the system regard as important. The second mode, the 'operational mode', refers to the business of carrying out practical tasks at different levels within the system – what people actually do or are required to do (Becher and Kogan, 1992: 10).

According to them, these modes can be analysed in their internal and external aspects. The external aspect of the 'normative mode' would be for the university to take cognisance of current economic, social and cultural values. Internally, the university would meet the requirements of the external authorities and set and monitor rules of procedures and due process. The institution would try to ensure that the basic units (departments) would carry out proper procedures regarding the appointment of academics, use of funds, student recruitment, and so on. Increasing pressure from central authorities would mean that the university would exercise increasing control in these areas, developing policies and norms around 'managerial efficiency' and 'enterprise culture' (Becher and Kogan 1992).
The 'operational mode' involves internal university operations concerning the maintenance and development of its constituent elements and its established activities, through the allocation of money and personnel (Becher and Kogan 1992).

This system analysis provides a framework for relating the individual academic to the department, the university, and the pressures coming from central government in terms of goals and activities. This perspective emphasises the university as an entity, rather than a collection of individuals, and deemphasises the perspective of individual academics, arguing that they need the security of tenure arrangement to pursue the true purpose of the academic enterprise and their commitment to teaching and research (Miller 1995).

Rhoades (1992) argues that all systems consist of a mix of academic, political and bureaucratic types of authority. Literature on higher education suggests that what has changed is the difference between these types, with various forms of professional authority on decline, and different forms of political and managerial/bureaucratic authority at different levels of higher education on the rise.

However, very little work has been done on the way the shifting balance of formal powers generated shifts in governance and decision-making, especially concerning the use of performance information. In fact, higher education literature often refers to external pressures on universities, to the press for accountability, but they do not attend to the mechanisms by which these challenges are voiced and implemented, nor interpret these challenges in terms of a structuring of governance by class or status groups' struggle and power external to the academy (Rhoades 1992).

In order to do this analysis, it is important to look at the governance structures in HEIs, which comprise both authority and decision-making structures. However, before doing that, it would be interesting to analyse how universities, as organisations, are coping with increasing pressures to change their management and governance arrangements. To understand universities' behaviour it is important to look at these institutions through the lens of neo-institutionalism.
2.4.3. Institutional behaviour through the lens of neo-institutionalism

In an attempt to better understand the need for institutions to adapt to the external environments surrounding an organisation, two perspectives could be taken into consideration. According to the first perspective, organisations have to adapt to economic, societal and cultural demands of external environments for reasons of legitimacy and survival. A representative theory of this perspective is 'isomorphism' (DiMaggio and Powell 1983). The second perspective argues that although organisations are dependent on external forces, they still have a certain discretion left to respond to those pressures, using decoupling strategies to cope with external pressures (Meyer and Rowan 1977). These two perspectives will be developed in the following sub-sections.

2.4.3.1. Isomorphism

Isomorphism is the sociological version of neo-institutionalism. This theoretical approach, developed by DiMaggio and Powell (1983), tries to explain structural homogeneity, that is, the reason for organisations to grow so similar over time and may be arguably interesting to explain common trends that can be found in some higher education systems.

DiMaggio and Powell (1983) distinguish between different types of isomorphism: coercive, mimetic and normative. 'Coercive isomorphism' happens when an organisation adapts and changes to conform to the external pressures applied to it. Changes in values, behaviours, structures and processes can occur, for example, in response to pressures exerted by other organisations or groups upon which the organisation depends. These can, for example, take the forms of laws and regulations applied by governments (DiMaggio and Powell 1983; Parker 2011). 'Mimetic isomorphism' refers to a pattern of behaviour where an organisation voluntarily imitates other groups' or organisations' values, characteristics, behaviours, structures or processes. It may include copying another organisation's apparently successful strategy (DiMaggio and Powell 1983; Parker 2011). 'Normative isomorphism' takes place through the beliefs and actions of key groups. Specific member groups (namely professionals) that share particular common professional training, background, or norms, may import those into their employing organisation (DiMaggio and Powell 1983; Parker 2011).
2.4.3.2. Decoupling strategies

Larsen and Gornitzka (1995) talk about 'window dressing' to explain some voluntary actions taken by organisations to cope with external pressures. Parker (2011: 436) states:

"Formal institutionalised organisational structures and processes have been observed at times to exist decoupled from what in fact occurs within an organisation. Actual informal organisational structure and processes may differ significantly from the formal, reported structures and processes that simply act as symbolic window dressing, presenting a mythical, ceremonial image to placate outsiders".

Meyer and Rowan's (1977) neo-institutional take on organisational behaviour highlights the concept of decoupling as a coping strategy used by organisations to resolve the tension between formal structures and informal practices. In order to appear legitimate to the exterior, organisations are expected to conform to certain 'rationalised concepts', including how different types of organisations are expected to look and act (Meyer and Rowan 1977). Weick (1976) defines 'loose coupling' as a situation in which elements are responsive, but retain evidence of separateness and identity. The concept of 'loose coupling' became analytically powerful because it helped scholars to understand why many organisations (including universities) continued to operate by familiar routines and practices despite waves of policy reforms and environmental pressures to change. Many times, these organisations avoid conflict by buffering "their formal structures from the uncertainties of technical activities by becoming loosely coupled, building gaps between their formal structures and actual work activities" (Meyer and Rowan 1977: 341). This perspective could be considered particularly relevant in universities, given their high degree of autonomy and their integration into the state hierarchy. On the one hand, universities must adapt themselves to the various strains of public authority. By contrast, the norms of academic freedom and autonomy dominate internally.

After exploring some theoretical perspectives that could help to explain the behaviour of universities in face of external pressures to change, let us now look at the governance structures in HEIs.
2.4.4. Governance structures: a new framework

De Boer (2002) regards governance structures as a "set of rules concerning authority and power related to the performance of a university's activities directed towards a set of common goals" (ibid: 44). It reflects the way an organisation divides and integrates responsibility and authority.

Authors like Amaral et al. (2002) and Meek (2003) emphasise the tremendous differences in the organisational and structural assumptions that draw attention to institution-level governance arrangements.

In the US, for example, there is a strong, centralised approach to decision-making with a focus on the institutional president and his or her cabinet, functioning under the supervision of a governing body composed of elected or appointed external members. The recent trends involve a movement towards even stronger central steering. Senates are generally regarded as weak and there is a reluctance to include faculty representation on university governing boards (El-Khawas 2002).

In the UK, there is a hierarchy of committee decision-making bodies flowing from departmental committees, faculty academic boards, and university academic boards (the senate in chartered universities). The vice-chancellor (equivalent to the rector) is appointed by the institutions and has great executive authority. Recently, there is a trend for deans to be appointed instead of elected, being assigned executive management responsibilities (Meek 2003).

In France, the university sector has been characterised by a straight state-control, with strong academic guilds represented, in structural terms, by academic units and deans. Recent changes, largely initiated by the government, resulted in a stronger institutional-level governance structure, being presidential teams and participatory bodies the ones to make strategic decisions (Musselin and Mignot-Gérard 2002). Nevertheless, and since these are 'evolutionary' changes, the state continues to exercise centralised system-level control over certain policy areas, such as programme approval (Amaral et al. 2002).

In Portugal, governance structures changed recently. There are now three main decision-making bodies and authority structures at the central university level. First, there is the general council, which is composed of a majority of academics, external members,
students and non-academic staff. Second, there is the management council, which is responsible for the administrative, patrimonial, financial and human resources management of the university. Third, there is the rector, who presides over almost every governing body. The new structure allows for an increased participation of the outside world and became more centralised.

Despite the differences in the governance structures of different higher education systems, the struggles to reform higher education usually involve restructuring campus mechanisms of governance in order to include a broader range of groups in campus decision-making (Rhoades 1992). Amaral et al. (2002) also argue that recent changes in institutional-level governance seem to have shifted the balance of power within these institutions through the development of new central governance structures, the strengthening of the role of central administration and changes in participatory governance arrangements.

On the same issue, Rhoades (1992) states that there has been an expansion of "the legitimate political authority of various groups with respect to campus matters that had previously been dominated by the authority of academics, whether through personal or collegial rulership or some combination of the two in guild authority. In some cases this meant creating or expanding the powers of university councils that had representatives from lay community" (ibid: 1380).

In fact, in addition to the creation of new structures, external stakeholders seem to be assuming an increasingly important role in governance, although in some higher education systems that role is often 'fictional' (see Amaral and Magalhães 2002). Plus, there have also been changes in the level and form of participation of internal constituencies. For example, in many countries, there has been a repositioning of the rector as a chief executive officer (Amaral et al. 2002).

To Amaral et al. (2002), above all, there seems to be a "general trend towards the centralisation of authority in institution-level governing structures and administrators and a decline in the 'academic-voice' in institutional decision-making" (ibid: 288).

Having looked at some of the main differences that exist in the governance structures of some higher education systems and the common trends, it would be interesting to go
deeper into the governing bodies and analyse the composition of these bodies. This will be done by revisiting the concept of Estates proposed by Neave and Rhoades in 1987.

2.4.4.1. Composition of the bodies: the concept of Estates

In 1987, Neave and Rhoades examined the academic profession in Western Europe and showed the differences they found, by then, between the concept and organisation of the academia in the Anglo-Saxon world and in Continental Europe. At the time, they found out that in mainland Europe there was a sense of 'corporate identity', confirmed by the close ties between academia and the state. Therefore, they distinguished between the academic profession and the academic Estate (Neave and Rhoades 1987).

According to Neave (2009: 17) the characteristic of an Estate is "the central part played by prescribed and formal status". In an Estate, representation is determined by the presence of individuals directly mandated and formally elected on the basis of one individual one vote.

Since the 1960s, two major revolutions took place: massification and managerialism (see Section 1.3.2). On the one hand, almost all Western European systems of higher education moved well beyond mass higher education. On the other hand, new management ideas, drove higher education towards quality, efficiency and entrepreneurism (Neave 1988).

Surprisingly, the increase of student power inside the academia, resulting from massification, did not question the basis of the Academic Estate as an inner form of university governance. Instead, the solution for the tensions inside the academia from the late 1960s through the mid-1970s, was power-sharing. To Neave (2009), there was a move from what Clark (1983) called 'academic oligarchy' to an extended constituency in which all three Estates – Academic, Student and Administrative – have their formal elected place (Neave 2009).

As discussed before (see Section 1.2), in the 1980s, several measures were undertaken by governments in order to reduce costs and wastage, to raise institutional efficiency and performance levels, and to shift budgeting modes from input financing to output financing (Neave 2009). Some of the motives given by governments to act were: first, to relief the
public budget; second, to increase the transparency of higher education systems, whose complexity had grown in proportion to the number of students enrolled and increasing public expectation; third, to satisfy increasing demands for accountability; and fourth, to reduce the frontiers of the state (Neave 2009).

Some authors (e.g. Rhoades 1998; Neave 2009) argue that with the 'managerial revolution', academia became 'a specialised sub-sector' (Neave 2009). Rhoades (1998) states that academics became 'managed professionals'.

With these changes, some functions that were part of the Academic Estate as a whole were relocated by the government, usually in the form of intermediary bodies, such as Evaluation Committees, Quality Assurance Agencies or Accreditation Agencies. Moreover, there was also the professionalisation of management in some universities, which led to contracting out professional managers or giving academics full time posts in management, thus increasing the degree of specialisation of academic shores and the division of academic labour (Neave 2009).

The concept of Estates proposed by Neave and Rhoades (1987) will be used to develop a new framework designed to understand governance structures in higher education.

2.4.4.2. A new framework representing governance structures in higher education

From what was presented in Section 2.4, it seems undeniable that HEIs are complex organisations, not being easy to find a unique model that defines the way they are governed and managed. As Birnbaum (1988) argues, HEIs will probably present more characteristics of one of the models (bureaucratic, collegial, garbage can, organised anarchy or political) over the others always or during a certain period of time.

Acknowledging the importance of looking at HEIs in a systemic way (as discussed in Section 2.4.1), it was decided to build a framework that helped to understand governance structures in higher education. The framework conceived by Conceição et al. (1998) presented the internal and external stakeholders, but did not cluster the external stakeholders in more general coordination mechanisms. Moreover, it represented the internal stakeholders as mere elements of the organisation, and not as integrative elements of HEIs governing and management bodies.
Therefore, for the purpose of this research, it was decided to develop a new analytical framework that would fully represent governance structures in higher education.

The proposed framework extends Clark's (1983) Triangle of Coordination (see Section 2.3) to other internal stakeholders of the university, revisiting the concept of the university's Estates proposed by Neave and Rhoades (1987). To the three Estates proposed – Academic, Student and Administrative –, this research adds a new one – the 'External Representatives Estate' –, since these members have become increasingly important in the governance and management of universities, being part of the most important governing bodies of many HEIs.

Figure 6 is thus proposed as the new analytical framework to look at governance structures in higher education. According to it, governance structures can be conceptualized by an 'inner ring' and an 'outer ring'.

The 'inner ring' represents the internal coordination mechanisms, and is composed of the members of the university's governing bodies – the four Estates. These are: the Academic Estate, the Student Estate, the External Representatives Estate, and the Administrative Estate.

The 'outer ring' embodies the external coordination mechanisms and is composed of the state, Europe and the market. This ring adds to Clark's (1983) external coordination mechanisms – the state and the market –, a new one – Europe. This third coordination mechanism was incorporated due to the influence it has had in most European countries, as explained in Section 1.3.2. In fact, European higher education policies have been one of the major drivers for governance changes in most European higher education systems.
Figure 6 is thus proposed as the analytical framework that will help to answer the following questions: What pressures, both external and internal, are there to introduce performance management systems in universities? How might the external and internal coordination mechanisms be influencing the introduction and functioning of performance management systems inside universities? And how has the introduction of performance management affected governance structures and the roles, influences and accountabilities of the Estates (the 'inner ring')?

Having looked at HEIs as organisations, analysed the way they are governed and managed, and established a new framework to look at governance structures in higher education, it is now important to introduce the theme that triggered this research: performance management. In fact, it is the current centrality of performance and the importance that performance information has in the reform of higher education (see Section 1.3.2) that motivates this research. Our interest lies mainly on what is done with the performance information obtained through the measurement process.

Therefore, the next chapter will be dedicated to the measurement, reporting and management of performance, focusing particularly in the higher education sector.
Performance management in higher education
Although the practice of performance management is not something new, it has been revived with the advent of NPM (van de Walle and van Dooren 2008), which advocated, amongst other things, managerial freedom based on output control (Hood 1991). In exchange for more autonomy and flexibility in the use of allocated resources and in choosing the means and methods, many public organisations had to accept more rigid PMS (Laegreid et al. 2008).

In fact, in the early 1990s, and especially in OECD countries, many public service organisations from different areas, including higher education, focused on developing PIs and targets (Bouckaert and Halligan 2006). Since then, performance management became increasingly systematic, specialized, professionalized and institutionalized in the public sector (van Dooren 2006).

This chapter is dedicated to performance management and is structured in the following way: first, the concept of performance will be introduced and the increasing interest in this topic explained. Secondly, the concepts of performance measurement, performance reporting and performance management will be discussed. Thirdly, performance will be looked at from a systems point of view and some performance management models will be presented. Finally, an input-process-output-outcome model representing a PMS for higher education will be introduced. This model, which will be used in this research, will arguably help to understand the complexity of managing performance in higher education.
3.1. The concept of performance

There has been very little consensus on what performance is. In fact, few people agree on what it really means, giving its multiple and often ambiguous meanings (van Dooren et al. 2010). As Lebas (1995: 23) argues "it can mean anything from efficiency, to robustness or resistance or return on investment, or plenty of other definitions never fully specified". According to Dubnick (2005: 391):

"Performance can be associated with a range of actions from the simple and mundane act of opening a car door, to the staging of an elaborate reenactment of the Broadway musical 'Chicago'. In all these forms, performance stands in distinction from mere 'behaviour' in implying some degree of intent."

Lebas (1995) argues that performance is case-specific and decision-maker specific. It is about "deploying and managing well the components of the casual model(s) that lead to the timely attainment of stated objectives with constraints specific to the [institution] and to the situation" (ibid: 29). According to the casual model, understanding the processes underlying performance is the only way to define the measures that lead to action. If only the final is looked at, no appropriate corrective action can be identified. For example, knowing whether customers are satisfied or not with the service provided is better than simply observing how quickly the service is delivered (Lebas 1995). Therefore, performance can have several meanings.

To Lebas and Euske (2002: 67-68), performance is: measurable by either a number or an expression that allows communication; to accomplish something with a specific intention; the result of an action; the ability to accomplish or the potential of creating a result; the comparison of a result with some benchmark or reference selected or imposed, either internally or externally; a surprising result compared to expectations; a judgement by comparison; acting out, in psychology; a show, in 'performing arts', that includes both the acting or actions and the results of the actions, as well as the observation of the performers by outsiders.

Talbot (2007) regards performance as:

- **Accountability** – for democratic systems to work, citizens need to be given information not just about what is spent but also about what results are achieved.
In practice, few public institutions regularly publish information about their achievements, deepening the arguments for the need to improve public accountability;

- **User choice** – comparative performance information should be made available, to enable users to make informed choices. For example, in the UK, 'league tables' of university performance are published every year, pressuring those performing worse to improve services;

- **Customer service** – public organisations should make clear statements about the levels of service they want to supply, in terms of timeliness, accessibility and quality, and then report on their success against these aims;

- **Efficiency** – performance contracts should specify the resources to be supplied, the outputs and services to be delivered, the monitoring mechanisms to be used, and reward or sanction mechanisms to be applied;

- **Results, effectiveness and 'what works'** – there has been an excessive focus on inputs and processes, losing sight of the outcomes intended to achieve;

- **Resource allocation** – performance information is essential for decision-making on resource allocation;

- **Creating public value** – public services are not merely addressing 'market failure', but have a more positive role in creating value, which could not be made in the private sector. Public services add value, through issues like equity, equality, and building social capital.

According to Lebas and Euske (2002: 68), performance is "the sum of all processes that will lead managers to taking appropriate actions in the present that will create a performing organization in the future". As Lebas (1995) argues, performance, especially in the case of management, should not be "so much about past achievements, as generally accepted, but about the future, about the capability of the unit being evaluated. It is so because (...) the purpose of management is about creating and shaping the future of the organization, as well as that of society" (ibid: 23).
Having presented the concept of performance, the next section will explain why there have been increased pressures to introduce performance management practices over the last decades.

3.2. The increasing interest in performance

As discussed before (see section 1.1), the post-war expansion of the welfare state raised expectations about the role of the government. However, in the 1980s, this expansion could no longer be supported (Pollitt and Bouckaert 2000). Fiscal stress pressed the public budget and legitimacy crises pressured the politico-administrative system (van Dooren et al. 2010). In order to meet the social demand for a high-performing public sector, governments felt the urge to reform. Thomas (2004: 4) lists the main factors that have driven the current widespread interest in performance:

- The stressed financial condition of most governments with accumulated debts and annual deficits;
- The turbulent and unpredictable environment of today's public sector, which requires governments to have both a sense of direction and the capacity to respond rapidly to unforeseen changes;
- The impact of NPM philosophies, which are leading to an insistence on results, to the removal of excessive central control, and to the delegation of more authority to public managers;
- The need to respond to several decades of slow, but steady, decline of public trust and confidence in the public sector by strengthening accountability and improving communication;
- The need to respond to growing public insistence that the quality of the public sector should improve;
- The opportunity to take advantage of the refinements in analytical techniques and new information technologies, which enable more sophisticated tracking of the success of a programme or institution and offer opportunities to improve democratic dialogue over public policy.
Although the interest for performance increased in the public sector, there is a wide debate on the benefits of measuring and managing performance in that sector. One of the most persistent lines of attack on the performance agenda is that, being usually related to concepts such as efficiency, effectiveness and accountability, it does not take into account some other important public values, such as equity, often crossing purposes with those values (van Dooren et al. 2010). Radin (2006), for example, contends that, among others, the performance movement forgets about the context, interferes with professionalism, is not concerned with equity and is apolitical. Adcroft and Willis (2005) support these criticisms, believing that "the increased use of performance measurement and the importation of private-sector management principles and practices will have the dual effect of commodifying services and deprofessionalising public sector workers" (ibid: 396). These authors define commodification in terms of the transformation of relationships into quasi-commercial relations with an emphasis placed on the economic activity of buying and selling and the management activity of performance measurement. To Adcroft and Willis (2005), the outcome of commodification will be deprofessionalisation, since, to them, a professional is regarded as someone whose activities are value-driven where the crucial values are altruism, autonomy and authority. With respect to higher education, Talib (2003) makes the point that there will be some sort of shift away from professional activities, which may have a high social worth or intrinsic value towards those activities which are management-driven. Following the same line of thought, Deem (2004: 116) argues that universities have become "more akin to a business than an educational institution", and questions "whether the contemporary UK university can survive the domination of management [over academic leadership]" (ibid: 125).

Notwithstanding the criticisms, there is the general acceptance that performance will continue to be central to government and to the management of public services, especially in a context of economic crisis. In fact, with public finance under pressure, the need to assure and demonstrate value for money is likely to be reinforced (van Dooren et al. 2010).

Before looking at performance management from a systems point of view, three concepts will be explored – performance measurement, performance reporting and performance management. These are considered necessary to comprehend how a PMS functions.
3.3. **Performance measurement, reporting and management**

Radnor and Barnes (2007) suggest that a differentiation should be made between 'performance measurement', 'performance reporting' and 'performance management', since each has their own set of activities and issues.

### 3.3.1. Performance measurement

With a growing demand for more effective co-ordination and control systems, arguably needed to improve organisational performance, performance measurement became very important.

On a very simple definition, Zairi (1994) describes performance measurement as the systematic assignment of numbers to entities.

Van Dooren et al. (2010: 6) argue that "measuring performance means systematically collecting data by observing and registering performance-related issues for some performance purpose". According to these authors, the result of performance measurement is performance information.

To Lebas (1995), performance measurement includes measures based on key success factors, measures for detection of deviations, measures to track past achievements, measures to describe the status potential, measures of output, and measures of input.

To this definition, Radnor and Barnes (2007) add data on the level of activity. According to these authors, "performance measurement is quantifying, either quantitatively or qualitatively, the input, output or level of activity of an event or process" *(ibid: 393).*

For the purpose of this research, Radnor and Barnes' (2007) definition will be used and it will be considered that performance measurement encompasses three main steps: deciding what to measure; selecting measures and targets; and collecting data. The first step involves deciding what will be measured. In order to do that it is important understand what is being measured, whether it is an organisation, a programme or a policy and then to target measurement efforts, since, as van Dooren et al. (2010: 57) argue, "it is unrealistic to pursue a measurement system that perfectly mirrors every aspect of the
organisation or programme, its policies and environment”. The second step comprises selecting the measures that will be used and setting the targets in terms of the measures chosen. The last stage consists of collecting the data, being important to define appropriate data collection methods and sources, which may be internal or external.

The next section will explore the concept of ‘performance reporting’.

### 3.3.2. Performance reporting

After measuring performance, it is important to analyse the data collected and communicate the results to responsible decision-makers, so that they can decide what to do with the information being reported. To Radnor and Barnes (2007), performance reporting is "providing an account, and often some analysis, of the level of input, activity or output of an event or process usually against some form of target" (ibid: 393).

The Canadian Comprehensive Auditing Foundation (2002) defined nine principles for better performance reporting. Even though these principles were defined for the Canadian Government to follow, it is believed they can be applied to any institution, including universities. The first five principles provide guidance about what should be reported and the other four relate to how it should be reported. These principles are (CCAF 2002: 15-48):

1. focus on the few critical aspects of performance;
2. look forward as well as back;
3. explain key risk considerations;
4. explain key capacity considerations;
5. explain other factors critical to performance;
6. integrate financial and non-financial information;
7. provide comparative information;
8. present credible information, fairly interpreted;
9. and disclose the basis for reporting.

Several authors (e.g. Hendricks 1994; van Dooren et al. 2010) argue that, when reporting, it is important to choose the format that will be used, since it should be appropriate to the target group. To these authors, it is essential to know who will be receiving the information (e.g. general public, media, government, managers, employees), in order to decide the best way to present the data (e.g. news flashes may be more appropriate for the media and the general public than annual reports and plans).

Thomas (2004) recognises the need to tell the performance story and not become mesmerised by the numbers themselves. He argues that (ibid: 10):
"Formal performance reporting is only one window through which internal and external audiences will gain information and form impressions about performances. To call for more and better reporting assumes that the relevant audiences will read the documents and use them to judge performance".

In fact, to Bouckaert and Peters (2002) the availability of performance information is a necessary, but not sufficient, condition for the success of many reform initiatives. Above all, information is fundamental to inform leaders/managers, helping them to make informed decisions, to provide guidance, to develop the institution's mission, vision and values, to communicate these to other members and to coordinate every component of the organisation. Moreover, information connects the management subsystems with each other and the management system with the outside world, helping, for example, external assessors in evaluating the performance of an organisation (van Dooren 2006). That is why performance management plays such an important role.

### 3.3.3. Performance management

Performance management can be defined as the managerial work needed to ensure that the organisation's top level aims (sometimes expressed as 'Vision' or 'Mission' statements) and objectives are attained. Usually this will require realistic time periods for their attainment, and the identification of sub-objectives and tasks, which, in turn, have to be attained in a controlled way, contributing to top-level objectives (Holloway 1999).

Notions such as strategic management, performance budgeting, management-by-objectives and management for results all share a common logic that public organisations should produce performance information to inform decision-making (Moynihan 2008).

To Radnor and Barnes (2007: 393), "performance management is action, based on performance measures and reporting, aimed at improvements in behaviour, motivation and processes and promotes innovation." Patton (1997) claims that the 'actual use' of evaluation is the best way to understand the value of activities and the efforts dedicated to it.

Mayston (1985) suggests eight objectives for performance management: to clarify the organisation's objectives; to evaluate the final outcomes resulting from the organisation's
activities; to enable consumers to make informed choices; to indicate performance standards in the licensing or contracting of privatised services, and to monitor the fulfilment of these terms; to indicate how well different services contribute to specific areas of policy; to trigger further investigation and possible remedial action to improve the quality of inputs and outputs; to assist in determining the most cost-effective set of service levels to attain a given target; and to indicate areas of potential cost saving in attaining a given set of intermediate outputs.

Pollitt (1987) presents a very similar list of roles, adding another one: provide staff with feedback designed to enable them to develop and improve their practice.

Behn (2003) proposes a categorisation of eight managerial uses:

- **Evaluate** – to see how an organisation is performing;
- **Control** – to determine whether the subordinates are doing the right thing. To Johnston and Clark (2008) and Pollitt (1987) this entails providing feedback so that action can be taken to keep the process in control. This requires a complete control loop, which targets, measures and takes appropriate action if needed (Johnston and Clark 2008);
- **Budget** – to determine the kind of projects, people or programmes the organisation should spend the money in. The general idea is to invest in the most cost-effectiveness activities;
- **Motivate** – to motivate staff. It is believed the establishment of performance goals grabs people's attention and that the measurement of progress towards the goals provides useful feedback, concentrating their efforts on reaching these targets (Duncan 1989);
- **Promote** – to have the public's support. Performance measures can contribute to such support by revealing not only when an institution is failing, but also when it is doing an excellent job;
- **Celebrate** – rituals of celebrating an organisation's accomplishments tie people together, giving them a sense of their individual and collective relevance, and motivating future efforts;
• **Learn** – to understand why things are (or not) working. Performance measures contain information that can be used not only to evaluate, but also to learn;

• **Improve** – to realise what should be done differently in order to improve performance. Performance measurement should not be an end in itself, but should be used to make improvements. Johnston and Clark (2008) argue that often simply by communicating a measure, improvements can occur. Also by linking measures to rewards and/or punishments, individuals could be motivated to improve performance, assuming they have control over what is being measured (Johnston and Clark 2008).

According to Behn (2003), the first seven purposes are subordinate to the last one: "for the measurement of performance, the public manager's real purpose – indeed the only real purpose – is to improve performance. The other seven purposes are simply means for achieving this ultimate purpose" (Behn 2003: 588).

To Johnston and Clark (2008), performance management is also important to communicate and implement the strategy, since measures inform employees as to what the organisation requires them to achieve and what they might be accountable for.

Although many managers use performance information for improvement, as intended, the measurement of performance can also lead, according to some authors (e.g. Bouckaert and Balk 1991; Smith 1995; Behn and Kant 1999; Bevan and Hood 2006a), to dysfunctional behaviour.

To Johnsen (2000), resistance towards performance management and possibly changes in the implementation process are common. Smith (1995: 283) lists eight unintended consequences of publishing performance data in the public sector:

• **Tunnel vision** – occurs when managers, faced with many different targets, choose the ones that are easiest to measure and ignore the rest;

• **Sub-optimisation** – happens when managers choose to operate in ways that serve their own operation well, but damage the performance of the overall system;

• **Myopia** – occurs when, for whatever reason, managers focus their efforts on short-term targets at the expense of longer-term objectives;
• *Measure fixation* – happens when there is an emphasis on measures of success rather than the underlying objective;

• *Misrepresentation* – this is a form of fraud and occurs when performance data is either misreported or distorted to create a good impression. It is the deliberate manipulation of data so that reported behaviour differs from actual behaviour. It leads to the distortion of reported behaviour;

• *Misinterpretation* – occurs when wrong policy signals are sent due to bounded rationality, although the agent possesses all the facts;

• *Gaming* – happens when there is the deliberate manipulation of behaviour in order to secure strategic advantage. This leads to distortions in the actual behaviour;

• *Ossification* – occurs when a performance indicator is 'past its sell-by date' and has lost its purpose, but no one revises or removes it.

Talbot (2010) defies the view of many scholars (e.g. Bevan and Hood 2006a; Bevan and Hood 2006b; van de Walle and Roberts 2008; Pollitt 2010), who argue that the measurement of performance will most likely lead to unwanted effects. Talbot (2010) argues that many times the 'ideological' antipathy for performance measurement is so strong "that the need for evidence to support assertion is dispensed with or treated in cavalier ways" (*ibid*: 44). According to Talbot (2010), common errors are to list a whole series of possible difficulties and dysfunctions in the effects of performance information without providing any empirical evidence that those things happen, or to what extent; or to establish criteria of perfection for PMS that are so exacting that any system will surely fail. Talbot (2010) states that many authors "have ignored the pretty strong evidence that alongside gaming and other undesirable effects, there have also been significant gains in real performance and service delivery" (*ibid*: 202).

In the next section, the concepts of performance measurement, reporting and management will be interlinked through a systems view of performance management.
3.4. A systems view of performance management

A PMS should have a direct link between performance measurement and strategic and operational planning. To Thomas (2004: 18):

"Ideally, strategic planning helps organizations to clarify their mission, mandate and goals, to scan the future external and internal environments for threats and opportunities, to identify strategic issues and alternative ways to deal with them, and to develop a set of outcome indicators to track progress towards their goals. All of these elements are to be linked to annual operational planning and to forthcoming budgets. This (…) represents the aspiration to achieve predictable, comprehensive, systematic and rational control over the future direction of the organization in all dimensions of its performance".

In its most simple form, the managerial process works as follows: first, organisational objectives are identified (should be derived from the 'Vision'), and communicated to the staff; second, measures are developed to reflect these objectives (the following questions should be answered: what will be measured, how, by whom and when); third, targets are set in terms of those measures and management chooses action and effort intended to achieve targets; fourth, progress is monitored using the pre-defined measures; fifth, measures are reported (the following questions ought to be answered: how and by whom information will be reported) and used to drive action, meaning that if the results diverge from targets, appropriate remedial action is taken, and, when necessary, targets are readjusted or new targets are created. And the process goes on (Anthony and Young 1994). Thus, the centrality of this process lies on the concept of feedback (see Figure 7).

Thomas (2004) argues that an ideal PMS should: have clear and defined purposes and uses; focus on outcomes and not just on inputs and outputs; employ a limited, cost-effective set of measures; use measures which are valid, reliable, consistent, comparable and controllable; produce information which is relevant, meaningful, balanced and valued by the leaders of the organisation; report performance information adequately; be integrated with the planning and the budgetary processes; and be embedded in the organisation, stable and widely understood and supported. Therefore, it is fundamental that a PMS creates a mechanism for intervention and learning (Haas and Kleingeld 1998; Neely 1998). This is why it is so important to interlink performance measurement, performance reporting and performance management.
In the next section, several performance management frameworks will be looked at, showing how the study of performance measurement and management has evolved over time.

### 3.5. Performance management models

Performance measurement and management have been much researched and discussed since the early 1990s. According to Neely (1999), the equivalent of one article every five hours of each working day was published between 1994 and 1996, and there has been a proliferation of conferences on the topic since 1994. Consequently, the trend in the performance literature has been towards the development of various models or frameworks of performance. The emergence of such models, techniques and tools has been influenced by wider performance measurement developments, coming mainly from the private sector.

The problem of how organisations should assess their performance is not something new (Kennerley and Neely 2002a). It has long been recognised that performance measures are an integral part of the planning and control cycle (Neely 1999). Indeed, Chandler (1977) argues that most of the basic methods used to manage big businesses today were in place by 1910 (*ibid*: 417):

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**Figure 7 – The functioning of a performance management system**

In the next section, several performance management frameworks will be looked at, showing how the study of performance measurement and management has evolved over time.

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The problem of how organisations should assess their performance is not something new (Kennerley and Neely 2002a). It has long been recognised that performance measures are an integral part of the planning and control cycle (Neely 1999). Indeed, Chandler (1977) argues that most of the basic methods used to manage big businesses today were in place by 1910 (*ibid*: 417):
"In 1903, three Du Pont cousins consolidated their small enterprises with many other small single-unit family firms. They then completely reorganised the American explosives industry and installed an organisational structure that incorporated the 'best practice' of the day. The highly rational managers at Du Pont continued to perfect these techniques, so that by 1910 that company was employing nearly all the basic methods that are currently used in managing big businesses”.

Traditionally, performance management was developed from cost and management accounting and was seen as the process of quantifying the efficiency and effectiveness of action (Neely et al. 1995). Most public organisations relied on financial indicators to develop appropriate strategic directions.

The excessive focus on financial measures was criticised by several authors (e.g. Banks and Wheelwright 1979; Hayes and Abernathy 1980; Kaplan and Norton 1992). Neely (1999) sums-up these criticisms. To him these measures (ibid: 206): encourage short-termism (e.g. the delay of capital investment); lack strategic focus and fail to provide data on quality, responsiveness and flexibility; encourage local optimisation (e.g. 'manufacturing' inventory to keep people and machines busy); encourage managers to minimise the variances from standard rather than seek to improve continually; are historically focused, whereas most managers want predictive measures that indicate what will happen next week, next month, or next year; and fail to provide information on what customers want and on how competitors are performing.

Recognising the shortcomings of traditional measurement systems, with an excessive concern with the financial perspective, Eccles (1991) triggered a performance measurement revolution. In his 1991 article, The Performance Measurement Manifesto, Eccles argued: "during the past few years, academics and practitioners have begun to demonstrate that accrual-based performance measures are at best obsolete – and more often harmful" (Eccles 1991: 132). Attention turned to how organisations could replace their traditional measurement systems with ones that reflected their current objectives and environment (Kennerley and Neely 2002a).

According to Eccles (1991), several factors contributed to the performance measurement revolution (ibid: 132-133):

- The increasing commitment towards quality, not just due to the pressure of global competitors, but also due to the growth of the Total Quality Movement and related
programmes (e.g. the Malcom Baldrige National Quality Award\textsuperscript{6}), and to more rigid quality requirements;

- Efforts to generate measures of customer satisfaction, such as customer retention rates, market-share and perceived value of goods and services. Eccles even stated that "what quality was for the 1980s, customer satisfaction will be for the 1990s" (\textit{ibid}: 133);

- The development of competitive benchmarking, which involves identifying competitors in other organisations that exemplify best practice in some activity, function, or process and then comparing one's own performance to theirs. This externally oriented approach made people aware of improvements they would not have thought possible;

- The advances made in information technology (e.g. improved price-performance ratios in hardware and breakthroughs in software and database technology) made it possible for organisations to generate, disseminate, analyse, and store more information from more sources, for more people, more quickly and cheaper than ever conceivable before.

Other authors, such as Fitzgerald et al. (1991) and Porter (1998), also claim that services are now competing on factors such as quality, innovation and flexibility, which have forced a change in emphasis from internal performance measures, like efficiency, to external, market-based measures, such as customer's satisfaction with quality.

In order to incorporate other criteria rather than financial information, various multidimensional models were developed, such as Fitzgerald et al.'s (1991) \textit{Results and Determinants Framework}, Kaplan and Norton's (1992) \textit{Balanced Scorecard}, Brown's (1996) \textit{Input-Process-Output-Outcome Framework}, and Neely and Adams's (2001) \textit{Performance Prism}.

In a study of several service delivery organisations in the UK, Fitzgerald et al. (1991) advocate the need to establish integrated organisational PMS, which should include a

\textsuperscript{6} The Baldrige Award was established by the Malcolm Baldrige National Quality Improvement Act of 1987 – Public Law 100-107. It had its origin in the 'quality' movement, but has also been influenced by the benchmarking movement, which emphasised the development of "a model which allowed each individual organisation to measure its activities against a wide set of standardized criteria through which to compare" (Talbot 2007: 506).
range of varied performance measures, and point to an explicit cause-and-effect framework between organisational results and the determinants of those results (Sarrico 2010). They suggest six generic performance dimensions: competitive performance; financial performance; quality of service; flexibility; resource utilisation; and innovation. The first two reflect the success of the chosen strategy (results); the other four determine competitive success (determinants). To these authors, only by managing well the determinants will an organisation obtain better results.

The relationship of causality between predetermined measures and their ensuing results highlighted by the Results and Determinants Framework was further developed by Brown (1996). The Input-Process-Output-Outcome Framework, as he called it, determines the five stages of the business process: inputs, processes, outputs, outcomes and goal, which are represented in Figure 8.

![Figure 8 – The input-process-output-outcome framework](source: Brown (1996))

Input measures include employees' satisfaction, suppliers' performance and finance; process measures integrate production and operational matters; output measures look at product and service, as well as at financial results; and outcome measures are concerned with customer satisfaction.
Johnston and Clark (2008) argue that there is little use in driving an organisation only by knowing the results (financial and external data) because there is no means of knowing what is determining those results. Conversely, driving an organisation by determinants alone gives no understanding of the results of actions taken. These authors say that organisations must learn to balance the use of both financial and non-financial measures, in order to get a competitive advantage, customer-focused and competitor-based. Needing to select performance measures according to strategic intentions, service organisations must ensure that one dimension of performance is not stressed to the excessive detriment of another.

The best-known framework that encourages the use of a mix of measures is the Balanced Scorecard (BSC). This model, developed by Kaplan and Norton (1992), should, according to these authors, translate an organisation’s mission and strategy into tangible objectives and a coherent set of performance measures, providing a framework for a strategic management system (Kaplan and Norton 1996; Radnor and Lovell 2003). The model points to a balance of measures: financial measures (total costs, total revenues, cost per customer, revenue per customer); customer or external measures (customer satisfaction, customer loyalty, retention rates, new customers, and number and types of complaints, for example); operational or internal measures (equipment or staff availability, number of faults, and number of staff by process); and development or learning measures (staff satisfaction, number of suggestions, number of improvements, staff turnover, and number of service innovations) (Johnston and Clark 2008).

Despite its widespread use, authors like Neely et al. (1995) and Kennerly and Neely (2002b) identified shortcomings in the BSC, namely: the absence of a competitive dimension (Neely et al. 1995); and the lack of measurement of the human resources perspective/employees' satisfaction, product/service quality and environmental/community perspective (Maisel 1992; Lingle and Schiemann 1996). In order to address the shortcomings of the BSC and other frameworks, Neely and Adams (2001) introduced another multi-faceted framework: the Performance Prism. This model adopts a stakeholder-centric view of performance measurement.

The Performance Prism explains that an organisation's results (stakeholder satisfaction) are a function of the determinants (strategies, processes and capabilities). Neely and Adams (2001: 153) consider this framework to be "multi-dimensional, reflecting all of the
areas of performance that influence the performance of an organisation, [enabling] a balanced picture of the business to be provided, highlighting external (stakeholder) and internal (strategy, process and capability) measures, as well as enabling financial and non-financial measures and measures of efficiency and effectiveness throughout the organization".

Given that, in this research, it has been decided to look at performance from a systems point of view, an Input-Process-Output-Outcome framework was considered appropriate to look at the way performance is measured, reported and managed. Neely et al. (2000) and Neely et al. (2007) argue that this type of framework is useful to distinguish between different categories of measures and has proved popular in public sector businesses. In the next section, the Input-Process-Output-Outcome model proposed by Pollitt and Bouckaert (2000) for the public sector will be displayed.

3.6. Performance management systems in the public sector: an input-process-output-outcome model

Figure 9 represents the input-process-output-outcome model proposed by Pollitt and Bouckaert, in 2000, for the public sector, in their book Public Management Reform: A Comparative Analysis, and later modified by Bouckaert and Halligan in 2008, in their work Managing Performance: International Comparisons.

In relation to Pollitt and Bouckaert's (2000) initial model, Bouckaert and Halligan (2008b) made two significant modifications: first, the inclusion of 'trust' as an integral element of performance management; and second, the addition of 'the environment' as directly impacting on (and being impacted by) the identification of needs, the level of trust in the system and the outcome/effects of policy and implementation interventions.

This model, based on systems-theory, provides tools for a dynamic and systemic 'thinking', since it acknowledges the existence of a closed loop between the actions of performance measuring, taking corrective action and achieving outcome response (Boland and Fowler 2000). It comprises five main components: inputs, processes, outputs, outcomes and trust.
This framework assumes that institutions are set up to address specific needs. In order to do so, they establish goals, concerned with those needs, and acquire inputs (staff, buildings, and so on), which they will use in the pursuit of those goals. Processes are those activities that take place inside institutions in order to generate outputs. Outputs are the products of those processes, that is, what the institution delivers to the outside world. These outputs, services or products, then leave the 'grey box' and interact with the environment (especially with the individuals and groups to whom they are specifically aimed – their stakeholders), leading to outcomes, which may be defined as the impact that outputs have in meeting a perceived need (Pollitt and Bouckaert 2000).

Given that outcomes are generally thought of in qualitative terms they are difficult to measure. Furthermore, the process is also complicated by the length of time it takes for such impacts to be identified. Finally, the fact that external factors may have an influence on outcomes also complicates the process (Boland and Fowler 2000). As a result, there seems to be a major disconnection between outputs on the one side, and a disrupted sequence of outcomes on the other side. This divide, termed by Bouckaert and Halligan (2008b) as a 'Grand Canyon', may be caused by a variety of reasons: stakeholders that inhibit the full attainment of outcomes because of their reactions; an absence of (quasi-) market mechanisms; and politicians that over or under grade outcomes.

Figure 9 – The input-process-output-outcome model

Source: Adapted from Bouckaert and Halligan (2008: 33).
Nevertheless, Bouckaert and Halligan (2008b) argue that outcomes, even if fundamental, are not an end in itself in public services. For them, the ultimate ambition is to guarantee a functional level of trust in public institutions, providing the link between outcomes and trust, which they have termed as "the second Grand Canyon in the public sector" (ibid: 17). The role of all stakeholders in helping to overcome this Canyon seems clear, but if there is a divergence between politicians, professionals, administrators and clients in creating outcomes and in constructing trust, the other side of the Grand Canyon will remain unreachable (Bouckaert and Halligan 2008b).

In order to assess performance, some criteria are usually used. In public services, it normally relates to the three Es: economy, which is concerned with the input of resources and with ensuring that those resources are obtained at the lowest possible cost; efficiency, concerned with how much output is achieved for a given level of input at a specified level of volume and quality; and effectiveness, concerned with the extent to which services confer the benefits which they are intended to confer. Some authors (e.g. Holloway 1999) incorporate a fourth E – equity – since they believe that public services should offer a fair and non-discriminatory treatment of people. Emphasising the need of the fourth E, Smith (1995) argues that, even though "efficiency and effectiveness may be important objectives of many stakeholders in a public sector organization (...), the pursuit of economic efficiency is only one aspect of control. In particular, an important consideration in many public sector organizations is that users of the service should be treated equitably" (ibid: 279).

In their input-process-output-outcome model, Bouckaert and Halligan (2008b) consider four criteria: relevance, which can be assessed by confronting the objectives with the needs; efficiency, which is measured by the ratio of outputs over inputs, focusing measures around the productivity of a process and/or the utilisation of resources; effectiveness, measured by the confrontation between objectives and outcomes; and economy, which is the ratio of a monetary input over another input. Stretching the span up to the concept of trust, three other criteria linking inputs, outputs and outcomes to trust are considered: input/trust, output/trust, and outcome/trust. Even though there are no empirical studies corroborating these relationships, to Bouckaert and Halligan (2008b), the

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7 In recent years, some governments have added a 'customer satisfaction' component to effectiveness.
8 Thomas (2004) argues that omitting equity may have an impact on another E in government, namely electability.
inclusion of these three criteria is important to assess performance, since trust is very present in the broad discourse of public sector performance and it is also a significant driver in performance-based public sector reform policies.

The ratios that are more easily measured are economy and efficiency. Relevance is not difficult to assess if the organisation defines clear objectives \textit{a-priori}. Effectiveness and the three ratios related to trust are probably the hardest to verify. In the case of effectiveness, it is often difficult to determine if a certain objective has led to a certain outcome or if other factors may have had an impact. In the case of the other ratios, it is not easy to establish a relationship between inputs, outputs and outcomes and the degree of trust in public institutions.

Having defined Figure 9 as their analytical framework, Bouckaert and Halligan (2008b) propose four ideal types of managing performance, using them to describe the state of performance management in the six countries they studied (Australia, Canada, The Netherlands, Sweden, the UK, and the US). These ideal types were constructed taking into consideration the features of what are, according to them, the core dimensions of a PMS: measurement (collecting data by observing and registering performance related issues), incorporation (intentionally importing performance-related data into documents and procedures with the purpose of using them) and use of performance (using performance-related data). They define as the four ideal types: Public Administration; Managements of Performances; Performance Management; and Performance Governance.

Within \textit{Performance Administration}, a commitment to measurement and performance is expected, but the relationship may not be explicit or well developed and the application is often \textit{ad hoc}. There is a systematic administrative registration of data, mostly on inputs and processes. There is a limited level of incorporation that is formal and procedural, but which is not necessarily at the core of decision-making. The measurement and incorporation of performance does not happen because organisations need it for policy-making or managing, but because there are laws and regulations requiring it. The administration of organisations is based on the importance of rules, regulations and laws, mostly within a legal framework. As a consequence, the intended and potential use of performance data is limited. A classical Weberian bureaucracy fits this model (Bouckaert and Halligan 2008b).
According to the *Managements of Performances* ideal type, management and performance are linked, but the connection between them is underdeveloped and concurrent systems operate. It implies different types of performances according to different and unconnected management functions. This results in a diverse range of managements of performances like performances in personnel management, financial management, strategic and operational management, customer management, and communication management. Asymmetrical development of these function-based measurement systems makes it not very consistent, coherent, comprehensive, and integrated. However, within some functions there may be a high level of sophistication and development, even up to the level of driving an improvement and reform processes (Bouckaert and Halligan 2008b).

*Performance Management* is defined by the presence of distinctive features: coherence, integration, consistency, convergence, and comprehensiveness. Measurement is high within this ideal type, since indicators and measurement systems are not just technically sound and functional, but also legitimate. It includes an integration of performance information, which goes beyond *ad hoc* connectedness, for the purpose of using it for improvement purposes. Performance management is conceived as a framework with system properties. There is a functional and optimal equilibrium between trust-based and performance-based control systems, even if there are some tensions (Bouckaert and Halligan 2008b). The ultimate challenge is, according to Bouckaert and Halligan (2008b), the sustainability of a complex PMS within a governance context.

To Bouckaert and Halligan (2008b), *Performance Governance* provides a distinct ideal alternative that a few countries aspire to. According to these authors, this ideal type of managing performance is grounded on four elements: organisational relationships exist both within and beyond the public sector, covering a range of collaborations through networks, partnerships and coordination mechanisms; participation and citizen engagement, through, for example, community feedback; integration of performance across several organisational levels; and demonstration of performance management's impact on society. According to Bouckaert and Halligan (2008b: 184), "Performance Governance covers a shift from governing *of* performance to governing *for* performance".

Each ideal type has an "increasing span and depth of performance and improved levels of coherence, substance and consolidation" (Bouckaert and Halligan 2008a: 73), meaning
that these types can be applied to the historical development of, and to trace the evolution of managing performance over time. According to these authors, the ideal types are also the basis for analysing and comparing country orientations to performance as a means of thinking analytically about performance management and its components. In essence, a country will advance to the next ideal type by expanding and integrating the level and type of measurements used while also improving on the processes of reporting, feedback, accountability and learning (Bouckaert and Halligan 2008b), being Performance Governance the aspirational ideal type. In fact, apart from Bouckaert and Halligan (2008b), several other authors (e.g. Rhodes 1997; Moreira 2002; Osborne 2006; Sarrico 2010; Talbot 2010; Halligan et al. 2012) hint at a Performance Governance paradigm, although not necessarily calling it that. Indeed, as stated in Section 1.2.3, Osborne (2006) predicts an era of 'new public governance', which will replace those of 'public administration' and of NPM.

Given the importance of linking the measurement process with strategic planning and the need to look at several levels of performance, it was considered adequate to use an input-process-output-outcome model to look at the performance of universities. Therefore, in the next section, Bouckaert and Halligan's (2008b) model will be adapted to higher education.

### 3.7. A systems view of performance management in higher education

Built upon the input-process-output-outcome model presented in Section 3.6 (see Figure 9) and the work of Dochy et al. (1990), Figure 10 gives a systems view of performance management in universities, relating inputs, processes, outputs, outcomes and trust.

According to this model, there is an ex-ante stage where, for example, the state determines the budget allocation for universities, with which universities may or not agree. This authorises expenses for inputs, which are transformed into processes and outputs, resulting in outcomes and in levels of trust. This is monitored and controlled, sometimes for the purpose of redirecting resources (Bouckaert and Halligan 2008b).
Higher education here is seen as a process for transforming inputs (notably students' time, academics' time, consumables, and equipment and buildings) into outputs, which can be broadly classified as relating to the three components of every university's mission – teaching, research and third mission. The former includes the value-added of all those receiving instruction from HEIs, that is to say, any increment in the knowledge of students, whether or not they complete their studies. Research incorporates any increase in knowledge generated by the institution, in the form of publications or patents, for example (Cave and Hanney 1992), and third mission includes, for instance, educational or consultancy activities for outside organisations. Outcomes are the products of a university in the long-run, and comprise, for example, building a well-educated society or contributing to economic development (Boland and Fowler 2000). Outcomes are affected by the environment, which should also be affected by them. Needs are derived from the environment and are also supposedly affected by outcomes. Needs result in strategic and operational objectives of policies that are realised through outcomes (Bouckaert and Halligan 2008b).
All this process is monitored and controlled. At the end, the outputs and the outcomes are measured against pre-established targets and, if there is a difference between these and the actual outputs/outcomes, corrective action should occur. Similarly to what was described by Bouckaert and Halligan (2008b) for public sector organisations, in universities, effectiveness should be a primary dimension of performance, being efficiency or productivity a secondary dimension. Nevertheless, and as stated in Section 3.6, the ratios that are more easily measured are economy and efficiency. This happens mainly due to the fact that organisations are only able to control inputs, processes and outputs, depending all other factors on other agents.

Given that performance measurement can widen the gap between managers and professionals, constructing trust between them is considered essential for a well-succeeded PMS. Therefore, it is desirable, at various crucial moments in the performance measurement process, to arrange for interaction between academics and managers. This means that professionals ought to be invited to say what constitutes a good product definition and what they want to be assessed on: "If management and professionals (...) arrive at product definitions and performance indicators by mutual agreement, there is a greater chance that they will be taken seriously, which will help them [to] fulfil their function" (De Bruijn 2007: 58). Plus, there should be a clear identification of the functions of performance measurement and the intended forums for dealing with the performance measurement results. This way, the manager and professional can trust that any deviation from it will demand consultation. As stated in Section 3.6, the three criteria linking inputs, outputs and outcomes to trust, although considered important, are extremely hard to measure.

In the last stage of the system's view there is an ex-post audit and/or evaluation, with an internal and external dimension. In higher education these tasks can be performed by external auditors or by an accreditation agency, which usually starts off the evaluation process by analysing a self-assessment report produced by each university. To Bouckaert and Halligan (2008b), ideally this feeds forward to the next cycle.

If working well, a PMS should provide information on important matters, promote appropriate behaviour, provide mechanisms for accountability and control, and create a mechanism for intervention and learning (Fisher 1995; Haas and Kleingeld 1998; Neely 1998). In fact, monitoring should only take place in order to provide organisational
learning, which may be defined as the "processing of information which changes an entity's range of potential behaviour" (Johnsen 2000: 269). In other words, performance should be not only measured and reported, but also managed, that is, used for improvement purposes (Radnor and Barnes 2007).

But, how is performance being measured, reported and managed in universities? And, how do these systems relate to the governance structures of universities? Answering these questions will be the focus of this research.

Before moving into the methodology chapter, in order to explain how the research was carried out, it is important to understand what performance measures are usually used in universities and what *ex-post* evaluation procedures are normally carried out.

### 3.7.1. Performance measures used in higher education

Several tools can be used to measure performance in universities. Barnett (1992) argues that there are three forms of quality assessment in higher education: peer review, judgements of the market and PIs (Figure 11).

![Figure 11 – Performance measures in higher education](image)

*Source: Barnett (1992: 4) and Rosa (2003: 61)*

Barnett (1992) based his analysis on the triangle proposed by Clark (1983) (see Section 2.3), who argues that there are three coordinating mechanisms in higher education: the
state, the market and the academic oligarchy. According to Barnett (1992), the type of performance measures used will depend on the prevailing coordination mechanism. To him, "the state will tend to favour performance indicators as a means of assessing quality; (...) the academic community will tend to favour peer review; and the market-led system will generate consumer oriented approaches to quality assessment" (ibid: 3).

Therefore, determined to promote a more efficient system, the state will tend to regard as high quality institutions those that have PIs showing that they are able to drive increasing numbers of students into the labour market at reducing unit costs. The peer review system will reflect the values around which the academic class is oriented, namely knowledge development. The market system will favour the collective voice of the consumers (Barnett 1992).

Rosa (2003) positioned five countries in Barnett's triangle: Portugal, The Netherlands, France, the UK and the US. According to her, the first two countries favoured peer review; France and the UK preferred PIs; and the US favoured market judgements.

Barnett (1992) recognises that his analysis is over-simplistic, since "the academic community may not rest content with peer review and may embrace PIs; the state, correspondingly, will be likely to support quasi-peer reviews, in the form of inspection, accreditation or audit whether at institutional or programme level. At the same time, there will be accreditation exercises carried out by the relevant professional bodies" (ibid: 4). Nevertheless, he argues that his triangle offers a comprehensive summary of the key social forces in higher education and their dominant approaches.

The next sub-sections will take a closer look at each of the measures that can be used in higher education – peer review, judgements of the market and PIs, following Barnett's (1992) triangle.

### 3.7.1.1. Peer review

Peer review is a method used for assessing the quality of higher education, consisting in evaluations by peers, who are experts in a specific field of knowledge (Brennan et al. 1993).
Cole (2003), cited in Blackmore (2005), regards peer review as an essential process for reviewing ideas and finding mistakes, leading to the improvement of the quality of a product. Cole (2003) argues that a 'culture of criticism' is an important ingredient for successful peer reviewing and a critical factor to favour a quality improvement culture.

To Pagani (2002), peer review is a tool for change, providing a method of assessing policies or performances in order to help each other to improve and to ensure compliance to standards. Blackmore (2005) argues that one positive spin off from such a practice is that good practice can be identified and shared. To Brennan et al. (1993: 133):

"The traditional example of peer review is the referee system of scientific journals. An anonymous output of scientific activity (a manuscript) is judged by a few anonymous fellow scientists (peers) who are reputed to possess sufficient expertise with regard to the questions addressed in the article".

Nevertheless, this method is also used with other purposes. It can be used: in the allocation of research funding; to assess the research rating of university departments (e.g. it has been used as part of the Research Assessment Exercise (RAE) to judge the quality of research in the UK); to assess the quality of teaching and learning; or to judge the quality of a department, programme or course.

Given that peer review involves human judgement its outputs are often regarded as being subjective. Some authors (e.g. Conrad and Blackburn 1985; Skolnick 1989; Elsworth 1994) argue that, in the case of the evaluation of teaching and learning, peer reviews are frequently indicators of reputation rather than of performance.

Conrad and Blackburn (1985) list a number of limitations of this approach, including: evaluator bias and limited evaluator perspective; and the frequent use of academic staff as the single reputation criterion. Skolnick (1989) highlights the potential for conservatism, meaning that peer review tends to stifle diversity and innovation. Elsworth (1994: 165) adds: "at the centre of this conservatism appears to be the arbitrary (…) nature and lack of public validity of the evaluative criteria used".

Bingham and Ottewill (2001) recognise that the assessment of peers might be too self-congratulatory, needing to be some checks and balances in place to prevent this from occurring.
Cave et al. (1997: 201), for example, state that peer review of departments should involve the following: those being reviewed knowing who are the reviewers; the reviewers getting to know the full range of the work of those being reviewed; those reviewed having the opportunity of being interrogated on their work so that misunderstandings can be adjusted and the reviewers become knowledgeable about what they are judging; reviews should be done by 'genuine' peers (who are not too different in status from those being reviewed) and yet experts in the field being reviewed.

Even though the purpose of the review varies across the higher education sector, being either a management tool for target and objective setting (Shelley 1999) or a self-evaluation tool for the individual (Blackmore 2005), most authors (Cave et al. 1997; Shelley 1999; Blackmore 2005) agree that the review process should be educative, based on trust and openness between the reviewer and those who are reviewed.

3.7.1.2. **Performance indicators**

Performance indicators (PIs) are considered essential to clarify the gap between current and desired practice, that is to say, the extent to which operational units (universities, faculties, departments, individuals, etc.) are achieving desired results. Cave et al. (1997) define a 'performance indicator' in the following way:

"Measure – usually in quantitative form – of an aspect of a higher education institution. The measure may be either ordinal or cardinal, absolute or comparative. It thus includes the mechanic applications of formulae (...) and can inform, and be derived from, such informal and subjective procedures as peer evaluations or reputational rankings."

Even though, when speaking of PIs, there is the temptation of thinking first of quantitative measures, qualitative PIs also exist (Brennan et al. 1993). As a matter of fact, leaving behind the reductionist view that PIs are quantitative, and preferentially, financial data, Brennan et al. (1993: 133) state that "performance indicators are empirical, quantitative, or qualitative data that point to the goal achievement of a system".

In higher education, PIs became an essential part of governmental initiatives with the passage from the 'state control model' to the 'state supervision model' (Neave 1988), as explained in Section 1.3.2. With this change, governments started to introduce evaluative
mechanisms to reinforce the accountability of public institutions for the economic, effective and efficient use of public resources.

Several reasons have been advanced for the development of PIs. These include the enhancement of managerial control, the opening up of institutions to consumer review, and the strengthening of professional judgement (Cave et al. 1988).

To Cave and Hanney (1992), in order to define PIs, it is important to classify them into three categories, which are related to the systems view of performance presented in Section 3.7: input, process and output indicators. Input indicators have to do with the resources, human and financial, employed by universities. Process indicators relate to the intensity or productivity of resource use and to the management effort applied to the inputs or to the operation of the organisation. Output indicators concern what is being achieved, that is to say, the products of the institution. In this research outcome indicators have been added to the table, even though, as discussed before, they are not easily measured. Table 2 shows some examples of all these types of indicators.

Table 2 – Examples of performance indicators within the input-process-output-outcome model

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Output</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources (e.g. financial and material facilities; students; staff)</td>
<td>Organisational and administrative (management) aspects for three primary tasks of higher education institutions: research; teaching and learning; and third mission</td>
<td>Products of research, education and services (e.g. amount of publications; employability of graduates)</td>
<td>Products of the university in the long-run (e.g. help building a well-educated society; contribute to economic development)</td>
</tr>
</tbody>
</table>

Source: Adapted from Dochy et al. (1990: 145), who did not consider outcome indicators.

To Dochy et al. (1990: 145), individual PIs or sets of PIs should satisfy certain criteria to fulfil their evaluative role. These criteria include:

- **Type of indicator** (input, process, quantity, quality, etc.);
- **Relevance** (how accurately is the attainment of objectives measured?);
- **Ambiguity** (is the direction of improvement clear?)
• Manipulability (can units costlessly adjust or misrepresent performance?)
• Cost of collection and availability of comparative data;
• Level of aggregation (at what level should they be applied?)
• Relation to other indicators (do certain indicators overlap with other PIs?)

Even though a wide range of PIs is used in many universities, the adoption of systems of PIs is far from universal.

Kells (1992) states that countries differ enormously in respect to three variables: technical development; the political decision to create structures that allow and encourage the use of PIs; and the adoption of policies which will, hopefully, lead to the advancement of PIs.

Systems of higher education also vary in other related issues, including the degree of autonomy of institutions and individual academics. Within Western Europe, the drive towards the 'Evaluative State' is most advanced in countries like the Netherlands and the UK (Neave 1988). Also Teichler (1988) identifies the UK and The Netherlands as the two countries where performance measures have had the most impact on policy and research.

These differences between countries suggest that it would be interesting to compare higher education systems that have arguably adopted different systems of PIs, in order to understand the reasons that led to such differences.

3.7.1.3. Judgements of the market

Fiscal constraints, public policies that foster a greater role for market forces, changing levels of demand, and increasing competition, push institutions to pursue strategies they believe will best position them in the competitive marketplace, such as hiring 'star' professors or investing in high-cost amenities, such as recreational facilities, residence halls and improved information technology infrastructures (Eckel 2007).

In this increasingly competitive environment, it could be argued that it is important to look at the market and listen to what the consumers have to say, in order to understand their needs and meet their requirements. Those who favour the market as the main form to
assess quality argue that the voice of consumers is what counts as quality, especially since the market system is anarchic and no predictions can be made about its preferences (Barnett 1992).

The success in the market pre-empts deeper consideration of the questions 'who benefits?' and 'whose values are served?' (Houston 2008). According to Eckel (2007: 88), "students and their families seek the highest quality institution. Yet, quality is often defined with little attention to how much students learn or the impact of the students' education on their personal, professional and civic lives". This implies listening to graduates, future students and their families, current and future employers.

3.7.1.4. The combination of performance measurement tools: qualitative and quantitative

Performance measures can be either qualitative or quantitative. Quantitative models, usually based on formulas, have the advantage of providing objective criteria for measurement, enabling an unbiased comparison between different institutions. Qualitative tools, such as peer review, tend to pay less attention to minor issues, mainly because of the holistic judgements they make. Plus, since they are based on human judgements, it is often difficult for the evaluators to be objective and consistent through the application of their evaluation policy (Rosa and Sarrico 2007).

It thus seems clear that qualitative and quantitative tools do not have to be mutually exclusive. Instead, they can complement each other contributing to a better assessment of performance.

The actual trend in higher education is to associate PIs to other evaluation forms (e.g. qualitative indicators resulting from 'peer review'), which translate each institution's context and allows a broader vision of universities (Cave and Hanney 1992).

After looking at the tools that are used to measure performance in higher education, the next section will explain how the *ex-post* evaluation, referred to in Figure 10, occurs in most HEIs.
3.7.2. **Ex-post evaluation in higher education**

McDavid and Hawthorn (2006: 293) point some differences between performance measurement and evaluation: PMS are ongoing while evaluation is episodic; performance measures are routinised while evaluation measures are customized for each evaluation; resources for performance measurement are usually part of the organisational infrastructure while resources for evaluation are targeted; managers often play a key role in performance measurement while evaluators and managers are less connected; and the uses of performance information evolve over time while the intended purposes of evaluation are usually negotiated upfront.

Most European countries have been influenced by the ideas contained in a 'general model' of evaluation, supported and promoted by the EU. This model has four main elements: first, there is a national body (independent of government) with the responsibility of coordinating and setting out the procedures and methods to be used by HEIs, in order to assure quality; second, based on the procedures and methods set out by the national body, institutions should undertake regular self-evaluation, carried out by the academic staff of the institution, and report to the co-ordinating body on a regular basis; third, the institutional self-evaluation would be the basis for an external peer evaluation. The external peers, selected to represent specific expertise (management, academic, etc.), would have discussions with academic and administrative staff, alumni and students; fourth, and last, a report should be published, setting out the findings of the peer review visit. Its main purpose should be to make recommendations to institutions in order to improve their quality (Brennan and Shah 2000). The evaluation procedure for universities could be as shown in Figure 12.

Even though evaluation procedures may differ between countries, the model displayed represents the system of evaluation present in many higher education systems.
From what has been described in the literature review chapters, it seems undeniable that similarly to what happened in other public services (see Section 1.2), pressures to reform higher education have become more acute in recent years. Amongst others, there have been pressures to democratise access to higher education; to contain costs; to be accountable for the money spent; to increase productivity; to improve the quality of teaching and research; and to develop the third mission and show its impact on society. These pressures have not only challenged universities to change their traditional models of governance, but have also raised the interest in introducing performance measurement, reporting and management practices, as discussed in Section 1.3.2.

The increasing interest for performance enhancement, both in the private and public sectors, led to prolific research, especially on the topic of performance measurement, and to the development of numerous performance management frameworks (e.g. Fitzgerald et al. 1991; Kaplan and Norton 1992; Brown 1996; Neely and Adams 2001), as seen in Section 3.5.
Despite the growing base for research into the topic of performance in higher education, there still seem to be some gaps in the literature, especially regarding the management of performance and its link to strategic planning. Actually, in higher education, the focus has been primarily on the selection and use of PIs (e.g. Goedegebuure et al. 1990; Johnes and Taylor 1991; Cave and Hanney 1992; Tam 2001) or on the development, implementation and/or analysis of quality assurance mechanisms (e.g. Brennan and Shah 1997; Brown 2004; Filippakou and Tapper 2010; Langfeldt et al. 2010; Shah et al. 2011; Stensaker et al. 2011). Only more recently, there has been an interest for studying performance management in higher education (see Table 3). Nevertheless, studies like these are not common and tend to focus on the implementation of management models, such as the BSC; look at the performance of specific areas (e.g. research, central administrative services or performance appraisal of staff); or look at specific actors (e.g. heads of departments or vice-chancellors).

Thus, and even though the literature review (e.g. Fisher 1995; Haas and Kleingeld 1998; Neely 1998) has shown that a well-built and well-functioning PMS is one where performance is measured and reported, and where performance information is integrated into decision-making, using it for learning purposes (as discussed in Section 3.7), it is believed too much attention has been put on how to measure performance or on how to build quality mechanisms, mainly in order to prepare for external evaluation exercises, often forgetting to look at what is considered to be the most important part of the process: what is being done with the performance data collected during the measurement process, and what and who may be influencing measurement, reporting and management processes.

As a matter of fact, not only are there few studies looking at performance management in universities from a systems perspective, but also there seem to be no studies relating performance measurement, reporting and management to governance structures, despite the huge body of literature on university governance (e.g. Bargh et al. 1996; Braun and Merrien 1999; Shattock 1999; Kogan and Hanney 2000; Amaral et al. 2002; Kehm and Lanzendorf 2006) and a rather small number of studies that look at both governance and performance (Knott et al. 2004; Aghion et al. 2009). The relationship between performance and governance became even more relevant when several scholars (e.g. Bouckaert and Halligan 2008b; Sarrico 2010; Halligan et al. 2012) are predicting a move from performance management to performance governance, as discussed in Section 3.6.
Table 3 – Literature review on performance management in higher education

<table>
<thead>
<tr>
<th>Authors</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simmons (2002)</td>
<td>Looks at the performance appraisal systems for academic staff.</td>
</tr>
<tr>
<td>Talib (2003)</td>
<td>Explores the use of performance models and goal setting in universities, focusing on the RAE.</td>
</tr>
<tr>
<td>Knott et al. (2004)</td>
<td>Study the impact of state governance structures on the management and performance of higher education institutions in the US.</td>
</tr>
<tr>
<td>Adcroft and Willis (2005)</td>
<td>Considers four key issues: the context and content of performance measurement in the public sector; the specific examples of health care and higher education; the limitations of performance measurement systems; and the likely outcomes of performance measurement systems.</td>
</tr>
<tr>
<td>Broad et al. (2007)</td>
<td>Examine the relationship between strategic planning, accounting and performance measurement systems in local government and higher education.</td>
</tr>
<tr>
<td>Aghion et al. (2009)</td>
<td>Look at the relationship between governance and performance. To them, performance is based on the positions on the Shanghai rankings and is, therefore, basically research performance. Governance is mainly defined in terms of public status and budget, building, hiring and wage setting autonomy.</td>
</tr>
<tr>
<td>Arena et al. (2009)</td>
<td>Develop and test a PMS for central administrative services, drawing on actor network theory.</td>
</tr>
<tr>
<td>Yu et al. (2009)</td>
<td>Describe the implementation of the BSC in a university department.</td>
</tr>
<tr>
<td>Breakwell and Tytherleigh (2010)</td>
<td>Analyse whether the socio-demographic characteristics favoured by those responsible for selecting vice-chancellors are related to the performance of institutions.</td>
</tr>
<tr>
<td>Sousa et al. (2010)</td>
<td>Explore how universities have implemented research performance systems.</td>
</tr>
<tr>
<td>Cugini et al. (2011)</td>
<td>Look at the suitability of the BSC for measuring and managing the performance excellence of academic staff.</td>
</tr>
<tr>
<td>Haapakorpi (2011)</td>
<td>Explores the direct and indirect outcomes of quality assurance processes in Finnish universities and the impact of organisational conditions on these assurance processes.</td>
</tr>
</tbody>
</table>

Given that universities are complex organisations (as seen in Section 2.4), being influenced by both external and internal coordination mechanisms, it is believed that, when analysing internal mechanisms, the research should go beyond the university top managers' perceptions concerning the implementation and functioning of PMS, looking not only at a single level of decision-making, but at the different levels that compose a
university's governance structure and at the different Estates that integrate those levels (Academic Estate, Administrative Estate, Student Estate and External Representatives Estate), as explained in Section 2.4.4.2. The analysis of multiple levels and actors is considered essential to understand how the introduction of PMS in universities, often encouraged by external pressures, has affected the configuration of the governance structures and the roles, influences and accountabilities of the key actors in these structures (the four Estates). The understanding of these changes will, arguably, contribute to comprehend the way each level and Estate looks at PMS and the decisions they make concerning the implementation and functioning of those systems. To our knowledge, this analysis has not been made yet, being a gap in the literature.

Therefore, this research attempts to address the gaps in current knowledge, being its focus to explore how universities are measuring, reporting and managing performance and how governance structures relate to it.

Guided by the research aim, four specific questions were considered relevant to encompass the various dimensions involved in the research:

1. **How have the changes in different higher education systems impacted on the governance of universities?**

   It is important to look at how higher education systems have evolved over time, in order to understand the way universities are governed and managed within those systems.

2. **How are performance management systems functioning in universities?**

   To understand the functioning of PMS in universities, several aspects need to be analysed, namely: the way universities define their strategy; how they measure, report and manage their performance; the way the governing and management bodies and the four Estates that compose those bodies are involved in the measurement, reporting and management of performance; and the way measurement, reporting and management practices are integrated and linked to strategic steering.

3. **What factors are influencing the implementation and functioning of performance management systems in universities?**
To comprehend the reason(s) for PMS to be functioning effectively (or not) it is important to analyse the factors that may influence, either positively or negatively, the implementation and functioning of those systems.

4. *How do governance structures influence and are influenced by the implementation and functioning of performance management systems in universities?*

The aim of this question is to understand the way universities are structured both in governance and management terms, and how these structures and the Estates that constitute them (Academic, Administrative, Student and External Representatives) may be affected by the introduction of PMS and may influence (both positively and negatively) the implementation and functioning of those systems.

Following the aforementioned research questions, it is possible to define several specific objectives:

1. Analyse how the British and the Portuguese higher education systems have evolved over time and how the changes that occurred in those systems might have impacted on the way universities are governed and managed.

2. Identify performance measurement and reporting practices and the way performance information is being used to inform decision-making in universities, and discuss the existence of fully accomplished PMS in these institutions.

3. Identify and categorise the factors that affect the implementation and functioning of PMS in universities.

4. Identify and analyse the pressures that exist to introduce performance measurement, reporting and management practices.

5. Analyse the influence of the introduction of performance measurement, reporting and management practices on the existing governance structure.

6. Discuss the influence of performance measurement, reporting and management practices on the roles and influences of the four Estates (Academic Estate, Administrative Estate, Student Estate and External Representatives Estate) and the influence of the Estates on decision-making.
7. Analyse the influence of the existing governance structure and Estates on the implementation and functioning of PMS.

The framework used integrates, on the one hand, literature on performance management and, on the other, literature on governance, applied to the context of higher education.

Performance management is presented through the systems view shown in Section 3.7 (see Figure 10), using three main dimensions – measurement, reporting and management; and performance measures are defined and identified within the input-process-output-outcome model (Dochy et al. 1990; Cave and Hanney 1992; Bouckaert and Halligan 2008b). The areas that are looked at in terms of performance measurement, reporting and management are the main activities that compose the mission of a university (teaching and learning, research and scholarship and third mission), the employees (academic and non-academic staff), the 'customers' (students), services, other important stakeholders (employers and alumni) and finance.

Governance structures are analysed by using the analytical framework proposed in Section 2.4.4.2 (see Figure 6). First, the relationship between universities and the external coordination mechanisms that compose the 'outer ring' – the state, the market and Europe – are explored; secondly, the type, size and composition of governing and management bodies are disclosed, and the reforms that have taken place are discussed; and thirdly, the roles and influences of the key actors that sit in governing and management bodies are looked at (especially in relation to PMS). These actors are the four Estates that compose the 'inner ring' of the analytical framework: Academic Estate, Administrative Estate, Student Estate and External Representatives Estate.

The process by which the research questions and objectives aforementioned have been transferred into a systematic study will be addressed in the following chapter, which discusses research paradigms, research methodology, data collection methods, and data treatment techniques, ensuring they are aligned with the research aim and objectives.
4

Research design
"We can be absolutely certain only about things we do not understand."
Henry Miller

"Research is the process of going up alleys to see if they are blind."
Marston Bates

In the previous chapters, the main literature that frames the current study, centred on the relationship between governance structures and PMS, was reviewed.

The objective of this chapter is to explain why the research design used is considered adequate for the research aim and demonstrate that the decisions that informed the research design were conducted in a rigorous manner, in full awareness of the options available.

The chapter is structured as follows: First, the paradigms available to researchers will be compared and the choice of a phenomenological paradigm and of an interpretative approach justified. Secondly, the reasons for having chosen a qualitative methodology and an exploratory study will be presented, followed by an explanation of the decision to use a case study design and a presentation of the reasons that support the selection of cases. Thirdly, the choice of documentary analysis and semi-structured interviews to collect data will be justified. Finally, the data treatment techniques used will be explained and the way data was analysed and interpreted shown, whilst acknowledging issues such as validity and reliability.

4.1. Research paradigm

The research paradigm adopted by a researcher is fundamental since paradigms "are central to the notion of research design" (Easterby-Smith et al. 2001: 56). Kuhn (1996) defines a paradigm as a set of assumptions embraced by a community of scientists about how problems are to be understood, about what theory best describes the world and, therefore, about which research questions and methodologies are appropriate. In human and social sciences, paradigms help to understand phenomena: "They advance
assumptions about the social world, how science should be conducted, and what constitutes legitimate problems, solutions and criteria of ‘proof’” (Creswell 1994: 1). As such, paradigms include both theories and methods, helping to clarify the research design.

Although there is considerable blurring, two paradigms dominate the literature: the positivist and the phenomenological (Hussey and Hussey 1997). Some authors, like Creswell (1994) use other terms, such as quantitative and qualitative paradigms. Table 4 shows the numerous alternative terms that are used.

<table>
<thead>
<tr>
<th>Positivist paradigm</th>
<th>Phenomenological paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Objectivist</td>
<td>Subjectivist</td>
</tr>
<tr>
<td>Scientific</td>
<td>Humanistic</td>
</tr>
<tr>
<td>Experimentalist</td>
<td>Interpretivist</td>
</tr>
<tr>
<td>Traditionalist</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Adapted from Hussey and Hussey (1997: 47).*

Each paradigm adopts a different stance with regard to the key assumptions that guide the way in which social research is conducted.

Denzin and Lincoln (1994) argue that a paradigm encompasses three assumptions (the fundamental questions): ontology, epistemology, and methodology.

Ontology raises basic questions about the nature of reality. Does the researcher believe that reality can be objectively considered, or is reality subjective or dependent on the participant (Creswell 1994)? Even though we accept that there is a reality out there independently of our observation of it, agreeing to an extent with positivist assumptions, it is believed performance has a socially constructed element, which can only be understood by examining the perceptions of human actors, as advocated by the phenomenological perspective.

Epistemology is concerned with the study of knowledge and what is accepted as being valid knowledge. This involves examining the relationship between the researcher and
what is being researched (Collis and Hussey 2003). Since what is important in the multiple elements and dimensions of performance, and how each of these elements and dimensions is measured, reported and managed, is believed to be socially constructed, it was considered important to "report faithfully these realities and to rely on voices and interpretations from informants" (Creswell 1994). This perspective is in accordance with the phenomenological paradigm.

Methodology focuses on the entire process of research. Given that the intent of the study is not to develop generalisations that contribute to theory, as supported by positivist assumptions, but to explore how universities are measuring, reporting and managing performance and how governance structures relate to it, a qualitative methodology was preferred over a quantitative one. The reasons that justify this choice are explained in Section 4.2.1.

Within the phenomenological paradigm there are a number of philosophies that come under this umbrella, such as ethnography, hermeneutics, social constructivism and interpretivism. Whilst all have slightly different perspectives in the way they approach the ontological and epistemological assumptions, they all share the belief that methods of the natural sciences are inadequate for the study of social reality (Lee 1993).

Unlike atoms, molecules and electrons, people create and attach their own meanings to the world around them and to the behaviour that they manifest in that world (Lee 1993). In other words, the same human action can have different meanings for different human subjects, as well as for the observing social scientist. Being the focus of this study to interpret the perceptions of different actors (academics, non-academics, students and external members) concerning the implementation and functioning of PMS, the approach that this research aligns itself with is that of interpretivism.
4.2. Research methodology

4.2.1. Qualitative methodology

Several reasons explain the choice of a qualitative analysis for this research.

The first set of reasons is related to the relative absence of studies that relate governance structures to PMS. In this sense, a qualitative approach was considered more adequate, since it enables a more profound and rich analysis of the phenomena being studied than a quantitative approach, especially when the study field is not scientifically well structured (Denscombe 1999; Silverman 2006).

A second set of reasons has to do with the nature of the study. It was considered that in order to get the perceptions of all the actors that sit in the existing governing and management bodies and/or have a close link to the management of the university (these being academics, non-academic staff, students or external members), a qualitative methodology would provide a richer understanding of the reality than a quantitative approach. In fact, by using a qualitative methodology, the researcher is able to carry out a more in-depth study, arguably allowing for a better interpretation of the way the actors perceive PMS and are involved in the implementation and functioning of these systems.

The last set of reasons is related to the scientific domain of the present study – social sciences. Actually, there is a strong tradition in social sciences of using a qualitative approach (Alasuutari 1995). Having started in the Chicago School, in the 1920s, the qualitative approach became more preeminent in the 1970s. The interest in this methodology arose as a reaction against the priority attached to the scientific or positivist methodology present in sociological textbooks. In these textbooks, sections on qualitative or 'soft' techniques – if existed at all – were referred to as being of interest only in providing intuitions for the formulation of hypotheses, which could then be tested more rigorously using quantitative or 'hard' data (Gherardi and Turner 1999; Scott and Marshall 2005). The growing interest in phenomenological approaches in the 1970s led to scepticism about the relevance of the natural scientific model of research for social sciences (Scott and Marshall 2005). As a matter of fact, in the last decades, several books have been written on the importance of qualitative research (Denzin and Lincoln 1994; Miles and Huberman 1994; Mason 1996).
Even though, for the purpose of this research, a qualitative methodology was preferred over a quantitative approach, that does not mean that certain rules and procedures have not been followed in order to ensure the reliability and the validity of the data (Silverman 2006), as will be explained in Section 4.4.3. The intent was to minimise the subjectiveness usually associated with a qualitative methodology, given that data collection can be influenced by the characteristics of the researcher (Denscombe 1999). Nevertheless, it is recognised and accepted that no qualitative study can be entirely objective.

4.2.2. An exploratory study

Robson (1993) argues that, in addition to the objective of contributing to knowledge, there are three purposes for undertaking research: to explore; to describe; or to explain events and/or situations (Table 5).

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Key Characteristics</th>
</tr>
</thead>
</table>
| Exploratory   | • To find out what is happening  
• To seek new insights  
• To ask questions  
• To assess phenomena in a new light  
• Usually, but not necessarily qualitative |
| Descriptive   | • To portray an accurate profile of persons, events or situations  
• Requires extensive previous knowledge of the situation to be researched or described, so that you know the particular aspects on which to gather information  
• May be qualitative and/or quantitative |
| Explanatory   | • Seeks an explanation of a situation or problem, usually in the form of causal relationships  
• May be qualitative and/or quantitative |

*Source: Robson (1993: 42)*

Given the novelty of the topic area, this research is exploratory. In fact, as the literature review highlighted (see end of Chapter 3), there is still a lack of understanding relating to how universities are measuring, reporting and using the data that is collected during the measurement process and how governance structures relate to it. The primary purpose of
the study is, therefore, to 'explore' the concepts and develop ideas rather than to 'explain' or 'describe' what is happening and why. In 'exploring', the study aims at developing an understanding of the relationship between governance structures and PMS rather than testing hypothesis or confirming them, which would be more characteristic of a positivistic study (Collis and Hussey 2003). This research is believed to lead to new insights of knowledge to the way PMS should be implemented in HEIs.

Having opted for a qualitative methodology, a case study design was considered the best option to approach the object of study. In the next section, the reasons that justify this choice will be presented and the process used to choose the cases explained.

4.2.3. Case study design

4.2.3.1. Justification

Case-studies include descriptive reports on typical, illustrative, or deviant examples; descriptions of good practice in policy research; evaluations of policies after implementation in an organisation; studies that focus on extreme or strategic cases; the rigorous test of a well-defined hypothesis through the use of carefully selected contrasting cases; and studies of natural experiments (Scott and Marshall 2005).

To carry out this qualitative research, a case study design was chosen for three main reasons. First, it is in line with the aim of the research, which is to explore in-depth a specific phenomenon of interest – how are universities measuring, reporting and managing their performance and how governance structures relate to it.

Second, case studies are important to analyse complex social phenomena, like to one we are looking at. In fact, the way universities measure, report and manage their performance "is sensitive to the context in which management behaviour takes place and to its temporal restraints" (Bonoma 1985: 204), not being clearly evident the boundary between phenomenon and context (Yin 1994).

Third, the case study allows an investigation to retain the holistic and meaningful characteristics of real-life events – such as individual life cycles, organisational and managerial processes, neighbourhood change, international relations, and the maturation
of industries (Yin 1994). In this study, case studies are used in order to understand organisational and managerial processes in a specific kind of organisations – universities (Melo et al. 2008).

A case study research design can include both single and multiple-case studies. Since the aim of this research is to investigate a particular phenomenon (PMS and their relationship with governance structures), it was considered important to analyse that phenomenon in different higher education settings (the British and the Portuguese, in this case), in order to see how different contexts and policies can impact on the way universities deal with PMS and how governance structures may influence and be influenced by those systems. Therefore, a multiple-case approach was chosen, since it enables the development of more sophisticated descriptions and explanations. To Miles and Huberman (1994: 172), multiple cases help the researcher to "pin down the conditions under which that finding will occur".

In the trade-off between broadness, which means choosing a large number of cases with limited deepness, and depth, which entails choosing a small number of cases with significant deepness, the latter was preferred. Given the complexity of the analysis, which involved several levels of the organisation (central, departmental and individual), and different actors (academics, non-academics, students and external members), an adequate understanding of a university is only considered possible if a significant amount of time was spent at each location, which meant fewer cases (Melo et al. 2008). As Yin (1994) points out, by examining a relatively small number of cases, and comparing and contrasting them, the researcher learns about significant features of the phenomenon and how it varies under different circumstances.

Therefore, two cases were selected – the University of Warwick (UW) and the University of Aveiro (UA) – enabling an in-depth analysis. In fact, and even though with some disagreement, it is generally thought that in-depth case studies are extremely powerful for inductive theory building (Zhao and Calantone 2003), such as this research attempts.

4.2.3.2. Selection of cases

As discussed in Section 2.2, not every country or institution responded to reform demands in the same way. Perhaps, the most profound reforms in higher education have taken
place in countries associated with the Anglo-Saxon model of system-level governance. For the UK, for example, these reforms were not isolated to a particular public sector but were a component of a much broader rethinking and restructuring of the role and function of the government (Amaral et al. 2002). In fact, profound reforms were implemented in the public sector (Pollitt 2003), first under the Thatcher Government, in the 1980s, and, later, under Tony Blair's 'Third Way'. Other countries, such as Portugal, have recently started to debate the need for deep changes in order to increase the efficiency, effectiveness, accountability and performance of HEIs. Indeed, the Portuguese government just started to put into practice a profound restructuring of the higher education sector.

Taking these differences into account, and the particular interest of the researcher to look at the Portuguese higher education system, where it is integrated, a comparative study between British and Portuguese universities was conducted, in order to assess if the way universities deal with performance measurement, reporting and management practices is that different in countries with different contextual settings, and to understand the influence those practices may have on governance structures, and the influence those structures may have on PMS, under different scenarios. It could be argued that, in this case, comparison is a powerful conceptual mechanism, fixing attention upon the few attributes being compared (Stake 1994).

This research was limited to state funded universities. Several reasons justified this choice: first, the research field needed to be limited due to time constraints and limited resources; secondly, in the Portuguese case, state funded universities are more well-established and more representative of the Portuguese higher education system; thirdly, the polytechnics were left out of the study, given that they ceased to exist in the UK after 1992.

Even though depth was preferred over broadness, as explained in the previous section, other type of constraints justified the choice of two cases, namely: limited time; limited resources to do research; and, above all, difficulties in accessing other universities. Therefore, two cases were selected: the University of Warwick, in the UK, and the University of Aveiro, in Portugal. As Yin (1994) points out, by examining a relatively small number of cases, and comparing and contrasting them, the researcher learns about significant features of the phenomenon and how it varies under different circumstances.
These institutions were chosen for several reasons. First and foremost, they are both considered quite successful, entrepreneurial and innovative universities. In fact, when this study started both institutions belonged to the European Consortium of Innovative Universities (ECIU). UW left the consortium very recently. Secondly, they both have quite a flat structure, where departments play a major role. Thirdly, they are about the same age – UW dates back to 1965 and UA to 1973. Fourthly, due to facilitated access of the researcher to these institutions. The ECIU was founded in 1997 by ten European universities, being its goal to create a European network, where participating institutions could exchange experience and best practice of projects within education, research and regional development. It is a consortium of "research universities focussed on collaboration in innovative teaching and learning, enhancement of university-society interaction, internationalisation of the student and staff experience, and active engagement in policy development and practice within the evolving European Higher Education Area". At present, ECIU consists of eleven members, amongst which are UA, and three overseas associate partners. One would expect that these successful and innovative institutions in their countries would have implemented adequate systems to measure, report and manage performance.

It is not claimed that the selected institutions constitute a representative sample. Nevertheless, an attempt was made to ensure that, within each case, different characteristics were included. In fact, in each location, different subjects were considered, meaning that different departments, teaching different disciplines, were selected. The reason for choosing different subjects had to do with the fact that it would be expected that 'hard' subjects would have implemented more easily and deal better with PMS than 'soft' subjects, mainly because the first are more used to metrics than the latter.

To select the disciplines, the categorisation used by Becher and Trowler (2001) was applied. They distinguish between 'hard-pure' (pure sciences, such as physics, biology, mathematics or chemistry), 'soft-pure' (humanities, such as history and philosophy, and pure social sciences, such as psychology or anthropology), 'hard-applied' (technologies, such as engineering, agriculture, medicine or computer science), and 'soft-applied' (applied social sciences, such as education, accounting, journalism, management or law)

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subjects. Thus, similar departments were considered in both universities, being twelve departments selected in each location (see Table 6)\footnote{Even though in the Portuguese case departments are organised around a main scientific area, there are some departments where 'soft-applied' and 'hard-applied' disciplines can be found (e.g. the Department of Economics, Management and Industrial Engineering teaches those three subjects).}.

Table 6 – Selected departments

<table>
<thead>
<tr>
<th>Pure</th>
<th>Hard</th>
<th>Soft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry (UW and UA)</td>
<td>• Chemistry (UW and UA)</td>
<td>• Politics and International Studies</td>
</tr>
<tr>
<td>Mathematics (UW and UA)</td>
<td>• Mathematics (UW and UA)</td>
<td>(UW)/Social, Political and Territorial</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>• Biological Sciences (UW)/Biology</td>
<td>Studies (UA)</td>
</tr>
<tr>
<td>(UA)</td>
<td>(UA)</td>
<td>• French Studies (UW)/Languages and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cultures (UA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Economics (UW)/Communication and Art</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(UA)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applied</th>
<th>Hard</th>
<th>Soft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>• Computer Science (UW)/Electronics,</td>
<td>• Education (UW)/Education Sciences (UA)</td>
</tr>
<tr>
<td>(UW)/Electronics,</td>
<td>Telecommunications and Informatics</td>
<td></td>
</tr>
<tr>
<td>Engineering (UA)</td>
<td>Engineering (UW)/Mechanical Engineering</td>
<td>• Business (UW)/Economics, Management</td>
</tr>
<tr>
<td></td>
<td>(UA)</td>
<td>and Industrial Engineering (UA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Health and Social Studies (UW)/Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sciences (UA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When choosing departments, their governance structures were also taken into consideration. The sample includes: bigger departments, usually with devolved budgets and 'heavier' structures (in the British case); and smaller departments, with very flat structures and more dependent from the centre. This diversity favours different scenarios, possibly contributing to drawing conclusions and answering the research questions.

In UA, the heads of two other departments (Geosciences and Didactics and Educational Technology) were interviewed. Even though these departments were not part of the initial sample, they were considered of interest. The first department was chosen due to its old age and small size and the second because it was already known that it would be merged with the Department of Education Sciences, to form the Department of Education, being considered interesting to interview the heads of two departments about to merge.
The next section focuses on the methods used to collect the data needed to answer the research questions.

4.3. Research methods

Yin (1994) argues that it is not advisable to restrict the case study to one individual source of evidence. Rather, "a major strength of case study data collection is the opportunity to use many different sources of evidence" (ibid: 91), giving the researcher "further confidence that we've really understood what [is] going on" (Miles and Huberman 1994: 10).

Thus, in this research, mixed methods were used. Rossman and Wilson (1991) suggest three broad reasons for using mixed methods, namely: to enable confirmation or corroboration of each other via what Denzin (1978) called 'triangulation'; to elaborate or develop analysis, by providing richer detail; and to initiate new lines of thinking through attention to surprises or paradoxes.

According to McEwan and McEwan (2003), by allowing triangulation, a multi-method approach increases credibility by reducing the risk of jumping into conclusions based on insubstantial evidence.

To Yin (1994), there are six main sources of evidence: documents, archival records, interviews, direct observations, participant-observation and physical artefacts. In this research, the methods used to assemble information were documentary analysis and interviews. Each one of these methods will be explored in the following sub-sections.

4.3.1. Documentary analysis

Documentary analysis is an important means of increasing the available information for comparison. It consists in the use of existing material, and it can be characterised as (Verschuren and Doorewaard 1999): being relatively easily accessible; allowing a look to the material from a different perspective than at the time of its production; and not needing contact with the research object. Within the scope of this research, several documents were analysed, at European, national and case level:
• **European level** – the major European higher education policy documents and pieces of legislation that are thought to have affected most higher education systems were analysed, in order to understand how European policies regarding higher education impacted on national higher education policies;

• **National level** – the most important governmental documents that have arguably had an impact in both the British and Portuguese higher education systems were examined. Plus, external reports concerning the evaluation of both countries' higher education systems and official statistics related to both systems were looked at. The objective of this analysis was to understand the contextual differences between the two systems, especially in order to comprehend how the context affected the way universities are organised within each system, and how issues related to performance measurement, reporting and management are dealt with in each higher education system.

• **University level** – policy and strategic documents, minutes of meetings, the results of internal surveys, and statistical data related to each site were studied. The goal was to comprehend the way both institutions functioned, allowing a cross-analysis between these secondary data sources and the other source used to collect data (the interviews).

Table 7 summarises the types of documents that were consulted at all levels. A complete list of the documents analysed can be found in Annex 2.

Given that the documents consulted were entirely produced by others, they present some limitations: first, the researcher cannot influence the way they are produced; second, it cannot be guaranteed that the information there fits the research questions; third, it may not allow comparisons across universities, since the criteria used may differ across institutions; and fourth, the documents may lack accuracy and include bias. They are however good sources to "corroborate and augment evidence from other sources" (Yin 1994: 81).
Table 7 – Types of documents analysed

<table>
<thead>
<tr>
<th>Documents</th>
<th>Examples</th>
<th>Level</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>European legislation and policy documents</td>
<td>Laws, policy documents (e.g. Bologna Declaration)</td>
<td>European</td>
<td>To understand the European policy in terms of higher education and analyse its impact on national higher education systems</td>
</tr>
<tr>
<td>National legislation referring to higher education</td>
<td>Laws, Decree-Laws, White Papers, etc.</td>
<td>National: UK and Portugal</td>
<td>To understand the legislative framework and to see how evaluation mechanisms evolved over time</td>
</tr>
<tr>
<td>External reports on higher education systems and higher education institutions</td>
<td>ENQA, OECD, EUA, etc.</td>
<td>National: UK and Portugal Case: UA</td>
<td>To understand how external entities see the functioning of each higher education system and of specific institutions. This enables a comparison between externally collected data and internal reports</td>
</tr>
<tr>
<td>Official statistics</td>
<td>Statistics concerning higher education: number of institutions, students, etc.</td>
<td>National: UK and Portugal</td>
<td>Characterise both higher education systems</td>
</tr>
<tr>
<td>Institutional statistics</td>
<td>Statistics concerning each university: enrolments, number of departments, number of staff, etc.</td>
<td>Case: UW and UA</td>
<td>Characterise each university</td>
</tr>
<tr>
<td>Institutional documents</td>
<td>Internal evaluation reports, diagrammatic representations of the structures, other internal documents concerning performance evaluation</td>
<td>Case: UW and UA</td>
<td>To understand how universities are structured, how the different structural elements are linked, and how each institution measures and reports its performance</td>
</tr>
</tbody>
</table>

Since a comparative case study design requires collecting data on the same variables across HEIs, another method was used to collect information: interviews.
4.3.2. **Semi-structured interviews**

4.3.2.1. **Justification**

From all the data collection methods that could be used in a qualitative study, the interview was considered the most adequate for this research. This tool not only enables the collection of richer and more in-depth data on the research topic and promotes direct contact with the actors being researched (Ghiglione and Matalon 1992; Denscombe 1999; Silverman 2006), but is also an ideal tool to understand the perceptions, motivations, actions and attitudes of individuals towards a certain 'social object' (Best and Kahn 1989; Silverman 2006).

In fact, the interview is usually the main tool used to collect data for interpretive research, following the tradition of phenomenological research. It is also an essential source of case study evidence, since most case studies are about human affairs. According to Yin (1994: 85): "these human affairs should be reported and interpreted through the eyes of specific interviewees, and well-informed respondents can provide important insights into a situation. They can also provide shortcuts to the prior history of the situation, helping the investigator to identify other relevant sources of evidence".

Within this research, it was decided to collect data by conducting qualitative interviews to key actors. The term 'qualitative interviewing' usually refers to in-depth, semi-structured or loosely structured forms of interviewing. Burgess (1984: 102) calls them "conversations with a purpose". Generally, these types of interviews are characterised by: a relatively informal style, for example, with the appearance of a conversation or discussion, rather than a formal question and answer format; and the assumption that data is generated via interaction, because either the interviewee(s) or the interaction itself are the data sources (Mason 1996).

For the purpose of this study, semi-structured interviews were preferred over other type of interviews (e.g. structured or unstructured), given the particular characteristics of the research. This type of interviews has the advantage of guiding the interviewees' discourse towards the theme of the research, while, at the same time, giving them some freedom and flexibility to develop their ideas and interpretations of the phenomenon being studied,
within their own linguistic and mental frameworks (Ghiglione and Matalon 1992; Quivy and Campenhoudt 1992; Denscombe 1999).

In order to minimise possible bias and to ensure the validity of the data collected, the interview outline was carefully structured, based on the literature review, and the interviews were carefully conducted.

4.3.2.2. Interview schedule

The interview schedule (see Annex 1) integrates questions organised in five sections, with the intent of gathering perceptions that enable answering the research questions.

The questions asked in the first section aimed at collecting information on the interviewees, namely their role in the university, time at the university, academic and professional background, and participation in governing and management bodies.

The second set of questions focused on the interviewees’ perceptions on the university’s strategy/vision and strategic plan and on the way that strategy/vision and strategic plan are/were developed.

The third group of questions was centred on performance measurement, reporting and management practices, at all levels, and on the importance attributed by the interviewees to those practices. In order to help the interviewees answer this group of questions, a Prompt Card was shown to them (see Annex 1). They were then asked to discuss the performance measurement, reporting and management of the areas represented in the Prompt Card, or any other areas they considered important (there was an 'other' square in the card with that intent). They were given freedom to discuss the areas they wanted. The Prompt Card integrated the main activities that compose the mission of a university (teaching and learning, research and scholarship and third mission), the employees of a university (academic staff and non-academic staff), the 'customers' (students), the services (support services), finance (which one of the interviewees stated to be 'the cornerstone of everything'), and other important stakeholders (employers and alumni). These areas were drawn from the performance models reviewed in Chapter 3.

The fourth set of questions focused on the strengths and weaknesses of the integration of performance measurement, reporting and management practices; on the factors thought
to influence the implementation and function of PMS; and on the pressures (both internal and external) felt to measure, report and manage performance.

The last set of questions was related to: the functioning and composition of the existing governing and management bodies; the strengths and weaknesses of those bodies; the relationship between academics and non-academics; the influences exerted on decision-making by each one of the groups responsible for the governance and management of the university (academics, non-academics, students and external members); the position of these groups towards PMS; and the impact the introduction of measurement, reporting and management practices might have had on these groups.

4.3.2.3. Interviewing process

The contact with the interviewees happened after getting permission from both institutions to do the fieldwork there. The approach to the individuals was different in both universities. At UW, the Registrar's Office helped to establish contacts and schedule the interviews. At UA, the researcher established the contacts directly with the interviewees. In both cases, the interviewees participated voluntarily in the study.

The interviews were conducted by the researcher in two different languages (English and Portuguese), given the different nationalities of the interviewees. Nevertheless, the researcher tried to translate the questions in the most accurate way possible, in order to ensure comparability.

The more 'formal' structure of the interview did not mean that the questions were asked in the same order as they appear in the schedule or that they have all been asked to all the interviewees. The selection of questions and their sequence varied amongst interviewees, and resulted from the interaction established between the interviewer and the interviewee. Moreover, in order to guarantee the reliability of the data, the questions were sometimes repeated and posed in a slightly different way from the one written in the schedule (Best and Kahn 1989). That happened especially with the questions related to the strategy/vision and strategic plan, and with the questions related to PMS. This occurred because many of the interviewees were not particularly familiar with those concepts, especially in the Portuguese case.
The interviews were all face-to-face, being conducted in different locations inside each university, but always in a dedicated interview room to provide privacy for the interviews to take place.

In order to avoid the pre-structuring of their discourses, thus guaranteeing the reliability of the data, the interview schedule was never shown to the interviewees prior to the interview, even though some of the interviewees asked for it. At the beginning of every interview, a small introduction was always made about the aim of the research and the objectives of the study.

All the interviewees were also asked permission to record the interviews. Even though all of them agreed, thus enabling easy storage and playback of the interviews, whenever asked to do so, the researcher switched off the recorder and took notes by hand.

Moreover, anonymity and confidentiality were assured to the interviewees. These guarantees are not only an ethical principle of every research, but they also tend to leave the interviewees more at ease, ‘freeing’ them from a more ‘formatted’ or ‘institutional’ discourse. In order to ensure anonymity and confidentiality all the quotes used in the research were coded.

Although the interviewer interacted with every interviewee, adopting a friendly posture, it tried to avoid answering some questions related to the research findings, in order to guarantee the reliability of the data.

A reflective field diary was also kept during the interviewing process. The diary contained all the information considered relevant by the researcher in relation to each interview (e.g. context, emotions, facial expressions, documents and people mentioned). This diary proved to be very helpful during the content analysis of the interviews.

4.3.2.4. **Interviewees**

As explained in Section 4.2.3.2, the qualitative approach taken and the depth of the research, led to the choice of two institutions – UW and UA. Given that the intent of the study is to assess the way performance is being measured, reported and managed at each university and the way governance structures are being influenced by these
practices and are influencing them, it was decided to interview the key actors in the governance and management of each institution.

The key actors were divided into four groups – the Estates of Figure 6 (Academic, Administrative, Student and External Representatives), since the researcher wanted to analyse: the differences and similarities in the way each group perceives performance measurement, reporting and management practices in the institution; their position towards the introduction of PMS; the way their roles and influences have changed owing to the introduction of control practices in the institution; and the way they influence and control the introduction and functioning of PMS.

Therefore, in our study, the interviews were conducted to academics, non-academic staff, students and external members, being the common element their participation in governing and management bodies and/or their close link to the management of the university. These have been chosen for several reasons: first, they are arguably more familiar with the way the university is governed and managed, since they participate in bodies where decisions are made and/or have to take managerial decisions quite regularly; secondly, they are likely to be the first ones to feel both external and internal pressures to introduce control mechanisms, thus being able to tell the interviewer what those pressures are (if any); thirdly, they are arguably more familiar with the concept of PMS and with the way performance is measured, reported and managed internally; fourthly, they are expected to play a certain role in the process of decision-making concerning the choice of procedures in order to enhance performance (namely those in top and middle management positions).

In relation to academics, these were divided into two sub-groups: academic heads (heads or directors of department/deans) and other academics (vice-chancellor/rector, deputy vice-chancellor, pro-vice-chancellors/vice-rectors, pro-rectors, presidents of governing bodies and participants in commissions related to evaluation procedures). The main objective of this divide was to see if their perceptions differed and to also analyse if, within the group of academic heads, there were differences amongst departments (according to the categorisation presented in Table 6 – see Section 4.2.3.2). It should be stated that some of the interviewees played more than one role (one interviewee, for example, was head of department and head of a governing body). In this case, the interviewee was coded as ‘academic head’, since that was the main role performed within the institution.
Non-academic staff included the registrar/administrator of each institution, directors of support services (e.g. finance director, academic registrar) and people in charge of offices that look at evaluation issues in each university.

In relation to students, the President of the Students’ Union and other students that participated in the different governing and management bodies were interviewed in both locations.

Finally, external members sitting in governing bodies were also interviewed.

Taking into consideration the groups of interviewees aforementioned, all the quotes used in the research were coded in the following way: S refers to students, L to external members, and NA to non-academic staff. Academics were divided into two categories: heads of department and other academics. Therefore, AH was used to identify the academic heads of department and A to identify other academics.

The study also included two pilot interviews (one in each institution) in order to assess the suitability and clarity of questions to respondents. In UW the pilot interview was conducted to the Registrar and in UA to a Vice-Rector.

Table 8 presents a summary of the number of interviews that were conducted to each of the four groups abovementioned.

<table>
<thead>
<tr>
<th></th>
<th>Academic staff</th>
<th>Non-academic staff</th>
<th>Students</th>
<th>External members</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AH  A  Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UW</td>
<td>12  11  23</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>37</td>
</tr>
<tr>
<td>UA</td>
<td>14  10  24</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>26  21  47</td>
<td>16</td>
<td>7</td>
<td>6</td>
<td>76</td>
</tr>
</tbody>
</table>

The selected sample is non-probabilistic (non-representative) and intentional (Quivy and Campenhoudt 1992; Miles and Huberman 1994; Denscombe 1999; Silverman 2006). The individuals were selected according to: the conceptual framework (academics, non-academics, students and external members); the departments selected for analysis (see
Table 6), in the case of heads of department; research interests (those sitting in governing and management bodies and/or linked to units or committees that deal with evaluation issues); their weight inside those bodies (in the case of academics, students and external members); and their influence in the management of the institution. For example, even though many of the non-academic interviewees do not sit in governing bodies or are there *ex officio*, they were considered key actors in the management of the university, thus having a knowledge of performance measurement, reporting and management practices in most areas.

The next section will discuss the techniques used to treat and analyse the data.

4.4. Data treatment and analysis

4.4.1. Interview transcriptions

The seventy-six interviews conducted to academics, non-academic staff, students and external members of both universities totalised eighty-five hours of recordings. This meant that each interview lasted, on average, one hour and seven minutes.

The interviews were all conducted and taped by the researcher, being most of them also transcribed by her. In fact, due to the huge amount of data involved in the study, a professional was asked to transcribe some of the interviews. Nevertheless, in these cases, each interview was double checked by the researcher in order to guarantee the perfect transcription of the recordings. This verification proved to be useful since some mistakes were detected and immediately corrected.

The transcription work lasted six months. The transcription of each interview took, on average, ten hours and the review process of those interviews that were not transcribed by the researcher took, on average, four hours. All this time spent listening to the recordings and writing, brought the researcher very close to the data, facilitating its subsequent analysis, coding and interpretation.
4.4.2. Data analysis

Qualitative analysis techniques were used to treat the data collected during the interviewing process. The technique used in this study was content analysis. This process was supported by the use of the qualitative data analysis software NVivo 8®.

Content analysis or textual analysis is a methodology used for studying the content of communication. Babbie (2003: 350) defines it as "the study of recorded human communications, such as books, websites, paintings and laws" (ibid: 350). To Holsti (1969: 14), it is "any technique for making inferences by objectively and systematically identifying specified characteristics of messages".

Given that this method enables the researcher to compress large amounts of text into fewer content categories, based on explicit rules of coding, it has been widely used, namely in social sciences, and was considered adequate for this study. Its adequacy is related not only to the qualitative approach adopted (Bardin 1995), but also to the aim of the research, which involves analysing the perceptions of key actors in the governance of universities in relation to the introduction and functioning of PMS.

Codes are labels for assigning units of meaning to the descriptive or inferential information compiled during a study. Codes are usually attached to 'chunks' of varying size – words, sentences, paragraphs, connected or unconnected to a specific setting (Miles and Huberman 1994). Since, for the purpose of this study, it is not the words themselves, but their meaning that matters, the coding unit chosen was the theme, rather than the physical linguistic units (e.g. word, sentence, or paragraph). An instance of a theme might be expressed in a single word, a phrase, a sentence, a paragraph, or an entire document. When using theme as the coding unit, the researcher is primarily looking for the expressions of an idea (Minichiello et al. 1990). This enables the researcher to assign a code to a text chunk of any size, as long as that chunk represents a single theme or issue of relevance to the research questions. Therefore, the content analysis grid was structured in themes, which were grouped into categories, then clustered into dimensions.

Open and closed methods of analysis were used to create the categories. In fact, while some categories derived from the conceptual framework, others were inductively derived from the data.
In order to build the categories, all interviews were read individually and transversally, with the objective of establishing liaisons between all of them. During this process, several analysis grids were designed, until the final grid was complete.

Even though qualitative content analysis allows the assignment of a unit of text to more than one category simultaneously (Tesch 1990), the researcher kept this practice to a minimum, in order to assure mutual exclusivity.

During the coding process, the codes were revised repeatedly, since "some codes do not work; others decay. No field material fits them, or the way they slice up the phenomenon is not the adequate way the phenomenon appears empirically. (...) Other codes flourish, sometimes too much so" (Miles and Huberman 1994: 61). Table 9 shows the dimensions, categories and themes that were created for this study.

Table 9 – Dimensions, categories and themes

| FIRST DIMENSION: Components of a Performance Management System |
| Measurement, reporting and management practices, where performance information is closely linked to strategic steering |
| CATEGORY: Strategy |
| Perceptions on the existence of a strategy/vision and of a strategic plan; importance of having a strategy/vision and a strategic plan; development of the strategy/vision and of the strategic plan; and strengths and weaknesses of the strategy/vision and of the strategic plan |
| THEMES |
| Strategy Existence | Perceptions on the existence of a strategy (formal and/or informal) and of a strategic plan and reasons justifying it. |
| Strategy Importance | Perceived importance of having a strategy/vision and a strategic plan. |
| Strategy Development | Bodies (governing and management) and actors responsible for the development of the strategy/vision and of the strategic plan. |
| Strategy's Strengths and Weaknesses | Strengths and weaknesses of the university's strategy/vision and strategic plan. |
**CATEGORY: Performance Measurement Practices**

Perceptions on the existence of performance measurement practices in the university; areas where performance is measured; types of measures used; actors and bodies involved in the definition of measures and in the measurement process; and perceptions on the adequacy of the measures used.

### THEMES

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Practices</td>
<td>Perceptions on the existence of performance measurement practices in the university and reasons justifying it.</td>
</tr>
<tr>
<td>Areas Measured</td>
<td>Areas of the university where performance is measured and degree of measurement.</td>
</tr>
<tr>
<td>Measures Used</td>
<td>Measures (quantitative and/or qualitative) used to assess the performance of all areas of the university.</td>
</tr>
<tr>
<td>Delineation and Measurement Process</td>
<td>Bodies (governing and management) and actors (external and internal) responsible for deciding on the measures used and for measuring performance.</td>
</tr>
<tr>
<td>Adequacy of Measures</td>
<td>Adequacy of the measures used to assess the performance of all areas of the university.</td>
</tr>
</tbody>
</table>

**CATEGORY: Performance Reporting Practices**

Perceptions on the existence of performance reporting practices in the university; areas where performance is reported; and actors and bodies involved in the development of the reports and in their discussion.

### THEMES

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Practices</td>
<td>Perceived existence of performance reports in the university and reasons justifying it.</td>
</tr>
<tr>
<td>Areas Reported</td>
<td>Areas of the university where performance is reported.</td>
</tr>
<tr>
<td>Reports Development and Discussion</td>
<td>Bodies (governing and management) and actors (external and internal) involved in the development and in the discussion of performance reports.</td>
</tr>
<tr>
<td>Reports' Pertinence</td>
<td>Pertinence ascribed to the performance reports produced.</td>
</tr>
</tbody>
</table>

**CATEGORY: Performance Management Practices**

Perceptions on the use of performance data in the university; areas where performance information is used; and actors and bodies that act upon performance data.

### THEMES

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Data Use</td>
<td>Perceived use of performance data to inform decision-making, both operational and strategic, in the university and reasons justifying it.</td>
</tr>
<tr>
<td>Areas Acted Upon</td>
<td>Areas of the university where performance data is used to inform decision-making (both operational and strategic).</td>
</tr>
<tr>
<td>Users of Performance Data</td>
<td>Bodies (governing and management) and actors (external and internal) that act upon performance data.</td>
</tr>
<tr>
<td>Adequacy of Use</td>
<td>Adequacy of the use of performance data to inform decision-making (both operational and strategic).</td>
</tr>
</tbody>
</table>
### SECOND DIMENSION: Integration of Practices and Context of Influence
Integration of practices, where performance information is closely linked to strategic steering, and context of influence of performance management systems

#### CATEGORY: Integration of Practices
Perceptions on the importance of having integrated practices; and adequacy of the way performance measurement, reporting and management practices are integrated and linked to strategic steering

<table>
<thead>
<tr>
<th>THEMES</th>
<th>Perceptions on the importance of integrating performance measurement, reporting and management practices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of Integrated Practices</td>
<td>Perceptions on the importance of having integrated practices.</td>
</tr>
<tr>
<td>Adequacy of Integrated Practices</td>
<td>Positive and negative aspects concerning the integration of measurement, reporting and management practices and links to strategic steering in the university.</td>
</tr>
</tbody>
</table>

#### CATEGORY: Context of influence
Perceptions on the pressures towards the introduction of performance management systems and on the factors that influence the introduction and implementation of these systems

<table>
<thead>
<tr>
<th>THEMES</th>
<th>Factors that influence the introduction and implementation of performance management systems (positively and negatively)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressures</td>
<td>Pressures (both internal and external) to introduce performance management systems</td>
</tr>
<tr>
<td>Influences</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

### THIRD DIMENSION: Governance Structures and Performance Management Systems
Relationship between the way an organisation divides and integrates responsibility and authority at different levels – structural level (governing and management bodies) and individual level (actors that compose the four Estates – academics, non-academics, students and external members) – and performance management systems

#### CATEGORY: Governing Bodies
Functioning dynamic of the governing bodies that exist at the university and of upcoming ones (in case of foreseen change); and perceptions on the strengths and weaknesses of these bodies

<table>
<thead>
<tr>
<th>THEMES</th>
<th>Type, composition and links between the governing bodies that exist at the university, and change that have/will happen in these bodies (in the case of foreseen change).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functioning Dynamic of Governing Bodies</td>
<td>Type, composition and links between the governing bodies that exist at the university, and change that have/will happen in these bodies (in the case of foreseen change).</td>
</tr>
<tr>
<td>Appropriateness of Governing Bodies</td>
<td>Strengths and weaknesses of the existing governing bodies and of upcoming ones (in case of foreseen change).</td>
</tr>
</tbody>
</table>

#### CATEGORY: Management Bodies
Characterisation of the management bodies that exist at the university and of upcoming ones (in case of foreseen change); and perceptions on the suitability of those bodies

<table>
<thead>
<tr>
<th>THEMES</th>
<th>Type, composition and links between the management bodies that exist at the university, and change that have/will happen in these bodies (in the case of foreseen change).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Bodies' Characteristics</td>
<td>Type, composition and links between the management bodies that exist at the university, and change that have/will happen in these bodies (in the case of foreseen change).</td>
</tr>
<tr>
<td>Suitability of Management Bodies</td>
<td>Strengths and weaknesses of the existing management bodies and of the upcoming ones (in case of foreseen change).</td>
</tr>
</tbody>
</table>
4.4.3. Validation and reliability

The final stage of the case study process consisted in the validation of results by the organisations that participated in the study. Validity is concerned with the extent to which the research findings accurately represent what is happening (Hussey and Hussey 1997); in other words, whether it is a true picture of what is being studied. Data validation was done by presenting a report to each of the institutions involved in the research. This offered both universities the time to refute or acknowledge the case study findings, and more importantly, it allowed a confidence in the research findings that could otherwise be lacking.

Further elements of validity were incorporated into the case studies through the research design itself. The triangulation of data methods (incorporating other sources of data collection), already discussed in Section 4.3, provided multiple measures of the same phenomenon, helping to ensure validity (Yin 1994).

The issue of reliability differs depending on which research paradigm the researcher chooses. Whereas for positivists notions of reliability assume an underlying universe where inquiry could be replicated, reliability here refers to whether the process of interpretation is transparent to others, can be understood, and whether the same process conducted on similar data would lead to the same results. It is believed the way this
research was conducted (as described in this chapter) ensures the reliability of the data collected.

After having provided an overview of the research design that was used to guide and operationalise this research, the next two chapters present the findings of both case studies, based on the analysis, interpretation and discussion of the data collected, using the categories and dimensions defined in this section (see Table 9).
The British Case: University of Warwick
"When people talk, listen completely. Most people never listen."
Ernest Hemingway

"From the outset the Warwick road was not easy, and there were major bumps along the way. (…) Warwick is a study of struggle and triumph over serious obstacles – a study in self-determination."
Burton Clark (1998: 11)

In this chapter, the findings that resulted from the fieldwork conducted at UW are displayed. Data was collected personally by the researcher, during her stay at the University of Warwick, from January to July 2008. During that period she was a Visiting Fellow at the Warwick Business School.

Before presenting the findings, it is important to set the context. Therefore, to start with, the British higher education system will be introduced. This will be done, first, by discussing the main policy documents and pieces of legislation that have influenced British higher education over the last decades; secondly, by explaining the evaluation exercises that were and/or are conducted at a national level; and, thirdly, by exploring the British higher education funding system. Then, UW will be characterised, in terms of history, student and staff numbers, finances, and governance and administrative management structures. Finally, the findings that resulted from the thirty-seven semi-structured interviews conducted at the university will be displayed.

5.1. The British higher education system

5.1.1. Brief history

In the UK, with the exceptions of Oxford and Cambridge, the four ancient Scottish universities and church colleges, British HEIs were established largely through lay endeavour that took two main forms:
The first, typical of the civic universities established in the nineteenth century, was an alliance between local political, professional, commercial and industrial elites, first to press for the grant of a Royal Charter and, when successful, to mobilise the resources required to establish a university. The second form of lay endeavour, typical of 'new universities', was municipal enterprise" (Bargh et al. 1996: 4).

In these institutions, the state and its agencies and the academic profession played subordinate roles. The state granted university charters, established local government structures and, modestly, contributed with some resources. The academics' contribution was more related to the impact of charismatic individuals than to the weight of an organised profession. Therefore, lay councils dominated the early universities.

After the Second World War, the dependence of universities on national funding accelerated: "The post-war expansion of higher education, especially after the publication of the Robbins Report in 1963, required the creation of planning structures national in scope, leaving councils and governing bodies with a subordinate role" (Bargh et al. 1996: 2).

When Margaret Thatcher came to power in 1979, British universities were still exceptional institutions. They were largely independent and self-regulating, owing to the institutional charters bestowed on them by the Crown, and continued to enjoy freedom to select staff and students, to determine curriculum content, and to allocate funds. The degree of their financial dependence upon the state remained to some extent masked by the major mechanism through which government resources were allocated to them – the University Grants Committee (UGC) – and the academic dominance of that mechanism. In fact, operating under the auspices of, first, the Treasury and then the Department of Education, the UGC worked on principles of trust, discretion and informality and the essential role of academic judgement in determining resource needs and allocation (Kogan and Hanney 2000). In order to distribute financial allocations, its judgements were, in fact, "peer judgements made on a reputational basis, although framed by analysis of likely student demand for different courses and expectations of the resources to be made available by the Government" (Cave et al. 1997: 5).

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11 At the time, and unlike universities, polytechnics were funded by local education authorities and their degrees had to be accredited by the Council for National Academic Awards (CNAA).
In 1981, university budgets were sharply reminded that institutional success could no longer be taken for granted. According to Kogan and Kogan (1983), there were financial cuts on universities of approximately 13 per cent. Since then, several changes happened in the British higher education system (see Figure 13).

In 1985, two major events happened. First, the publication of the Green Paper, *The Development of Higher Education into the 1990s*, which stressed the need for positive attitudes to business, entrepreneurialism and vocationalism in higher education and the need for a more general focus on students' acquisition of competencies, skills and applicable and relevant knowledge. It also advocated the development of PIs. Second, the publication of the *Jarratt Report*, commissioned by the Committee of Vice-Chancellors and Principals (CVCP), at the request of the Secretary of State for Education. This report advocated new managerial models of governance in universities, designed to strengthen their institutional capacity to act collectively and decisively in the face of changing and financial pressures. Universities were to see themselves as 'corporate universities' and governing bodies should reassert themselves against "the Senates' natural conservatism" and "the potential for [them] to resist change" (CVCP 1985 – see Annex 2). Moreover, vice-chancellors should exercise the role of chief executives, and deans and heads of department the role of middle managers, becoming the Senates primarily advisory bodies.
Figure 13 – Major legislation and policy documents in British higher education history
On 20 May 1986, Sir Keith Joseph\(^1\) told the House of Commons that the Government should consider, together with UGC and CVCP, some further financial provision for universities in 1987-1988 and the following years, but that such provision would depend on evidence of real progress in implementing the needed changes. Following this announcement, UGC and CVCP came to accept what became known as the *Concordat*, meaning that if changes in university management as requested by the Government were met, further finance would be released to universities. By November 1986, both committees were able to report progress to Kenneth Baker\(^2\), the successor of Sir Keith, being among the developments reported the publication of a report on the use of PIs relating to both inputs and outputs in teaching and research (Cave et al. 1997). In fact, in 1987, a Joint Working Party, representing the Government, CVCP and UGC, listed 39 PIs for publication. These were published by CVCP under the name *University Management Statistics and Performance Indicators: UK Universities*.

In 1988, the University Funding Council (UFC), which replaced UGC, and the Polytechnics and Colleges Funding Council (PCFC) were established under the *Education Reform Act*, and, in 1989, they assumed funding responsibilities for British universities, and for the polytechnics and higher education colleges in England.

In May 1991, a Government White Paper entitled *Higher Education – A New Framework* proposed a number of substantial changes, being the most important the abolition of the so-called 'binary line' between the universities, and the polytechnics and colleges. The goal was to establish a unitary system of higher education. Apart from that, it also proposed the establishment of new funding councils, and the allocation of research funding entirely on a selective basis. Moreover, it suggested that quality audit should be the responsibility of the institutions and quality assessment of funding councils, which would inform funding based on two approaches: first, the use of PIs and calculations of value added; and second, external judgements on the basis of direct observations (Sarrico 1998).

In 1992, the *Further and Higher Education Act* joined UFC and PCFC to create a unitary system of provision. This Act also allowed bids for university designation from former

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\(^1\) Sir Keith Joseph was Secretary of State for Education and Science from 1981 to 1986.

\(^2\) He served as Secretary of State for Education from 1986 to 1989.
polytechnics and colleges so that more universities existed, labelled 'modern', to distinguish them from a previous group known as 'new' (McNay 1995).

The Further and Higher Education Act also abolished the Council for National Academic Awards (CNAA), which had been a degree awarding authority in the UK since 1964\(^\text{14}\), and universities established the Higher Education Quality Council (HEQC) to take over the audit role of CVCP, and the access and quality enhancement roles of CNAA (Liston 1999). In addition, UGC was replaced by the Higher Education Funding Councils for England, Scotland and Wales (HEFCE, SHEFC, HEFCW). These councils were to incorporate transparency into resource allocation, through formula funding, based heavily on measures of performance and quality. Even though the purpose was to allocate funding for teaching and research on the basis of systematic evaluation, this was only implemented in the case of research.

Also in 1992, the Joint Performance Indicators Working Group of CVCP, the Standing Conference of Principals, and the Committee of Scottish Higher Education Principals were established, to build on earlier work and develop performance measures and indicators for both teaching and research, for the new merged university sector. By 1993, the national totals for the number of publications for each cost centre in 20 categories and averages for 3 indicators circulated. However, institutional figures were not published and the exercise was never repeated (Sarrico 1998).

In 1997, the report of the National Committee of Inquiry into Higher Education, entitled *Higher Education in the Learning Society*, which became mainly known as the 'Dearing Report', tried to change some aspects concerning teaching and student intake and created another body – the Quality Assurance Agency (QAA), formally defined as independent. This body is financed by subscriptions from HEIs and contracts with the funding councils, to which it makes a detailed annual report. Its governing board consists of senior members of HEIs and representatives of business, the professions and public bodies. QAA took on the Councils' responsibilities for the quality assessment of higher education and also the functions of institutional audit and quality enhancement, previously carried out by HEQC (Henkel 2007).

\(^{14}\) It awarded academic degrees at polytechnics and other non-university institutions, such as Colleges of Higher Education, until they were awarded university status.
In 1999, the UK signed the Bologna Declaration, together with other twenty-eight European Countries, agreeing on the creation of an EHEA by 2010 (as discussed in Section 1.3.2).

In 2003, a White Paper entitled The Future of Higher Education set out plans to "modernise English universities and their staff by offering more funding directed at teaching per se rather than at students, establishing Centres for Teaching Excellence and a Higher Education Academy, setting up a new bureaucracy to monitor widening student participation and requiring accreditation of new academic staff in teaching by 2006" (Brehony and Deem 2005: 405).

The Higher Education Act 2004 incorporated several key changes to the financial arrangements of higher education students. The changes took effect in 2006, and applied to England and Wales. The main measures taken were the following: up-front fees to be replaced by an income-linked deferred payment; fixed rate of £1,125 to be replaced by variable fees between 0 and £3,000; the creation of a new body called the Office for Fair Access, responsible for approving and reviewing the 'plans' of the universities that wish to charge more than the basic amount (equivalent to the current fixed rate); and increased levels of financial aid.

In May 2005, the UK and other forty-four European countries, committed to adopt the Standards and Guidelines for Quality Assurance in the EHEA, as proposed by the European Association for Quality Assurance in Higher Education – ENQA (discussed in Section 1.3.2).

In 2010, a report by the Independent Review of Higher Education Funding and Student Finance, entitled Securing a Sustainable Future for Higher Education, also known as the 'Browne Review', recommended sweeping changes to the university funding system. The changes included, among others: removing the cap on the level of fees that universities can charge; the provision, by the Government, of upfront loans to cover tuition fees and living costs of students; increasing the income level at which graduates must begin to pay their loans to £21,000; and the replacement of the four existing higher education bodies by a single Higher Education Council.
Following on Lord Browne's recommendations, a new Higher Education White Paper, entitled *Higher Education: Students at the Heart of the System*, was published in June 2011. The reforms proposed tackle three challenges:

"First, putting higher education on a sustainable footing. We inherited the largest budget deficit in post-war history, requiring spending cuts across government. By shifting public spending away from teaching grants and towards repayable tuition loans, we have ensured that higher education receives the funding it needs even as substantial savings are made to public expenditure. Second, institutions must deliver a better student experience, improving teaching, assessment, feedback and preparation for the world of work. Third, they must take more responsibility for increasing social mobility" (White Paper 2011: 4 – see Annex 2).

This White Paper set out the UK Government's policies for the reform of higher education.

### 5.1.2. Governance and management

The UK's HEIs are not owned or run by the government. They are independent legal entities, with councils or governing bodies that have responsibility for determining the strategic direction of the institutions, monitoring their financial health and ensuring they are effectively managed (UK HE International Unit 2011).

For many purposes, higher education policy is now developed separately in each of the countries making up the UK, with the Scottish Government, Welsh Assembly Government and the Northern Ireland Executive each having specific and differing responsibilities for certain parts of higher education and student policies. These governmental bodies have no direct role either in determining the courses offered by HEIs or directing the research undertaken by individual academics. Academic and support staff is employed by individual institutions and not by the state. Their pay is negotiated nationally through a joint body representing both management and trade unions, with the resulting agreements taking the form of recommendations to participating universities and colleges (UK HE International Unit 2011).

This governance structure means that UK universities are relatively autonomous and independent institutions. Each institution makes its own decisions about entry requirements, for example, setting the level of required qualifications to secure a place on
a programme, and is responsible for its own admissions procedures. The vast majority of applications to full-time undergraduate degrees in the UK – whether by home, international or EU students – are made via a central coordinating agency, the Universities and Colleges Admissions Service (UK HE International Unit 2011).

5.1.3. Evaluation exercises

Following the recommendations of the Dearing Report (published in 1997), the Government asked the funding councils to develop suitable indicators and benchmarks of performance in the higher education sector. The Performance Indicators Steering Group was established in 1998, with membership drawn from government departments, the funding councils and representative bodies.

In 1999, the first formally condoned group of key performance indicators (KPIs) for UK universities was established by HEFCE. They focussed on five broad aspects of institutional performance: participation of under-represented groups; student progression; learning outcomes; efficiency of learning and teaching; and research output. A sixth, an employment indicator, was added later. These KPIs reflected the political policy preoccupations of the time, related to social equity, value for money, economic impact and international standing (Breakwell and Tytherleigh 2010).

Subsequently, there has been a further specification of PIs. Since 2002/2003, the Higher Education Statistics Agency (HESA) has published, on an annual basis, PIs on behalf of HEFCE, who published them previously. According to HEFCE (2007), the role of these PIs is to: provide reliable information on the nature and performance of the UK higher education sector; allow comparison between individual institutions of similar nature, where appropriate; enable institutions to benchmark their own performance; inform policy developments; and contribute to the public accountability of higher education. The current indicators cover (HEFCE 2007):

- **Widening participation indicators** – show the proportion of entrants coming from various under-represented groups such as state schools or colleges, specified socio-economic classes, and low-participation neighbourhoods. They also cover students who are in receipt of Disabled Students’ Allowance;
• **Non-continuation rates (including projected outcomes)** – these are presented in two ways. The first considers students who start in a particular year, and looks at whether they are still in higher education one year later. The second method looks at projected outcomes over a longer period. Another way to look at non-continuation rates is to use information on current movements of students to project what would happen in the long run. Thus, the indicators project what proportion of students will eventually gain a degree, what proportion will leave their current university or college but transfer into higher education elsewhere, and what proportion will leave higher education altogether without any qualification;

• **Module completion rates** – it applies to part-time students. The provision of this information is dependent on how student data is returned to HESA. Only institutions in Wales are required to return a module record;

• **Research output** – the main indicators of research in UK higher education are the ratings from the Research Assessment Exercise (RAE). The research indicators that are produced as part of PIs provide additional information on the quantity of research outputs relative to the resources consumed. These are different from the ratings of quality produced by the RAE and are designed to complement, rather than replace, them;

• **Employment of graduates** – since 2005/2006, the employment indicator is based on the new Destinations of Leavers from Higher Education Survey (DLHE), which replaced the First Destinations Survey. DLHE is carried out among graduates six months after the end of the academic year in which they graduate.

HESA advises a careful interpretation of the indicators\(^\text{15}\):

"Because of the diversity of UK HEIs, there is no one measure of what is 'best'. (…) In making comparisons, care should be taken to ensure that two institutions are alike enough to compare, or at least that the differences are made explicit. (…) To help decide if two institutions are alike enough to be compared, the benchmarks may be used. In general, if two institutions have substantially different benchmarks they should not be compared".

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In the UK, PIs are complemented by other types of information, which also provide a further set of KPIs. At a national level there are three student surveys – the National Student Survey (NSS) and the International Student Barometer™ (ISB), which measure student satisfaction in different areas; and the DLHE, which collects information on alumni.

The NSS is a survey conducted by HEFCE, being its aim to gather feedback on the quality of students’ courses, in order to contribute to public accountability, and to help inform the choices of future applicants to HE. The first NSS took place in 2005.

The ISB is an independent and confidential feedback process for education providers, conducted by the International Graduate Insight Group Limited, tracking the decision-making, perceptions, expectations and experiences of students studying outside their home country, and allowing for comparisons.

DLHE collects information on what leavers from higher education programmes are doing six months after qualifying from their HE course (employed, engaged in further study, and so on). Individual HEIs administer their own surveys, using materials provided by HESA.

The results of the three surveys are published online and are looked at by prospective students. Moreover, the results from two external audit exercises are also made public: the RAE and the assessment performed by the Quality Assurance Agency (QAA).

Since 1986, the quality of research carried out in the UK higher education sector has been assessed through a formalised process, based on expert peer review, known as the RAE. Undertaken jointly by the four UK higher education funding bodies (for England, Wales, Scotland and Northern Ireland), six RAEs have taken place since 1986. The parameters that are looked at include: size of research contracts (number of contracts, research funding and income generation) and quality of research outputs, translated by the number of publications and citations. The funding of research in the UK is selectively allocated on the basis of performance. The results of the 2008 RAE (the last one conducted) were used to allocate more than £1.5 billion annually for research infrastructure in UK’s universities and colleges.

Commencing in 2014, the RAE is due to be replaced by a new system: the Research Excellence Framework (REF). REF will consist of a single framework for the funding and assessment of research across all subjects. The quality of research outputs will continue
to be the primary factor used in the assessment, as with the RAE, with judgments being made by expert panels against international standards of excellence. It is likely, however, that greater use will be made of quantitative indicators, including the so-called 'bibliometric' data (Baskerville et al. 2011).

The QAA took on the responsibilities for the quality assessment of higher education and also the functions of institutional audit and quality enhancement, previously carried out by HEQC. The QAA is an independent body funded by subscriptions from universities and colleges of higher education, and through contracts with the main higher education funding bodies. All universities and higher education colleges in the UK subscribe to the QAA. Although its reviews and audits take a slightly different form in different parts of the UK, they include: making regular visits to HEIs and further education colleges offering higher education; publishing reports on the confidence that can be placed in each institution's ability to maintain standards and quality; following up any areas which need attention to ensure that HEIs take satisfactory steps to address any shortcomings; and providing information to the UK funding bodies.

Apart from the QAA, there are also Professional, Statutory and Regulatory Bodies (PSRBs), which visit universities periodically, in order to ensure that their graduates are properly prepared for employment. These include organisations such as the Engineering Council, the Health Professions Council and the Architects Registration Board. For those professions regulated by law, only those graduating from courses accredited by the relevant body – the General Medical Council, in the case of medicine – are given a 'licence to practise' (Baskerville et al. 2011).

With all these external pressures to measure performance, many universities have introduced coordination mechanisms of their own, mainly to prepare for these external audits, even though it is not clear how effectively they are actually functioning. This will be later explored.
5.1.4. Funding system

While all UK HEIs – with one exception\textsuperscript{16} – receive some state funding as a percentage of their total income, the government does not manage this money directly, but works through a series of funding councils to provide both financial support and general guidance to institutions.

According to HESA finance data (HESA 2011), UK universities and colleges received a total of £26.8 billion in funding in 2009/2010, more than a third of which came from the Government's Department for Business, Innovation and Skills (BIS) and was distributed in the form of grants by the four UK funding bodies (see Figure 14).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{income_of_uk_heis_by_source_2009_2010.png}
\caption{Income of UK HEIs by source, 2009/2010}
\label{fig:income_of_uk_heis_by_source_2009_2010}
\end{figure}

\textit{Source:} Data from HESA (2011)

Taken together, the money channelled through the funding councils currently represents the largest single source of income to HEIs, though, across the sector, universities vary in the percentage of their overall funding received from public sources.

The funding councils allocate most of their funds for teaching and research using set formulae. The allocation of resources for teaching and learning depends largely on the

\textsuperscript{16} The University of Buckingham is UK's only independent HEI, i.e., it does not receive state funding.
number of students at an institution and on the mix of subjects it teaches (UK HE International Unit 2011).

Almost all the financial support for research is related to the quality and volume of that research. Government funding for research is administered under what is known as the 'dual support' system. One strand of it comes in the form of an annual 'block grant' from the funding councils. This supports UK's research infrastructure and enables individual universities to carry out research as they determine. The other strand provides grants for specific research projects, contracts and postgraduate programmes and is delivered via the seven research councils – public bodies charged with investing public money in UK science and research – with additional funding available from charities, industry, the EU and other UK government departments (UK HE International Unit 2011). Since 1986, the funding councils' allocation of funding to institutions for research infrastructure has been informed by the RAE.

Although UK HEIs receive significant public funding, they also receive substantial private income from different sources. These include: the provision of residence and catering facilities; the delivery of services to business, such as contract research, consultancy and training; endowments; and a variety of charitable sources (UK HE International Unit 2011).

Tuition fees also represent a significant source of income for most HEIs. These fees were introduced by the Government in 1998, following the recommendations of the Dearing Report, which argued that there was a case for students to make a contribution to the costs of higher education. Initially, a flat rate annual tuition fee of £1,000 was introduced, with means-tested grants to help disadvantaged families (OECD 2006b)17. In 2003, the White Paper entitled The Future of Higher Education recommended a new policy on tuition fees for full-time students, which was introduced by the Higher Education Act 2004. Since 2006, individual universities and colleges in England have the discretion to set their own tuition fees up to a limit of £3,000 per year with loans available to students to ensure that no student or parent have to pay an up-front fee (OECD 2006b).

The UK government recently announced its intention to change the present funding mechanism in England from 2012/2013 onwards so as to increase tuition income routed

17 Students studying at HEIs in England, Wales and Northern Ireland pay tuition fee contributions. Scottish and EU students studying at HEIs in Scotland do not currently pay such contributions.
through students while reducing the amount paid in grants to institutions through the funding councils. As the Secretary of State for Business, Innovation and Skills made clear in his grant letters to HEFCE, student choice is set to become a key driver of quality as well as of funding, and HEIs will "need to become more responsive to the changing demands of students and employers for high level skills and employability, to ensure they remain competitive as providers in the new funding environment". A White Paper setting out the Government's overall thinking and future plans for publicly funded higher education in England was published in June 2011. The extent to which this will influence the development of policy elsewhere in the UK remains to be seen.

After presenting the British higher education system, our first case study – the University of Warwick – will be characterised in the following section.

5.2. Characterisation of the University of Warwick

5.2.1. Brief history and figures

Britain had long been careful in adding new universities to the list of recognised institutions, but, in the optimism of the 1950s, the idea of developing new universities from scratch was gradually accepted. The group of institutions that attempted to be recognised as universities, at the time, became known as the 'seven sisters' (Clark 1998) or 'plateglass universities' (Beloff 1968). Warwick was amongst them. They all had in common the fact of being established outside cities, with student residences (Clark 1998).

The University of Warwick (UW) was given approval by the government in 1961 and received its Royal Charter in 1965. In its first decade it had a discipline-centred base, strong on research. Beyond this academic base the issue of relating to industry arose. The close relationship between Jack Butterworth, the first Vice-Chancellor, and leading

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19 These were Sussex, York, Lancaster, Essex, East Anglia, Kent and Warwick.

20 This designation was used to reflect the modern architectural design of the new universities, which contrasted with the (largely Victorian) red brick universities and the older ancient universities.
industrialists in the Coventry area, contributed to instil a pro-industry attitude at the university. Even though this relationship was heavily criticized, at the time, by many, institutional life went on and the university started to grow, assuming the shape of a medium-sized research university. In fact, the student body rose from about 450 in 1965 to approximately 2,100 in 1970, and academic staff from around 60 to more or less 240 (Clark 1998).

Today, UW is regarded as one of the best universities in the UK. The Independent (which publishes The Complete University Guide), The Sunday Times and The Times place UW in the 8th place in the 2012 UK University Rankings. According to The Guardian, which uses criteria that do not include a measure of research output, and includes a ‘value-added’ factor that compares students' degree results with their entry qualifications, UW is the 6th best university in the UK in 2011/2012.

Also internationally, UW is well positioned in the rankings. The Times Higher Education World University Rankings 2011-2012 place it in the 157th position.

Moreover, UW is also a member of the Russell Group, an association formed in 1992, which comprises the 20 major research-intensive universities of the UK and was, until recently, one of the members the European Consortium of Innovative Universities (ECIU).

UW is divided into four faculties – Arts, Medicine, Science and Social Sciences – which incorporate 30 academic departments (see Annex 3) and 76 research centres and institutes.

According to the Academic Statistics 2010\(^{21}\), in the academic year 2010/2011, 22,648 students, 12,823 undergraduates and 9,825 postgraduates, were registered at the university.

As Figure 15 shows, the total number of students rose steadily from 2002/2003 to 2007/2008 (around 2 per cent), rising around 8 per cent until 2009/2010 and around 5 per cent in the last academic year. This increase in the number of students is mainly due to the strategy followed by the university to increase the number of postgraduate students.

\(^{21}\) In [http://www2.warwick.ac.uk/services/mip/contact-new/academicstatistics/2010/](http://www2.warwick.ac.uk/services/mip/contact-new/academicstatistics/2010/) (accessed 16 September 2011).
As a matter of fact, this number increased 42.6 per cent between 2002/2003 and 2010/2011.

Figure 15 – Evolution of registered students at UW (2002-2011)

*Source:* Academic Statistics (from 2002 to 2010)

In terms of internationalisation, UW is a very international university. Indeed, from the total number of students registered in 2010/2011, 27 per cent were overseas (i.e. non-EU) students.

Regarding human resources, in the academic year 2010/2011, and according to the Academic Statistics 2010, UW employed 4,912 members of staff: 980 academics, 687 researchers, 195 teaching only staff and 3,050 non-academics.

In financial terms, UW was able to find a way to survive the financial cuts on universities throughout times. Burton Clark (1998) called it 'The Warwick Way'.

In 1981, when the University Grants Committee (UGC) was permitted to distribute the reductions differentially, Warwick's cut was 10 per cent. All the universities were facing the problem of how to handle the immediate cuts, and, more importantly, how to act in the future. Warwick decided to take action and settled that it would cover the 10 per cent reduction by a 'save half, make half policy', which meant making savings to eliminate half the shortfall and generate new income to cover the other half. This idea was sharpened
with the strategic decision to generate new income not through fundraising, as other universities did, but actually by earning it. Since student tuitions were out of the question, due to the national policy at the time (already discussed in Section 5.1.4), Warwick implemented the 'Earning Income Policy', within which various parts of the university could generate an annual surplus that could then be used by the entire university (Clark 1998). This policy, devised by Butterworth and Michael Shattock, the Registrar at the time, pointed strongly towards entrepreneurial action. A fundamental contribution to the earned income scheme was the Warwick Manufacturing Group, created in 1980, which was fully committed to research and development in close collaboration with major industrial firms (Clark 1998). Other important contributors to this policy were and still are: the Business School; conference centres; the Warwick Science Park; and the Arts Complex. Additionally, the university provides catering services and has established outside services on campus, such as banks and a bookstore.

In order to implement the 'Earning Income Policy', professional managers were hired to run the various units and the Earned Income Group. Within this structure, the earned money, together with the income from governmental annual allocations, passed over to committees focused on overall budget review and internal allocation.

By adopting this policy, aimed at seeking third-stream sources, UW was successful in filling the gap left by the reduction of state support in the early 1980s (see Table 10).

Table 10 – Sources of financial support at UW

<table>
<thead>
<tr>
<th>Year</th>
<th>Core support</th>
<th>Research Grants and Contracts</th>
<th>Other Sources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Million £</td>
<td>%</td>
<td>Million £</td>
<td>%</td>
</tr>
<tr>
<td>1970</td>
<td>2.0</td>
<td>69</td>
<td>0.3</td>
<td>10</td>
</tr>
<tr>
<td>1980</td>
<td>14.6</td>
<td>70</td>
<td>2.0</td>
<td>10</td>
</tr>
<tr>
<td>1990</td>
<td>36.0</td>
<td>43</td>
<td>14.6</td>
<td>18</td>
</tr>
<tr>
<td>1995</td>
<td>51.3</td>
<td>38</td>
<td>19.7</td>
<td>15</td>
</tr>
<tr>
<td>2010</td>
<td>89.8</td>
<td>22</td>
<td>79.8</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Clark (1998) and UW's Statement of Accounts 2009/2010
In UK’s state funded universities, the income streams usually take three main forms: mainline state allocation; funds obtained from governmental research councils; and income from other sources. Figure 16 shows the sources of financial support of UW for the year ended 31 July 2010.

Warwick’s income figures for the academic year 2009/2010 show that, in a total budget of £408.5 million, just £89.8 million (22 per cent) came from HEFCE (much below the 34 per cent registered at a national level – see Figure 14). Income from research grants and contracts comes to £79.8 million (19 per cent, slightly over the 16 per cent registered at a national level – see Figure 14), and income from third-stream sources amounts to £238.9 million (59 per cent). These include academic fees and support grants, which come to £133.3 million (33 per cent, a little over the 31 per cent registered at a national level – see Figure 14), and other income sources, in a total of £105.7 million (26 per cent). These other income sources, which comprise mainly income from residences, catering, conferences, and management training centres, are well over the national figures of 18 per cent (see Figure 14), showing the success of the ‘Earning Income Policy’ adopted by UW.

Figure 16 – Sources of income at UW, 2010

Source: UW’s Statement of Accounts 2009/2010

22 For the academic year 2011/2012, home/EU students pay a tuition fee of £3,375 for undergraduate degrees, and between £6,080 and £15,000 for postgraduate degrees. Fees for overseas students are much higher.
Additionally, in the mid-1990s, Warwick decided to commit to a long-term effort along fundraising. By then, the university had built a reputation and had a good network of alumni.

In terms of expenditure, staff costs are the largest single expenses item (see Figure 17).

![Figure 17 – Expenditure structure at UW, 2010](source: UW's Statement of Accounts 2009/2010)

Even though the expenditure with staff has increased in absolute terms (staff costs amounted to £145.1 million in the academic year 2004/2005), in relative terms, they represent the same percentage of the total expenditure as they do now.

The other expenses include depreciation (7 per cent), interest payable (1 per cent) and other operating expenses (39 per cent). The latter include, among others, costs with: teaching and research activities; residences, catering and conferences; premises; and retail operations.

In the next section, the governance, management and administrative management structures of the university will be presented.
5.2.2. Structure

5.2.2.1. Governance structure

Like in most pre-1992 universities\(^\text{23}\), i.e. HEIs that had university status before the Further and Higher Education Act of 1992, Warwick is governed by a Council and a Senate\(^\text{24}\). Figure 18 shows UW's committee structure.

The Council is the executive governing body of the university, with particular managerial responsibilities for finance and the university estate, and also a more general remit to oversee the conduct of university business in concert with the Senate. It also appoints, after consultation with the Senate, the Pro-Chancellor, the Vice-Chancellor, the Deputy Vice-Chancellor, the Treasurer and the Pro-Vice-Chancellors, and makes the university statutes, subjected to the provisions of the Charter.

The Council, which meets up to five times each year, is chaired by the Pro-Chancellor (an external member), and has a full membership of 33 – including 9 \textit{ex officio} members (the Pro-Chancellor, the Vice-Chancellor, the Deputy Vice-Chancellor, the Treasurer and 5 Pro-Vice-Chancellors); 6 academic members appointed by the Senate, 1 member of the non-academic staff appointed by the Senate; 2 students (including the President of the Students' Union and another student elected by the Students' Union); and 15 lay members (UW's University Calendar 2011-2012).

In order to carry out its responsibilities, and ensure the necessary dialogue with the Senate, the Council has specialist-standing committees, principal amongst which are the Finance and General Purposes Committee (FGPC), the Building Committee and the Audit Committee (see Figure 18). The detailed work of the Council is mostly carried out through these standing committees and a range of Council sub-committees, usually with a mixture of external and academic membership. These sub-committees have an important role in overseeing the conduct of specific areas of business (see Figure 18).

\(^{23}\) Those HEIs that acquired university status as a result of the provisions of the Further and Higher Education Act 1992 are called 'post-1992 universities', 'new universities', or 'modern universities'.

\(^{24}\) Before 15 October 2009, UW was also governed by a Court, which was an administrative body that acted on behalf of the institution's stakeholders. After submitting a request to the Privy Council to make revisions to its Charter and Statutes, the Court was abolished from the university's governance structure.
Figure 18 – Committee structure at the University of Warwick

Whilst the Council is ultimately accountable for the efficient management and good conduct of all aspects of UW's operation, the Senate is the supreme academic authority of the university. It is responsible for the academic activities of the institution, including all aspects of the operations of the university that have a bearing on teaching, research, and the welfare, supervision and discipline of students (UW's University Calendar 2011-2012 – see Annex 2).

The Senate, which meets up to five times a year, is chaired by the Vice-Chancellor and has a full membership of 46, elected from the Faculty Boards and the Assembly – including 13 ex officio members (the Vice-Chancellor, the Deputy Vice-Chancellor, 5 Pro-Vice-Chancellors, the Librarian and the 4 Chairs of the Boards of the Faculties); 24 members of the academic staff, appointed by the Boards of the Faculties; 6 members appointed by the Assembly, of whom not more than 2 are professors; and 3 students, including the President of the Students' Union and 2 registered students of the university elected by registered students of the university (UW's University Calendar 2011-2012 – see Annex 2).

Similarly to the Council, the greater part of Senate's business arises from reports from the range of Senate committees responsible for specific academic matters (e.g. Academic Quality and Standards Committee – AQSC; and the Board of Graduate Studies – BGS). The most important Senate committee is the Senate Steering Committee, commonly referred to as the Steering Committee (see Figure 18). This committee, comprising the Vice-Chancellor, the Deputy Vice-Chancellor, the five Pro-Vice-Chancellors, the Chairs of the Faculty Boards, the Chair of the Graduate School and the President of the Students' Union, meets on a weekly basis during term time and as required during vacations. The Committee's main responsibilities are to make recommendations to the Senate on items of business arising from more junior bodies and to act on behalf of the Senate in 'steering' business (UW's University Calendar 2011-2012).

The Boards of the Faculties of Arts, Medicine, Science and Social Sciences are headed by appointed Chairs, nominated on an annual basis. Membership of each of the Faculty Boards is drawn from representatives of academic departments and research centres within each faculty. The Faculty Boards are responsible to the Senate for academic matters within the Faculty, namely teaching, research, curricula and examinations.
Departments are managed by a head of department, which is chosen from amongst the professorial members of the department, for a period of five years. The process is as follows: in the Autumn Term of the academic year in which the head of department's appointment expires, the Vice-Chancellor advises eligible members of the department that a consultation on the appointment of head of the department will be held and appoints the independent head that will chair the process. Then, the Registrar shall invite members of the department to submit nominations to the independent Chair. After this, the Chair prepares, in consultation with the Departmental Management Committee, a report on the results of the consultation for submission to the Committee on Appointment of the Head of the Department. The report shall contain the names of all those who have indicated a wish to go forward in nomination for appointment and shall make such recommendations as may find appropriate. After that, the Vice-Chancellor establishes a Committee on the Appointment of Head of Department, which is responsible for approving such recommendations. This committee is composed of: the Vice-Chancellor or Deputy Vice-Chancellor; a senior member of the university from outside the department, who has been appointed to act as independent Chair for the consultation process; the Registrar; and three members of the department appointed by the Vice-Chancellor, who are not themselves nominees for appointment to head of the department (Ordinance 11 – see Annex 2). After being appointed, the head of department appoints a management group to advise him or her. The head of department may delegate defined areas of responsibility to the Deputy, members of a management group, other members of department and, in general, determine the administrative and management structures and processes within the department.

5.2.2.2. Management structure

The university is essentially managed by a Senior Management Team, which comprises the 'academic structure' – the Vice-Chancellor, the Deputy Vice-Chancellor, five Pro-Vice-Chancellors, and the Chairs of the four Faculty Boards –, and the Registrar, the Deputy Registrar and the Finance Director. The Senior Management Team meets on a weekly basis.

The Vice-Chancellor is the chief academic and administrative officer of the university. The Statutes prescribe that he has "a general responsibility to the Council and the Senate for
monitoring and promoting the efficiency and good order of the University". The Vice-Chancellor is responsible for ensuring that the university complies with the terms and conditions specified by the Funding Council for the use of Funding Council funds. He or she is a member of all university committees and chairs the Senate and a number of Council and Senate committees.

The Deputy Vice-Chancellor, appointed by the Vice-Chancellor, performs such duties as the Vice-Chancellor may delegate to him or her. In addition, the Pro-Vice-Chancellors have a reporting line to the Deputy Vice-Chancellor to facilitate improved coordination of academic matters (see Figure 19).

There are currently five Pro-Vice-Chancellors, who are appointed by the Council, from amongst the professors, on a part-time basis, for periods of two years up to a maximum of six years. Pro-Vice-Chancellors perform such duties as the Vice-Chancellor may delegate to them. Their current portfolios are as follows: Education and Student Experience; Research: Faculties of Arts and Social Sciences; Research: Faculties of Science and Medicine; Access, Widening Participation and Development; and Academic Resourcing (see Figure 19).

The Chairs of the Faculty Boards and the Chair of the Board of Graduate Studies are part-time elected positions with no specific limit on their term of office, even though a three-year period is considered the norm.

The other members of the Senior Management Team are the Registrar and the Director of Finance and Financial Strategy. The first, subject to the direction of the Vice-Chancellor, has responsibility, under University Statutes, for the administration of the university. The latter is responsible for overseeing all the financial arrangements of the institution.
Figure 19 – Academic structure at the University of Warwick

5.2.2.3. Administrative management structure

Administrative departments represent an important component of the university's structure. The university's administrative and managerial structure is headed by the Vice-Chancellor, supported by the Deputy Vice-Chancellor, the Registrar, and the Director of Finance and Financial Strategy. The Registrar is assisted by the following Senior Officers: Deputy Registrar; Director of Estates; Librarian; Academic Registrar; Director of Human Resources; Director of IT Services; Director of Development, Communications and Strategy; and the Director of Finance and Financial Strategy (see Figure 20).

At departments there are also technical and administrative staff, which ensure, in cooperation with the central services, or autonomously (in the case of some devolved departments), the functioning of these units' infrastructures and the necessary means for the accomplishment of the university's functions.

Having presented the British higher education system and characterised UW, the next sections will present the main findings that resulted from the case study conducted at this university.

Before presenting these findings, an explanation should be given on the way data is displayed. First, it should be noted that, as stated in the research design chapter, the coding unit chosen was the theme. In order to facilitate the organisation of the themes, the researcher opted to build tables, drawn as matrices from NVivo 8®, which show the number of interviewees that referred to a certain theme. These tables do not intend to replace the rich qualitative content analysis of the interviewees' perceptions, but rather complement it. Moreover, it should be recalled that all the questions related to the measurement, reporting and management of performance were guided by a Prompt Card (already discussed in Chapter 4 – see Annex 1). Based on this card, the interviewees were free to refer to the areas they wished to discuss in relation to those topics, not being obliged to discuss them all. They could also bring in more areas, if they wanted to. This fact explains the differences that are found in the number of interviewees that discussed the measurement, reporting and management of each area's performance.
Figure 20 – Administrative and managerial structure at the University of Warwick

5.3. Strategy

5.3.1. Existence of a strategy

When the new Vice-Chancellor, Nigel Thrift, arrived in 2006, he was very clear on the scale of ambition he wanted to achieve as Vice-Chancellor and on the institutional development he wanted for Warwick. As an academic stated: "The university had been fairly torn apart by the decision about whether it should open a campus in Singapore" (A12). That debate, mentioned in almost every interview, raised lots of issues about where the institution was heading and how that should fit into an overall strategy. The new Vice-Chancellor clearly came in and felt that he had to move away from that debate: "The process of formulating the strategy and developing the strategy would move the institution beyond what had been a fairly divisive (...) major issue within the institution" (A12).

Therefore, one year after arriving, a formal strategic document was produced, entitled Vision 2015: A Strategy for Warwick. In there, the Vice-Chancellor defined as an overarching aim to the institution that "(...) by 2015 Warwick [would] be in the top 50 world universities" (Vision 2015: 2). That date was set since it marks Warwick's fiftieth anniversary. According to the formal document:

"Warwick's international reputation [can only be achieved] by carrying out only the very best research and teaching (...) [and by continuing] to attract only the highest quality staff and students, who will be drawn to the university by its reputation and its supportive and challenging community" (Vision 2015: 3).

The vision also states the will "to consolidate existing support and find new partners to help take their plans forward. [For that, it needs to] reach out to all relevant stakeholders – and these include business and industry, government and government services, donors and alumni" (ibid: 3). Moreover, it recognises the need to generate a substantial increase in income: "We will need to see at least a doubling of our 2004-2005 annual income by 2015, in real terms" (ibid: 3).

The core values of Vision 2015 are excellence, ambition and drive, entrepreneurial flair, cosmopolitanism, service, accessibility, community and independence. These values were translated into 44 more specific ideas, having each idea its project team and its project managers. There are two project managers per project, being one of them administrative
and the other academic: "They are champions in each area and each of those project leaders is asked to complete a section on key performance indicators and milestones for programme teams to approve and look for synergies across projects' ideas" (NA37).

Therefore, not surprisingly, when asked about the existence of a strategy at UW, all the interviewees mentioned the existence of a formal one (see Table 11), and referred to Vision 2015 as the main strategic document.

### Table 11 – Existence of a strategy at UW

<table>
<thead>
<tr>
<th></th>
<th>Academic</th>
<th>Non-academic</th>
<th>Students</th>
<th>External Members</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Head</td>
<td>Other</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>13</td>
<td>23</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Formal</td>
<td>10</td>
<td>13</td>
<td>23</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Informal</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>13</strong></td>
<td><strong>23</strong></td>
<td><strong>7</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

According to the interviewees, the factors that contributed to the definition of the strategy were the following:

- **Vice-Chancellor** – the vast majority of the interviewees stated that the arrival of the new Vice-Chancellor was the main driver for the development and implementation of the strategy: "It is obviously associated with the Vice-Chancellor" (AH18);

- **Need to change** – some interviewees also mentioned the need to change as a driver of the strategy. An academic argued: "The actual resulting document comes from a desire for the university to increase its profile globally" (AH20).

Even though all interviewees recognised the existence of a formal strategy, it was considered important to understand the importance attributed by them to such an instrument. That is what will be analysed in the next section.
5.3.2. Importance of a strategy

All the interviewees that commented on the importance of having a strategic plan reaffirmed the importance of having one. To most of these interviewees, a strategy was important to establish a strategic direction, in order to know which direction to follow in the future and to have a focus:

"I think... overall it is extremely important to have this sort of vision, this notion of where we are going." (A7)

"It gives [everyone] a mantra, a bible to refer to." (AH21)

To other interviewees, the university also needed a strategy for organisational development, since "(...) it was not focusing on building up [its] international profile" (A2). It was felt that the university needed to be forward looking and to re-examine where it was at and where it wanted to go:

"I think that any university that wants to get better in the future needs to be able to clarify its future direction (...) that in some ways is distinctive from its core competitors." (NA37)

Moreover, the strategy was also considered important to mobilise people:

"I think it connects staff and students and alumni more than even before. They all know this is a way we're going, this is our direction, and so I think it's really positive." (S32)

Although the interviewees agreed on the importance of having a strategy, the researcher was also interested in understanding how the strategy had been developed and the level of engagement of the interviewees in that process. Section 5.3.3 explores these issues.

5.3.3. Development and level of involvement

The new Vice-Chancellor saw the need for the university to take a somewhat different strategic direction, but he did not want to introduce a new strategy immediately after his arrival. Therefore, he took a different approach. He waited a little while to "(...) feel for the lion and the lamb" (L31).
Practically all the interviewees agreed on the way the strategic plan was developed at UW. To them, Nigel Thrift thought the university needed to make an impact in research and reputation for its research and set the headline goals to raise the university's international reputation, being excellence a non-negotiable issue alongside with some other goals. Consequently, he set down some parameters of what a globally challenging institution should look like, produced a think piece of three pages and circulated it through the university magazine, asking for comments and ideas. People could submit ideas either in person or online. The university received "(...) 350 submissions from individuals and 19 from departments" (NA13). Then, there was a system of focus and discussion groups to consider the strategy. First, a panel was created to look at every single idea and decide which ones were valid. Then, a smaller group of ideas was presented to a senior panel, chaired by the Vice-Chancellor, which selected the ones that could fit with the development of the strategy. Some of the Vice-Chancellor’s ideas were incorporated as well, because, according to some interviewees, there were strategic issues that he wanted to include in there. The strategy was then formally produced and was shared with the wider university community. It was discussed at various levels of the university to seek support and endorsement, mainly from the Senate. It was ultimately taken to the Council and discussed there. It was then refined and published. The final document – Vision 2015 – was finally presented to HEFCE.

When asked about the development of the strategy, the majority of the interviewees referred there was a great deal of active consultation (see Table 12).

<table>
<thead>
<tr>
<th></th>
<th>Academic</th>
<th>Non-academic</th>
<th>External Members</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Head</td>
<td>Other</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Consultative</td>
<td>6</td>
<td>10</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>Centralised</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>12</strong></td>
<td><strong>21</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

According to these interviewees, the Vice-Chancellor had a very wide consultation process where everyone across the university was encouraged to put ideas forward. They believed the consultative approach was a way to generate ownership, since the "(...) implementation is to a critical degree dependent on staff buy-in" (AH25). Some of the interviewees were more sceptical on "(...) how much difference that [consultation] made to
the final product" (AH21), arguing that minor modifications were made to the original document.

A number of academic interviewees felt that the development of the strategy was fundamentally a top-down exercise (see Table 12), essentially led and instigated by the Vice-Chancellor and developed centrally by the Vice-Chancellor and the Senior Management Team:

"The strategy seems to have been constructed by a small group of university administrators, possibly involving the Vice-Chancellor and others, but not really... not really one which involved a great deal of consultation with the broader university." (AH23)

However, most of these academics recognised that they did not get involved willingly.

In the next section, the perceived strengths and weaknesses of the strategy will be presented.

5.3.4. **Strengths and weaknesses of the strategy**

Vision 2015 was generally considered a very high-level, professionally produced, document. Interviewees used terms such as 'ambitious', 'aspirational', 'challenging', 'directional', 'comprehensive', and 'explicit' to describe it.

Nevertheless, some interviewees pointed out the weaknesses of the strategic plan. The majority argued that it would be very difficult to achieve all of the goals set. "Undoubtedly, in some areas, we will not hit the targets unless we are extremely lucky" (A7). Nevertheless, most of these interviewees recognised that that is normal: "It's a vision, and it might not all happen" (L31).

Some interviewees also complained about the difficulty in resourcing all the objectives proposed. In fact, it was consensual that the new strategy needs a lot of extra money, requiring financial planning and a heavy investment in some areas to create capacities and deliver. To an external member: "We are planning for the future at a time when financial constraints seem to be really very serious" (L31). For some of these
interviewees, the solution would be to prioritize some of the objectives, even though all considered this a difficult task.

Other interviewees also felt the balance between the goals was not right, with a clear tendency towards research. The goals that seemed to raise more concern amongst the interviewees were the ones that were very clearly measurable, being the most contested one the '45 ISI Highly Cited researchers by 2015':

"Personally I am not convinced that is a very valid way of assessing quality. You can be cited for a number of reasons, and not necessarily quality." (AH16)

The interviewees mentioned other weaknesses, even though these were considered less important than the previous ones. One of them was the fact that the strategy was considered not particularly distinctive from other universities: "We are in danger of claiming that our strategy is a bit more distinctive than it is, because I know that Sheffield (...) and Manchester have all got their new strategies [and] they all say very similar things to what the Warwick strategy says" (A7). The second weakness, referred to by students, was the lack of the word 'student' in the final document. The third weakness was, according to two academics, a management capacity problem. According to them, even though the strategy offered a number of challenges for the future, it did not really provide training and development for middle managers, even though departments played a major role in the university, given Warwick's flat structure. Finally, to an external member there were no rigorous mechanisms to deal with poor performers, "(...) who either are underperforming or (...) people who have been good, but are now plateaued [sic] and are not going to deliver the strategy (...). [These] will act as a drag on the strategy" (L29).

Even though most heads of department stated that their departments were trying to align their strategic decision-making with the university's priorities, there seemed to be some concerns about some aspects of the strategy:

"Probably most academics will not engage with [the strategy] and will adopt a wait-and-see attitude, until it starts to really have an impact on the way they work." (A11)

This arguably presents a challenge for the Senior Management Team, and, particularly, for the Vice-Chancellor, to ensure that there is a continual buy-in from most academics
and most departments. Otherwise, it can be something that will difficult the process of pushing forward a changing scene.

After having analysed the way UW devised its strategy, the next three sections will look at the interviewees' perceptions in relation to the way the university deals with the measurement, reporting and management of performance.

5.4. Measurement of performance

The analysis of the interviews showed that the existence of measurement (see Table 13) and the degree of measurement (see Annex 4) varied considerably according to the area.

### Table 13 – Areas where performance is measured at UW

<table>
<thead>
<tr>
<th>Area</th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning</td>
<td>32</td>
<td>0</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>Research and scholarship</td>
<td>33</td>
<td>0</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td>Third mission</td>
<td>15</td>
<td>10</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Academic staff</td>
<td>35</td>
<td>0</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>Non-academic staff</td>
<td>20</td>
<td>0</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Students</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Support services</td>
<td>19</td>
<td>2</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Employers</td>
<td>19</td>
<td>6</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Alumni</td>
<td>22</td>
<td>6</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Finance</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note:* It should be noted that the answers to this question were guided by the Prompt Card (see Annex 1).

5.4.1. Teaching and learning

According to the majority of the interviewees, the performance of 'teaching and learning' was measured at the university (see Table 13), being the instruments used to evaluate it perceived to be both internal and external (see Table 14).
Table 14 – Instruments used to assess the performance of teaching and learning at UW

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Number of occurrences (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td></td>
</tr>
<tr>
<td>Student surveys at the end of each course</td>
<td>25</td>
</tr>
<tr>
<td>Internal database (e.g. retention rates, dropout rates)</td>
<td>22</td>
</tr>
<tr>
<td>Curricular review (departmental level)</td>
<td>6</td>
</tr>
<tr>
<td>Assessment performed by AQSC</td>
<td>3</td>
</tr>
<tr>
<td>Postgraduate Research Experience Survey</td>
<td>3</td>
</tr>
<tr>
<td>External instruments</td>
<td></td>
</tr>
<tr>
<td>External assessment performed by the QAA</td>
<td>20</td>
</tr>
<tr>
<td>National Student Survey</td>
<td>15</td>
</tr>
<tr>
<td>Assessment performed by professional and statutory bodies</td>
<td>2</td>
</tr>
</tbody>
</table>

(1) \( n \) equals the number of interviewees that discussed the topic/theme.

(2) For the purpose of this research, the 'number of occurrences' corresponds to the number of interviewees that mentioned a certain theme.

In terms of internal instruments, the majority of the interviewees mentioned the student survey. Even though it was not mandatory, most departments asked their students to fill in a questionnaire (which was not standardised) about the content of the course and about the members of staff that taught that course, at the end of each module.

Other internal instruments pointed out by the interviewees were: the records kept by the Academic Office (e.g. retention rates, dropout rates, and pass rates); the curricular review done at departmental level from time to time; the Postgraduate Research Experience Survey, aimed at assessing the experience of postgraduate students in relation to teaching and learning; and the assessment performed by the Academic Quality and Standards Committee (AQSC). This committee, chaired by the Pro-Vice-Chancellor for Student Experience, asked heads of departments, through an annual review process, "to comment on the effectiveness of teaching and learning methodologies employed in their departments, and, indeed, on the performance of individual staff in that context" (NA13). The AQSC, which reported to The Senate, was, according to the interviewees, responsible for the delivery and enhancement of teaching and learning within the university.

Externally, to most interviewees, teaching and learning was mainly assessed through the external assessment performed by the Quality Assurance Agency (QAA) and through the National Student Survey (these instruments have already been described in Section
5.1.3). Fewer interviewees (2) mentioned the Professional, Statutory and Regulatory Bodies (PSRBs), which visited the university periodically.

According to the interviewees, internal measures regarding teaching and learning were defined in an interaction between departmental and central levels. In fact, and even though these measures could be decided individually by each department (e.g. the centre did not impose the exact nature of feedback forms to departments), some of this information had to comply, for example, with QAA and PSRBs guidelines. This information was then delivered to the central administration, which prepared it for the quality assessment performed by the QAA. In governance terms, there was a Pro-Vice-Chancellor responsible for the Student Experience.

To the interviewees, external measures were defined by external assessors (e.g. the QAA and PSRBs).

When commenting on the measures used to assess teaching and learning, interviewees mentioned, as strength, the long tradition in producing Academic Statistics. Produced on an annual basis, the Academic Statistics gave an in-depth report on the students and staff of UW, alongside data on the destinations of leavers, research grants and contracts, league tables and other comparative information. The Academic Database was first produced following a Senate's decision in 1980, which stated that UW needed to pay more explicit regard to PIs in its academic planning and resource allocation. Over the years, the Academic Database evolved and, in 2001, it was reviewed and renamed Academic Statistics.

Amongst the weaknesses, the one most referred to by the interviewees was the difficulty in measuring the quality of teaching and learning: "It is the hardest one to measure" (A12). Other interviewees (all heads of department) argued that students' feedback (talking about Student Surveys) was a problematic instrument to use, claiming that it should not be taken into account on its own. They believed things like the topic being taught – because "(...) there are topics that are more easy to teach than others" (AH22) – and students' expectations – "(...) a student may well expect more of a university like Warwick, than he would of some lesser-ranked university" (AH27) – should also be taken into consideration.
5.4.2. Research and scholarship

Similarly to what happened with teaching and learning, the majority of the interviewees stated that UW measured the performance of 'research and scholarship' (see Table 13), having the interviewees mentioned both internal and external instruments used to assess that performance (see Table 15).

Table 15 – Instruments used to assess the performance of research and scholarship at UW

<table>
<thead>
<tr>
<th></th>
<th>n = 32</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal databases</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(e.g. costs, outputs, grants, income generated)</td>
</tr>
<tr>
<td>External instruments</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>RAE</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>International citation databases</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

From the external instruments referred to by the interviewees, the Research Assessment Exercise (RAE) gathered consensus. The parameters looked at, in terms of the RAE, were: (1) size of research contracts, translated into the grants and contracts applied for; number of grants and contracts won; success rate in winning those grants and contracts; and the actual expenditure on grants and contracts that went through the university's accounts; and (2) the quality of research outputs, translated in the number of publications and citations and the impact factor of the journal.

Internally, the university also had, according to some interviewees, a pre-award system called InfoEd, which recorded all the applications for grants and contracts, the amount needed, who the sponsor was, who the researchers were, and the amounts awarded. To a number of interviewees, expenditure on research was also recorded through the university's financial system.

Data analysis showed a big drive on the research side in UW, especially because of Vision 2015. Being a goal of the strategy to double the research income, a lot of focus was put on monitoring that issue. To an external member: "Council is very aware of that" (L28).

Even though each department was responsible for assessing its own research and scholarship, deciding on which indicators to use, strategies to develop, and ways to
monitor it, "(...) ultimately... that would be in the hands of the central administration prior to a submission to the RAE" (AH23). Therefore, most departments tended to conform to the requirements of the RAE. The Senate then confirmed the appropriateness of the measures selected. In governance terms, there were two Pro-Vice-Chancellors responsible for research – one for the faculties of Arts and Social Sciences, and the other for the faculties of Science and Medicine.

As for the instruments used, most interviewees considered the RAE as a reliable and well-established assessment instrument that "(...) has real consequences" (L29), since it is linked to financing. Some interviewees also saw the RAE as being important to "(...) build a reputation" (NA34), both institutional and individual, and "(...) to do good research" (AH27).

Few interviewees also complained about the RAE, considering it extremely demanding and time consuming: "Everybody tends to focus on the RAE to the exclusion of everything else" (L31).

5.4.3. Third mission

Third mission was the area of the university that more interviewees perceived as not being measured (See Table 13). Even those who argued that this area's performance was measured stated that the measurement was random and that no real measures had really been devised yet. To them, the few instruments used were essentially internal (see Table 16).

Table 16 – Instruments used to assess the performance of third mission at UW

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 12</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
</tr>
<tr>
<td>Database on volunteer work</td>
<td>8</td>
</tr>
<tr>
<td>Database on generated income</td>
<td>4</td>
</tr>
<tr>
<td>Directory of people's links to external organisations</td>
<td>3</td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
</tr>
<tr>
<td>Higher Education-Business and Community Interaction (HE-BCI) Survey</td>
<td>1</td>
</tr>
</tbody>
</table>
The internal instrument referred to by most of the interviewees, was the database that recorded the number of volunteers in community programmes and the places they were working in. This was, according to them, done through Warwick Volunteers, which provided opportunities for students and staff at the university to volunteer in a variety of roles, within the local community. They also mentioned the existence of a publication called 'Community', with examples of all the different types of community-based activities.

Other interviewees referred to a database where the income generated from the third stream was registered and the directory of people's contacts with industry kept by some departments, being some of this data then required for the RAE. Some interviewees also stated that the records concerning spin-outs and technology transfer were also kept. To them, this was mainly done through Warwick Ventures, which ensured that the intellectual property resulting from the university's annual research spend was properly protected and commercialised.

The only external instrument mentioned, and only by one interviewee, was the Higher Education-Business and Community Interaction Survey (HE-BCI Survey). This survey was undertaken annually across the UK Higher Education Sector to collect data on strategies and activities pursued by institutions during the academic year to commercialise knowledge. It recorded spin-outs, staff and graduate start-ups, and other commercialisation of knowledge generated by HEIs. HEIs' engagement with SMEs and other organisations was also covered by the survey.

According to the interviewees, the internal measures used were mainly decided centrally, by the Steering Committee. The HE-BCI Survey was developed by HEFCE.

5.4.4. Academic staff

It was practically consensual among the interviewees that academic staff's performance was measured at UW (see Table 13), being the instruments used to assess it essentially internal (see Table 17).
Table 17 – Instruments used to assess academic staff's performance at UW

<table>
<thead>
<tr>
<th>Number of occurrences</th>
<th>$n = 31$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td></td>
</tr>
<tr>
<td>Student surveys</td>
<td>22</td>
</tr>
<tr>
<td>at the end of each course</td>
<td></td>
</tr>
<tr>
<td>Appraisal system</td>
<td>21</td>
</tr>
<tr>
<td>Pulse Survey</td>
<td>11</td>
</tr>
<tr>
<td>Internal database (e.g. number, gender, research data, number of PhD students)</td>
<td>9</td>
</tr>
<tr>
<td>Recruitment process</td>
<td>2</td>
</tr>
<tr>
<td>External instruments</td>
<td></td>
</tr>
<tr>
<td>International citation databases</td>
<td>6</td>
</tr>
</tbody>
</table>

From the internal instruments referred to by the interviewees, those that stood out more were student surveys, handed out in paper at the end of each course or module in order to assess academics' performance in terms of teaching; and the annual appraisal system that full professors had to go through every year. In relation to the latter, and according to the interviewees, every professor had to write an annual report on his or her activities, being then rated from 1 to 5 in three different areas: "(...)

obviously research, and administration, and, presumably, the third one is teaching" (AH20). To an academic, the report "(...) is [then] read by the Academic Staff Committee, and they decide [on] (...) how much they're going to give you by way of a pay rise" (A5).

For academics that were not professors, the majority of the interviewees agreed: "There is not an adequate appraisal system at all" (A3), except for junior staff, who are on probation.

At the time the interviews were conducted, the university was trying to change the existing appraisal system, by extending the annual review to all members of staff.

Apart from student surveys and the appraisal system, some interviewees also mentioned the Pulse Survey, aimed at assessing the satisfaction of all staff, both academic and non-academic. According to these interviewees, this survey gave the staff an opportunity to have a say on a wide range of work-related issues, including job satisfaction, work-life balance and working conditions, pay, communications, staff development and equality and diversity. The survey was run by an independent research consultancy that acted on UW's behalf.
A number of interviewees also mentioned the information on academic staff collected by the Academic Office, including demographical data, profiled by department, and the data collected by departments on individual members of staff (e.g. number of PhD students, amount of research income, number of publications, number of citations, and courses taught). That data was usually collected to prepare for the dossier needed for the RAE.

Other interviewees referred to the huge concern with the recruitment process at UW. According to them, recruitment was done internationally, and if the candidates were not found suitable for a post, no one would be hired. In fact, when looking at the strategy, it seems clear that the quality of staff became increasingly important, with one of the main goals of Vision 2015 being to get '45 ISI Highly Cited researchers by 2015'.

In terms of external instruments, a few interviewees mentioned international citation databases, where information concerning the research of each individual could be taken from.

In relation to the development of measures concerning academic staff's performance, the interviewees agreed that departments decided on which measures to use and that the Senate confirmed their appropriateness.

To the interviewees, the instruments used to assess the performance of academic staff had several weaknesses. To them: the instruments were too research focused, being "(...) sometimes teaching (...) not considered important, especially in research focused universities" (AH15); there was a weak appraisal system "(...) for academic staff other than professors" (AH17); and satisfaction surveys were not entirely reliable, since responses were dependent on things like the topic being taught and students' expectations.

5.4.5. Non-academic staff

Fewer interviewees manifested interest in discussing the performance measurement of non-academic staff when compared to those who discussed the performance measurement of teaching and learning, research and scholarship, academic staff, or even, third mission (see Table 13). Nevertheless, almost all of those who talked about it stated
that it was measured (see Table 13), exclusively through internal instruments (see Table 18).

Table 18 – Instruments used to assess non-academic staff’s performance at UW

<table>
<thead>
<tr>
<th>n = 21</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td>21</td>
</tr>
<tr>
<td>Pulse Survey</td>
<td>11</td>
</tr>
<tr>
<td>Appraisal system</td>
<td>10</td>
</tr>
<tr>
<td>Internal database (e.g. number, gender)</td>
<td>6</td>
</tr>
<tr>
<td>External instruments</td>
<td>0</td>
</tr>
</tbody>
</table>

The interviewees mentioned three instruments, being the most relevant ones the Pulse Survey, used to assess the level of satisfaction of all staff, and the appraisal system that administrative staff went through annually. Considering the latter, the interviewees made a distinction between the way non-academic staff working in central administration and staff working in departments were assessed. According to them, non-academic staff’s performance was effectively measured within the central administration: "There is a management structure in administrative staff. You can see line management there (talking about central administration)" (AH16). In the central administration, each member of staff discussed with the director of his or her service his or her objectives for the following year and ways to reach them, being their performance then compared to pre-established objectives. Within departments, non-academic staff was subjected to an annual review process, being assessed by the head of department. If anyone was thought to be doing a good job, then he or she could be considered for extra payments (merit awards) or increments on the salary scale. The third instrument mentioned was the internal database developed by the Academic Office, which kept records on non-academic staff (e.g. numbers, gender, ethnicity, age).

According to the interviewees, measures concerning non-academic staff were agreed between staff and heads of department or service managers. The Registrar and the Vice-Chancellor would then confirm the appropriateness of the measures.
In relation to the measures used, the interviewees pointed out the following weaknesses:

- **Softness of the appraisal system in departments** – some interviewees believed there was not an effective assessment outside central administration: "Within central administration I think there is a very effective performance measurement. Outside, I don't think there is… certainly not in departments" (A12);

- **Difficulty to measure** – to other interviewees, the performance of non-academic staff was quite difficult to measure: "(...) it's a collective outcome, being very hard to attribute to a specific element" (AH27);

- **System does not reward cooperation** – some people stated that the system did not reward cooperation: "I think we actually have a system of rewards to report bad behaviour. Rewards selfish, individualistic (...) behaviour, and does not reward, and sometimes punishes, cooperation" (AH17);

- **Staff satisfaction measures are ambiguous** – other interviewees believed the measures of staff satisfaction to be ambiguous: "You can look at staff satisfaction (...) but whether that's telling you anything real about how they do their job is another matter" (AH27).

### 5.4.6. Students

All the interviewees that commented on the measurement of students' performance stated that this area's performance was assessed (see Table 13) exclusively through internal instruments (see Table 19).

#### Table 19 – Instruments used to measure students' performance at UW

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 20</strong></td>
<td></td>
</tr>
<tr>
<td>Internal instruments</td>
<td></td>
</tr>
<tr>
<td>Internal database (e.g. number of students, attendance rates)</td>
<td>13</td>
</tr>
<tr>
<td>Measures of educational success (e.g. degree results, completion rates, retention rates)</td>
<td>10</td>
</tr>
<tr>
<td>Recruitment process</td>
<td>3</td>
</tr>
<tr>
<td>Student tutoring system</td>
<td>2</td>
</tr>
<tr>
<td>External instruments</td>
<td>0</td>
</tr>
</tbody>
</table>
One of the instruments more often referred to by the interviewees was the internal database that collected student numbers, gender and ethnicity, attendance rates, and so on. To the interviewees, students were very closely monitored in terms of numbers, especially undergraduate students:

"Students are our critical revenue stream, as a university, in terms of (...) income, because each student comes with money attached to him or her." (AH22)

Other information collected was, according to other interviewees, related to educational success. It included mainly student outputs – degree results, completion rates, and retention rates. It contained data by student, by course, by department, by faculty and by level of study. The interviewees stated that all students' records were kept in a database called SITS.

Other two instruments came up in the interviews: student recruitment and the student tutoring system. To a few interviewees, UW was very careful with the students it chose on entrance. Only students who got top marks at entrance exams would get into the university. Other interviewees stated that student welfare was also monitored through the system of personal tutoring.

According to the interviewees, targets around students were negotiated between the centre and departments. The Council would then confirm their appropriateness.

5.4.7. Support services

Similarly to what happened with non-academic staff, a lot of interviewees chose not to comment on the way the performance of support services was measured (see Table 13). Nonetheless, the majority of those who commented on that, stated that this area's performance was assessed (see Table 13), namely through internal instruments (see Table 20).
Table 20 – Instruments used to assess the performance of support services at UW

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 16</strong></td>
<td></td>
</tr>
<tr>
<td>Internal instruments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
<tr>
<td><em>ASDAR</em></td>
<td>12</td>
</tr>
<tr>
<td><em>Complaints</em></td>
<td>2</td>
</tr>
<tr>
<td>External instruments</td>
<td></td>
</tr>
<tr>
<td><em>International Student Barometer™</em></td>
<td>3</td>
</tr>
</tbody>
</table>

There was no doubt amongst the interviewees concerning the tool that was more used to measure the performance of support services – the Administrative and Service Departments Annual Review (ASDAR) –, developed and controlled by the central administration. This instrument was not applied to academic departments. One interviewee explained how ASDAR worked:

"Every year, the plans of non-academic departments are reviewed, making sure that they are in alignment with the university strategy, in terms of their aims, their objectives... making sure that they are doing what they are doing the most efficient way possible... making sure that there is as little waste as possible in those areas." (NA13)

Each service set certain targets for decision-making and set up a system to be able to report against success in achieving those:

"It is both a qualitative and quantitative process, in a sense that individual services will demonstrate in a quantitative way how they have measured performance... [and] give a qualitative analysis of that performance as well." (NA34)

Some interviewees also mentioned other instruments used, namely the number of complaints and the results of the International Student Barometer™, which measured international students' perceptions on several items, including support services.

Concerning the development of measures, the interviewees argued that the directors of each service would come up with their budget and devise their targets. The Registrar and the Vice-Chancellor would then confirm the appropriateness of the measures.
The interviewees attributed several weaknesses to the instruments used to assess the performance of support services:

- *Does not allow benchmarking* – some interviewees complained about the existing system not allowing benchmarking with other support services, especially from other universities: "It is very difficult to get comparable data and benchmark… because we have different structures and different methods" (NA35);

- *Lack of customer satisfaction surveys* – to other interviewees there should be customer satisfaction surveys: "In terms of commercial performance (...) I don't see a lot of these things like customer satisfaction surveys (...). They are not very customer focused, they're very financially focused" (S40);

- *ASDAR is not a measurement system* – some interviewees argued that ASDAR was not a measurement system: "I wouldn't say that [ASDAR] is a performance measure. I would say it is an excuse for an annual conversation between the Registrar and its staff. (...) I am not sure what measures are coming out of that" (AH21);

- *ASDAR is not attributable to individuals* – to other interviewees, ASDAR should be attributable to specific individuals: "(...) the ASDAR system by its nature tends to… almost encourages comment and measurement on a collective basis, possibly because it is not attributable. And, you know, one of the big advantages of any decent annual review (...) is that it's entirely attributable" (NA39).

### 5.4.8. Employers

Apart from third mission, 'links to employers' was one of the areas of the university that more interviewees perceived as not being measured (see Table 13). Even most of those who argued that the university measured those links stated that it did not do it systematically. In fact, the majority of the interviewees argued that they had little contact with employers.

In terms of the instruments used to assess links to employers, most interviewees mentioned internal ones, namely a database that gathered statistics on where students went, sorted by sector, and the employment rate of students (see Table 21). That data
was, according to these interviewees, pulled out from the different departments through the Careers Service, being mainly collected because it was annually demanded by HEFCE.

Table 21 – Instruments used to assess links to employers at UW

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td>18</td>
</tr>
<tr>
<td>Internal databases (e.g. employment information)</td>
<td>13</td>
</tr>
<tr>
<td>Employment rate</td>
<td>7</td>
</tr>
<tr>
<td>External instruments</td>
<td>0</td>
</tr>
</tbody>
</table>

According to the interviewees, the Careers Centre decided on the measures used to assess the links to employers, together with the Steering Committee and Senate.

In relation to the adequacy of the instruments used to assess links to employers, many of the interviewees recognised that the engagement with employers was still quite poor and that there was "(...) a lot of improvement to make in that area" (NA37). They believed it to be an area where the institution needed to grow. The interviewees felt that the university should be looking at "(...) issues about careers, pathways for... graduates, trying to target where selected employers are" (NA35).

5.4.9. Alumni

Similarly to what happened with third mission and employers, links to alumni were also one of the areas that more interviewees perceived as not being measured (see Table 13). Even those who argued that this area was measured agreed that this was hardly done.

The majority of the interviewees that commented on the instruments used to assess links to alumni mentioned fundraising activities (see Table 22). To these interviewees, this area was assessed only in terms of numbers and contacts of alumni and donations.
Table 22 – Instruments used to assess links to alumni at UW

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal instruments</strong></td>
<td></td>
</tr>
<tr>
<td>Fundraising activities</td>
<td>16</td>
</tr>
<tr>
<td>Internal databases (e.g. contacts)</td>
<td>9</td>
</tr>
<tr>
<td><strong>External instruments</strong></td>
<td></td>
</tr>
<tr>
<td>DLHE</td>
<td>3</td>
</tr>
</tbody>
</table>

Data on alumni was, according to the interviewees, stored in a database called Raiser's Edge. The Development and Alumni Relations Office (DARO) managed this database.

In terms of external instruments, three interviewees mentioned the Destinations of Leavers in Higher Education Statistics (DLHE), already explained in Section 5.1.3. To these interviewees, the Careers Centre collected information on the initial careers of graduates and postgraduates six months after graduation, and compiled and analysed it to form the DLHE Statistics, then sent to HESA.

To the interviewees, the measures used to measure links to alumni were decided by DARO, together with the Steering Committee and Senate.

When asked about their thoughts concerning the measures used to assess this area, some interviewees stated that Warwick's linkages with alumni were not as strong as in other universities:

"As an alumnus what I get is a sort periodic printed thing… old fashioned. Other universities use technology much more." (L29)

"For a university with a global strategy… we should be able to make a better strategic use of an alumni network of 125,000 people and growing every year, a quarter of which are international… a quarter of which live outside of the UK... which is a phenomenal network." (NA37)

Nevertheless, all the interviewees agreed on the importance of alumni: "(...) alumni are critically important to the institution… and its future direction" (NA37).
5.4.10. Finance

It was consensual that finance was clearly measured, both at university and departmental levels (see Table 13). According to the interviewees, the concern about finance increased with the new strategy:

"We have people thinking very carefully about how we can grow the income streams at the university. How we can improve the financial situation. How we can be more entrepreneurial and more income generating for all that side of things." (NA2)

All interviewees believed there was a very strong awareness of finance throughout the organisation:

"People at Warwick understand that there are consequences from financial performance (…). They may not be close to it, but they know it is important, and they know that achieving financial plans is critical." (L29)

This awareness could arguably be explained by the 'Earning Income Policy' implemented in UW to face the financial cuts of 1981, as discussed in Section 5.2.1.

According to the interviewees, the KPIs used to measure financial performance came automatically out from the budget and were things like surplus as a percentage of income, staff cost as a percentage of income, and variances against budget (see Table 23).

Some interviewees explained how financial performance was measured and by whom: Having set the budgets, there was a Budget Steering Group that met every quarter to monitor the financial performance of the various areas of the university against budgets. There was also a Financial Planning Sub-Committee, which "(…) looks harder at… the economic situation… and [comes up] with a plan for the coming five years" (NA13). Both the Budget Steering Group and the Financial Planning Sub-Committee came into the aegis of the Finance and General Purposes Committee (FGPC), which, in turn, reported to The Council.
Table 23 – Types of measures used to assess financial performance at UW

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal measures</td>
<td></td>
</tr>
<tr>
<td>Financial measures</td>
<td></td>
</tr>
<tr>
<td>(e.g. surplus as a percentage of income, staff cost as a percentage of income, and variances against budget)</td>
<td>16</td>
</tr>
<tr>
<td>External measures</td>
<td>0</td>
</tr>
</tbody>
</table>

According to the interviewees, there was also a clear system in place to follow the financial position of departments. Every head of department had to devise the departmental financial plan for the upcoming five years, setting targets. Departments with devolved budgets had their own Finance Team and managed their own finances, even though they were closely monitored by the central administration, interacting with the Finance Director very closely. Non-devolved departments took their financial plans to the Academic Resourcing Committee (ARC). So, even though the money was handled at a departmental level, departments could not do what they wanted. Most decisions had to have the approval of ARC. All the financial information was stored in the university's finance system.

To the interviewees, the KPIs used by the Finance Office were developed by that office and agreed by The Council.

Even though external members stated that the measurement of finance was "(…) probably not as rigorous as you would expect in the private sector" (L29), the way UW managed the financial side was well regarded outside the institution, and other universities tended to visit the university to see how that was done.

In the next section, the way interviewees perceived performance to be reported in UW will be discussed.
5.5. Reporting of performance

Similarly to what happened with measurement, reporting also varied according to the area.

Several interviewees confirmed receiving or seeing reports on teaching and learning. Most of them mentioned they saw the results of the student surveys conducted internally, since data from those surveys was normally "(...) charted within the department and compiled into a series of statistics" (NA41). Additionally, the university tried to give feedback to students concerning the survey:

"Any comments that the course or module organiser writes, [are] put on the board for everyone to see, so that students can read the comments from the course organisers, as well, and see the scores that are given."
(AH16)

According to the interviewees, reports concerning teaching and learning usually came through the Academic Quality and Standards Committee (AQSC), in co-ordination with relevant committees, departments and centres. AQSC then reported to The Senate.

The interviewees also referred to the Academic Statistics published annually by the Academic Office, in collaboration with the Research and Development Services Office, the Careers Advisory Service and the Personnel Office. These statistics were available on the university website.

Externally, HEFCE published some results concerning teaching and learning in Unistats. This site, aimed at comparing and reviewing universities and subjects in order to help students choose the best UK university and subject, brought together authoritative, official information and it included the results of the National Student Survey (NSS). Results from the NSS were also passed out to departments with a letter from the Pro-Vice-Chancellor for Student Experience.

Additionally, the QAA presented a report on the findings of the quality assessment of teaching and learning. The full report was published on the university website.

The majority of the interviewees also argued that they saw reports on research and scholarship, stating that most of the data on this area came through the RAE route and
was accessible online, thus enabling benchmarking between subjects and institutions. Reports on this issue usually went to the Senate through the Steering Committee.

Within the university there was also a Research Committee, which looked at periodic reports on research performance, research quality and the generation of research income, in order to advise the Pro-Vice-Chancellors for Research on areas where improvements could be made.

Almost no reports were produced on *third mission*, according to the interviewees. Two academics mentioned the Warwick Volunteers' report, where all the volunteering activities were described. In relation to the volunteering programme, students were usually asked to "(…) collate information of what they would like to do and on how those activities went" (A4). Most reports on third mission came, according to the interviewees, through the Steering Committee.

Some data on *academic staff* was compiled in the Academic Statistics, being available online. Moreover, professors had to write an annual review report (as described in Section 5.4.4) and send it to the head of their department, who signed off appraisals, gave a grade from 1 to 5, and reported to the Deputy Vice-Chancellor. The reviews were then analysed by the Academic Staff Committee (ASC), which reported to The Senate.

Results from the student surveys were also sent to the academic staff and to the head of department, even though they were largely kept within the department.

Finally, everyone could see the broad results of the Pulse Survey, since the university published them online.

In terms of *non-academic staff*, most interviewees stated that they saw no reports on that area. The clerical and technical staffs working in departments reported to heads of department, who signed off appraisals, and to the Deputy Vice-Chancellor. Staff working outside academic departments reported to the director of their service. The latter reported directly to the Registrar. The appraisal reports were then analysed by the Finance and General Purposes Committee (FGPC), which was responsible to The Council for promotion policies.
To the interviewees, some data on students was compiled in the Academic Statistics. Additionally, the Board of Undergraduate Studies (BUS) and the Board of Graduate Studies (BGS) also produced reports destined to improve students' experience, making recommendations to The Senate.

Concerning support services, not many reports were produced, according to the interviewees. Each Pro-Vice-Chancellor received information on the services related to them (see Figure 19). The director of each support service reported to the Registrar, who, in turn, reported to the Steering Committee. Commercial services reported to the Finance and General Purposes Committee (FGPC). The polling company that ran the International Student Barometer™ presented a report to the university and gave a detailed presentation of the findings. A summary form of the results was published on the International Office website.

Not many interviewees mentioned seeing reports on employers. The Careers Centre produced a report on employers annually, and took it to the Steering Committee and to the Senate.

Similarly to what happened with employers, not many interviewees stated that they saw reports on alumni. Data on this area was produced by the Development and Alumni Relations Office (DARO). This office produced an annual report that was sent to the Steering Committee and to the Senate. Reports with the results from the Destination of Leavers in Higher Education Survey (DLHE) "(...) are published nationally [by HESA] and used actively in league tables" (NA35). The results of DLHE were then reported to the Steering Committee and to Senate.

In relation to finance, the majority of the interviewees confirmed seeing financial reports. Each non-devolved department produced its financial plan and took it to the Academic Resourcing Committee (ARC). This committee then reported to the Finance and General Purposes Committee (FGPC), which, in turn, reported to the Senate and Council. Departments with devolved budgets reported to the Finance Office, which then reported to the Council. Additionally, the Finance Office produced a Statement of Accounts annually, publishing it on its website.
Having looked at the way UW reported the performance information collected during the measurement process, Section 5.6 will analyse the way the interviewees perceived performance information to be used.

5.6. Management of performance

Data analysis showed that performance information was not used in the same way across the different areas of the university.

In terms of using the data concerning teaching and learning, some interviewees argued that the university acted upon it, even if, to them, some things could improve. For example, to some interviewees, the use of the information collected through the student surveys was not homogeneous. While some departments analysed and acted upon that data, others did not: "(...) some just leave it. (...) There's a broad spectrum there" (A6).

Also, a more systematic approach to the data collected through the National Student Survey (NSS) could be taken, according to some interviewees. Whereas some departments looked at the data and discussed it in their Student-Staff Liaison Committee, others did not. Nonetheless, some of the issues raised by students in the NSS were analysed by the Board of Undergraduate Students (BUS) and some action was taken. An interviewee gave an example of how NSS data was used: "(...) the one area where [students] expressed dissatisfaction was in assessments and feedback... feeling over assessed and feeling they haven't an adequate feedback in order to progress" (NA34). What the university did was talk to the Senior Tutor, who was responsible for the Personal Tutoring System within departments, and asked him to try and solve this problem.

According to some interviewees, the absence of a more systematic approach to deal with the data concerning teaching and learning made it difficult to have an overall picture of the university:

"There isn't a lot of discussion, for example at AQSC, about the overall picture of the university; so, for example, as a university do we really know how high our drop out rate really is? Do we know whether in relation to other universities in the country we give more firsts? (...) In my experience with the QAA we don't do a lot of that at a high level of aggregation. (...) We do it at faculty level." (A11)
In terms of research and scholarship, most interviewees believed academic departments used the results from the RAE to improve their performance: "(...) obviously there's a big drive on the research side" (NA41). In fact, in the quest to increase research productivity, some departments were, according to a few interviewees, promoting support to their staff, through "(...) peer evaluation of journal articles [and] joint research applications" (AH18). Some heads of department also confirmed signing off all grant applications prior to submission and monitoring success in terms of awards granted against submissions.

Moreover, the university also monitored citation rates and "(...) [was] trying to quantify for those disciplines where citation rates [were] not particularly relevant or reliable" (NA35). The Academic Office was also working on ways to "(...) benchmark outputs across disciplines" (NA35).

Third mission was not acted upon, according to the interviewees, unless "(...) Warwick [developed] a negative reputation" (S40). The action consisted basically in looking for good opportunities to cooperate with external institutions. Nevertheless, most interviewees agreed that this was an area where the university needed to do more.

The performance of academic staff was officially handled at departmental level. When there was a massive problem that could not be solved within the department, heads of department usually took the issue to a member of the Personnel Office. If the problem could not be solved there, they would go to the Deputy Vice-Chancellor.

With the exception of one, all heads of department felt they could not do much if an academic was underperforming. That opinion was also shared by other academics. They stated that it was sometimes very difficult to do anything about poor performance since the university did not have any mechanisms for looking at academic staff's performance. According to them, there were no sanctions that the department could take against the person that was not performing. They could talk or write to the person, telling him or her that there was an issue that needed sorting out, but they felt that if that person did not take it on board, then there would be very little else they could do besides writing to him or her again. According to them, there was not a disciplinary procedure. They felt it was virtually impossible to remove somebody from their job because they were not doing well as academics. A person would have to have done something very serious to be sanctioned. Two interviewees shared these feelings:
"All that can be done with the information collected is go and talk with some members of staff and discuss what they are doing. (...) There is nothing compulsory (...) or any sanction I can impose on the staff." (AH16)

"There is nothing we can do, other than withholding the merit payment." (A3)

In fact, the interviewees complained about a lack of management structures inside the university to deal with academics' performance:

"[On one occasion], having decided that I was going to do something about it, I was not sufficiently supported by the university, and probably, pragmatically, in the future, I would decide not to do it that way." (A25)

These complaints are congruent with the results from the Pulse Survey. There, the highest negative rating of staff was the university's effectiveness in dealing with poor performance. The reason for this lack of support was, according to the interviewees, related to the fear of having 'bad publicity':

"If you fire somebody, then they are quite entitled to go to the papers, and they are quite entitled to write bad things about the university. They are quite entitled to get, if they can afford it, a very expensive lawyer, and this will become a very huge case. And the university, quite rightly, will balance and make a judgment. The governance structures will analyse the cost-benefit of doing that." (AH22)

"It depends, of course, on how big your pockets are. Of course you can pay people to go away and people do, but as you probably know, in the UK, the system has changed in the last few years (...). It has become very expensive to buy people out of their contracts before age sixty. So that's a bit of a difficulty." (AH19)

What heads of department could do was to allocate certain responsibilities, teaching and administrative to academics. Two interviewees stated that, in relation to this issue, the problem was the lack of clarity on what comprised an academic role:

"Part of the problem also is the vagueness of many job descriptions and this is, as you know, a huge piece of work that has been undertaken. But unlike Portugal, for example, or many of the other universities across Europe, academics don't have a stipulated number of hours. They... the definition... the allocation of teaching is in the hands of the head of department. Now, this means, for example... I can tell you that there is one department in this university where the professors do no teaching." (A3)
Heads of department reported problems particularly in relation to administrative roles, mainly in ensuring that they were distributed equitably, and that people did them properly:

"People clearly want to concentrate on research and scholarship, and this is sometimes used as a lever not to do an administrative role, or do an administrative role poorly." (AH18)

So, heads of department felt they had to deal with these issues through diplomacy.

In terms of sanctions, heads of department stated that the only thing they could do was to withhold promotion or give poor performers more teaching load or more administrative responsibilities. In terms of rewards, it was much easier. They could, for example, attribute merit pays, promote people through the Academic Staff Committee (ASC), or reduce teaching loads. Some departments also had mentors in place to help academics when they needed.

In relation to non-academic staff, an interviewee stated: "I do not think non-academic staff gets away with poor performance, certainly not in the centre" (NA41). The Registrar had the ultimate managerial responsibility for people in support services. If some members of staff were not performing accordingly to required standards, they could be relocated or have their job responsibilities slightly shifted. In extreme cases, people could be dismissed or a mutual agreement could be reached, even though some interviewees believed that seldom happened. An academic even stated: "What we can't do, of course, is fire people who are performing badly" (A3). To a non-academic:

"[It] depends on what the reasons for the non-performance may be, but if it's general capability type of stuff, then [the Human Resources Office] supports the line manager in seeking to get the improvement from the individual to the required standard, always [using] an advisory and support method, because we don't have executive responsibility. Quite rightly! The only exceptions to that are where there can be some... big sensitivities around individuals in a situation domestically or health wise or whatever (...), but we tend to move that into more specialist counselling or occupational health environment to support the individual." (NA39)

If people performed well, it would be much easier, since they could be rewarded and promoted. There were mechanisms in place for doing that.
The results of the Pulse Survey were also a base for action. For example, the last survey showed that Warwick staff, both academic and non-academic, was working too hard. That led to fairly high levels of occupational stress. As a result, the university set in place a number of initiatives in order to try and reduce staff's workload.

Concerning students, they were very highly monitored, according to the interviewees, and the university looked carefully at the data:

"The metrics of students are extensive, whether it's their exam results, or the number we're getting in, or the number we're expecting to recruit through admissions, there's a big drive here (...) because that is the university's single biggest income source." (NA41)

Moreover, departments could decide on which students to take and on what numbers they were going for, and there was a careful selection on entrance:

"Obviously we have choices to make on the students side, about who we take and who we don't and what numbers we're going for and things of that kind." (A19)

Also, departments that struggled to get students communicated that message "(...) to the rest of the department and (...) [worked] very hard (...) to keep students in" (AH24).

Moreover, to some interviewees, tutors also promoted the academic welfare of students, individually and collectively. They were usually people to whom students could turn to in confidence for support regarding difficulties with their studies.

The Senate was the body where people agreed if some formal action could be taken concerning students.

In relation to support services, at the end of the academic year, performance was measured against the objectives and targets established at the beginning of the year, enabling the director of each service to act:

"Things have changed since the results of ASDAR... directors left departments... departments have been closed down... [or] have been merged... so, it has some teeth and the university is prepared to back up on the changes of what it finds out." (NA37)
Moreover, if data on a specific support service kept on coming up negative in the surveys conducted to students, the Registrar had the managerial responsibility of acting upon it:

"There are examples of... the need for service improvement and changing things around [Coughs], either people or structures, or both, to make sure we get those improvements." (NA13)

As for the ISB, some interviewees stated that, even though the International Office took upon the results from this survey, there was not a systematic methodology to use the data.

According to the interviewees, the university did not actively act upon employers or alumni. In relation to employers, it would only act if "(…) students were not getting jobs" (NA41). Data concerning alumni was not acted upon, since the data that existed was relatively scarce, as discussed in Section 5.4.9:

"I think we're not following up our students enough (…) and we're meant to do that (…). We could do with more of that." (AH18)

"We analyse them and then do nothing about it... we just say 'Oh, that's terrible!'" (NA14)

Finally, contrarily to what happened with employers and alumni, the interviewees perceived finance to be well acted upon in the university, since:

"It is the heart of everything, and if you haven't got money, and you're going bankrupt, you cannot do anything, and you're going down the tubes." (NA41)

Some interviewees explained the process: the Academic Resourcing Committee (ARC) allocated departmental budgets for the support of academic activities within the overall envelope of funding for non-devolved departments and within the context of the university's strategic goals and priorities. It also monitored income and expenditure and the achievement of plans by departments. An academic confirmed this:

"I spend a lot of time on the Academic Resourcing Committee, and there every department is subject to a pretty close review of its budgets, etc.... and targets are set. (…) Whether targets are met is another question." (A12)
The Finance and General Purposes Committee (FGPC) looked at performance in more detail and performance against budgets, once a term. It acted as a general purpose and executive committee with power to act on all day-to-day matters not within the province of any other Council committee. It advised and made recommendations to the Council regarding the financial policy and management of the university within the context of the university financial plan.

5.7. Performance management systems

After having explored UW's strategy and the way performance was measured, reported and managed at the university, the next sub-sections will look at: the importance attributed by the interviewees to PMS; the pressures felt by them to implement PMS; the factors that the interviewees believe to influence the implementation and functioning of PMS; and the perceived strengths and weaknesses of the PMS.

5.7.1. Importance of performance management systems

When asked about the importance of PMS, the vast majority of the interviews that commented on that issue stated that they considered it either 'important' or 'extremely important'. The only ones that showed some discomfort with the subject were two heads of department, one from a 'hard-pure' subject and the other one from a 'soft-pure' subject.

Performance management systems were considered important for a number of reasons, being the primary reason, according to the interviewees, to inform decision-making:

"The more information we get, the better decision we'll make." (A36)

"If you don't have measures of performance, or at least something to... aim at, in terms of planning, then you are lost." (AH22)

Some interviewees also believed PMS would help in the achievement of the strategy:

"Within the structure of the strategy document it's going to be absolutely essential. We can't do without it, and there must be an element of performance management. (...) Historically, of course, that has never existed in universities." (AH16)
Other interviewees mentioned the ability of PMS to **ensure accountability and transparency:**

"In terms of both the government investment but also the people who are paying fees, international students, home students paying fees, we have to have demonstrable value." (NA34)

Other reasons presented were: to **allow comparisons and ensure equity;** to lead staff; and to **build a reputation:**

"It's important to have a device within which you are able to say 'well, you may be doing the teaching hours that you are required to do, but actually you're very low on admin, and you haven't got the same kind of administration responsibilities as other people and we need to ensure that aspect.'" (AH18)

"Performance management systems are important in shaping the way staff… you know, do their job." (S32)

"Things like the Research Assessment Exercise [have been important] to build a reputation." (NA34)

Even though data analysis showed that most interviewees, from the four groups (academics, non-academic, students and external members), perceived PMS as something important, that helped organisations to think strategically and move forward, some interviewees argued that the university and individuals should be careful with some of the unintended effects that could emerge with the introduction of PMS. According to them, measurement should not be seen as an end in itself, since sometimes metrics did not tell the whole story:

"There is a real danger of becoming a number of tick boxes or scoring mechanisms (...), which then people try to work to. (...) It is almost a force towards mediocrity" (AH24).

Other interviewees believed PMS "(...) could be used to bully people (...), to put additional pressure on people. (...) Performance management tools are only as good as the working relationship through which they are implemented" (AH18).

A few interviewees feared that PMS could lead to the end of futuristic research:

"With so much measurement, people will stop doing more futuristic research, because no one is going to read it and it does not make them look good, and that's a shame, really." (AH15)
Some interviewees also believed PMS could lead to deliberate strategies to conform to what was demanded, and gave examples of this type of behaviour:

"It is very hard to manage the administrative load for an academic, so, given that most academics are smart enough to work that out... you know, there's nothing to stop them from saying 'well, I am simply not going to do that, and I will focus my attention on things that will give me better results, so that's research income and output'." (AH16)

"A decision (...) will be justified as a good decision (...) by manipulating the performance measures that are then used to assess whether this was successful or not (...). This happens throughout every department of the university." (AH22)

In the next section, the pressures felt by the interviewees to measure, report and manage performance will be discussed.

### 5.7.2. Pressures to measure and manage performance

All the interviewees agreed there were several pressures, both internal and external, to measure, report and manage performance, being the latter the most influential ones (see Table 24).

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<tr>
<td>External pressures</td>
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<tr>
<td>Internal pressures</td>
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In the next sub-sections, these pressures will be discussed more thoroughly.

#### 5.7.2.1. External pressures

Interviewees from the four groups (academics, non-academics, students and external members) concurred there were external pressures to introduce PMS in universities. To them, these came mainly from the state and from the market.
The RAE was the main pressure referred to in the interviews, especially for an institution like Warwick, because "(...) [the university] has decided to play that game and uses that game to define its reputation" (A7). One interviewee argued that, because of the RAE, the quality of British universities' research had been "(...) levered up dramatically over recent years" (AH27).

The assessment conducted by the QAA was also reported as a pressure, given the amount of preparation involved. Nevertheless, one interviewee stated: "[Even though] it creates pressure (...) it also creates an opportunity to reflect on what [we] are doing" (A7).

To other interviewees, HEFCE also created a heavy regulatory burden to the university:

"It (talking about HEFCE) is always keen to see how effective our teaching and learning and our research are." (L28)

"Between the government and the university there is a thing called the Higher Education Funding Council. (...). It's a little bit of a buffer between the two. We have to be careful that (...) there isn't too much intervention by the Higher Education Funding Council, but I happen to think that if we didn't help them, it would be a awful lot worse, because the universities would be straight in the firing line from the Ministry and, at least, the Funding Council protects us a bit, in that respect. But still... can create a heavy-ish regulatory burden." (NA13)

Other pressures announced by the interviewees were the two surveys – the NSS and the ISB. To these interviewees, since the results were published online they created an enormous tension for universities, by "(...) [allowing] students to see how universities are ranked in terms of student satisfaction" (AH27).

Some interviewees also mentioned the pressure exerted by the Department of Innovation, Universities and Skills:

"There is a Ministry now... the Department of Innovation, Universities and Skills. It's the first time that we've had a Ministry that... has had the word 'university' in its title. (...) It has got five ministers [Smiles]. (...) A small department, five ministers. (...) The interest they naturally have... can quite quickly turn into... interference... tension. In trying to do the right thing, they actually load more requests, more requirements onto the university. (...) That can become debilitating, tiring... counter-productive." (NA13)
Finally, a few academics also considered professional bodies to be a strain, because "(...) they are amazingly time consuming" (A4).

*Market*

Virtually all the interviewees agreed that the market became increasingly important over the years, playing an influential role in most universities. According to them, the competition between universities became tougher and every institution was trying to achieve the best quality they could. The majority of the interviewees argued that, in the UK, universities were increasingly competitive:

"There is a need to have our brand out there in the press. That, in a sense, feeds the image of the university." (NA13)

To these interviewees, there was a market for students, for staff and for funding:

"We are trying to make sure we attract the best possible students (...) the strongest undergraduates, and I think if we look at the A-level scores of our home students, we do get the strongest students. [Moreover], we need to develop reputation internationally so that we get the strongest international students." (A2)

"Any indicator that a department or university can be better than its competitors will appear in the marketplace, therefore attracting students." (AH23)

"In many, many cases now, we are recruiting our staff from around the world, rather than just from the UK." (A2)

"We need to compete for funding from business, funding from industry, funding from charities." (A2)

To several interviewees, the pressure to compete, mainly in terms of student recruitment, became more acute when "(...) the language of performance [was] taken out by the media and turned into league tables" (AH23).

Also with the advent of tuition fees, and their recent increase (as discussed in Section 5.1.4), students started to think more carefully about the value of the programme they were taking and parents started to get more interested in what people were doing. A number of interviewees argued that they were now "(...) seeing a lot more parental
influence in decision-making" (L29). Parents started coming more to the university on open days and became increasingly interested in the employability of their children.

To a few interviewees, market philosophies have also pressured universities to introduce control mechanisms:

"The idea that businesses and business models should be adopted by universities, and the whole of the public sector (…), [has] been very powerful." (AH17)

"The market philosophy is the overwhelming model of our times." (AH24)

Other forces that were referred to by some interviewees were alumni, who were, according to them, interested in improving the reputation of the university they had studied in, and employers, interested in knowing that the people they were employing had good degrees.

5.7.2.2. Internal pressures

Several interviewees also mentioned internal pressures (see Table 24), even though many of these believed external pressures were the ones forcing the university to look internally and discover what it did and how it wanted to move forward. Other interviewees stated that external pressures also led to internal ones unnecessarily:

"We create pressures for ourselves, trying to respond to the pressures from outside." (NA13)

The internal pressure more mentioned by the interviewees was the new strategy, which, according to them, led to the need to measure its achievement over a period of seven or eight years. Consequently, the Vice-Chancellor and the Council became more concerned with measurement; the Senior Management Team and the central administration expected increased value for money from the people employed; and the Audit Committee wanted some measurement of internal audit value. As a result, the interviewees felt there was an increased internal pressure to measure and improve performance, coming from the centre to departments, and from these to individuals:
"[The] competitive pressure cascades down through the department to every individual academic within it.... We all feel that we are in a struggle for the status for funding and for reputation. And we all therefore work hard at our jobs to do the best." (AH27)

To an academic "(...) that sort of competition can work in quite a healthy manner" (A7).

According a number of interviewees, financial pressures have also driven the university to measure, report and manage performance:

"Warwick has always had a philosophy of being quite prudent in the way it uses its money. It's significantly more economical with its use of money than a lot of other institutions." (NA34)

This prudency is arguably related to the 'Earning Income Policy' adopted by the university since the 1980s, as reported in Section 5.2.1.

Section 5.7.3 will look at the factors perceived to influence the implementation and functioning of PMS.

5.7.3. Factors that can influence PMS

The interviewees pointed out several factors believed to influence, either negatively or positively, the introduction and functioning of PMS. On the negative side, the factor most referred to by the interviewees was resistance to changes. To them, academics tended to dislike PMS due to the fear of losing their academic freedom:

"Academics, particularly, don't like to be managed and will constantly resist the tendency to do so in the name of academic freedom." (AH17)

"Historical attitudes towards the status quo that certain things shouldn't be done." (S40)

Other interviewees, all non-academic, mentioned the financial constraints of collecting some data, and the lack of means to implement it:

"Sometimes you can't get hold of the data... the cost of getting the data may be viewed as being too excessive to justify the results or what you can do with those results." (NA37)
"The university sometimes does (...) too much too fast, or at least too much anyway. And I think that (...) can lead to a lack of sufficient resources, in a certain area, because it's quite a diverse organisation (...) [that] manages quite a diverse set of operations." (S40)

To a number of interviewees, the governance and management structure could also negatively influence the introduction and functioning of PMS, namely the complexity of the governance structure and the lack of a clear responsibility structure:

"Targets are... debated at (...) the bottom of the committee structure... it's very hierarchical (...) and it takes a long time to have something approved, and by that point it is out of date." (S32)

"The university purchased a supercomputer for about a million pounds (...) and it did not realise at the time that it had to purchase, say, a certain piece of equipment to actually have the system in operation (...). Now, that's a sort of worrisome issue, in terms of performance management, for me... that should have never happened. When something like that happens, and (...) there's no clear sense of why this happened, other than just the fact that someone somewhere hadn't done something right. (...) It was very frustrating." (S40)

Finally, a few interviewees mentioned the international economic trends, which have not been very favourable lately, thus contributing to the financial problems felt by many institutions.

On the positive side, several factors were mentioned, especially the organisational culture. According to a number of interviewees, UW was always aware of the need to have a PMS:

"There is a clear wish [inside the university] to have available information, so that it can be used for the betterment of the university." (L30)

"Warwick has always been fairly clear about performance management data as being important." (NA35)

Other interviewees also indicated the importance of having strong leadership and the political or institutional will to implement a PMS:

"The trick (...) is to set out strong leadership (...) but recognise that... respect and the ability to persuade people to follow will need to be earned and will not be a God Given Right." (NA37)
"The main factor that affects it (talking about PMS) (...) is the institutional will [Laughs]. (...) There is no way a head of department can institute performance management unless the university is going to back him up." (AH16)

The need to have and train high quality people, to engage people in the process of building a PMS and the existence of a system of incentives, were also referred to by a number of interviewees as essential for a well-built and well-functioning PMS:

"The quality of its people, the training and development of its people are important." (L28)

"A robust system (...) trains those people who will be doing performance management at the local level, maybe the head of department, maybe the head of the division within the department, but trains people in its management processes." (A7)

"People have to get on board, and [be] willing to participate... and that's a process of... discussion, argument, negotiation (...) and it is slow. It is very slow." (AH16)

"Very many of the strategic goals of the department, of the university (...) require us to (...) get people to do this or that. And for that you need incentives (...). If people have no incentives and they don't see it in their own interest, they won't do it." (AH26)

Finally, a few interviewees also regarded the legal obligation to implement measurement, reporting and management practices as something positive:

"Performance measurement only became a factor in universities when it became externally audited. (...) A lot of the performance measures we have to achieve are actually externally generated and externally imposed on us anyway, so you certainly have to do it." (AH22)

The next section will focus on the perceived strengths and weaknesses of the PMS.

5.7.4. Strengths and weaknesses of the PMS

Although most interviewees did not acknowledge the existence of a fully developed PMS in UW, they reported the existence of several measurement, reporting and management practices in different areas across the university (as seen in previous sections). Therefore, when discussing the strengths and weaknesses of the PMS, interviewees were referring to the existing practices (see Table 25).
Table 25 – Strengths and weaknesses of the PMS at UW

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<td>Weaknesses</td>
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5.7.4.1. **Strengths**

The major strength pinpointed by the interviewees was the fact that the university was developing a PMS. They gave the example of the new appraisal system for academic staff, which was going to be implemented.

To other interviewees, the system was well-balanced: "(...) it seeks to create a balance across a range of things that are important for the institution, so it looks at the whole range of things that matter" (NA34).

Moreover, some interviewees believed the university was already very strong in measuring, reporting and managing some areas, namely those related to financial performance and research and scholarship, being also strong in dealing with the quality assessment exercise conducted by the QAA.

To a number of interviewees, UW was also quite good at measuring institutional performance, "(...) as opposed to measuring the performance of individual academics" (A7). Some interviewees (all heads of department), regarded the flexibility of the measurement system as its major strength:

"The strength is that the annual review for professors is quite light, which is okay." (AH15)

"It's very flexible, I mean, we do have got an amazing amount of freedom. We can do what we want virtually, and I think that is beneficial." (AH20)

5.7.4.2. **Weaknesses**

The fact that a PMS was not developed in Warwick yet was one of the weaknesses highlighted. The main complaints of the interviewees were not the measures, even though a few interviewees considered that "(...) in some areas it probably needs to become more robust" (NA34), but the poor use of the data:
"The weakness in the system has… to do not with the measures. It has to do with the lack of management tools… to do anything about it." (A12)

"The collection of data is easy… its use is more difficult." (L30)

From these interviewees, the majority believed the biggest weakness of the system was in managing individual performance:

"I think as a university we probably have a difficulty in managing individuals who just don't perform up to standard, whether they are academics or on the support side. I think you'll probably find this in most universities. Certainly in most good universities, because good universities depend on hiring people and then letting them work, and the very fact that you hire people and let them work means that you're not very good at correcting mistakes. The crucial thing is to hire the right people at the outset. If you don't hire the right people at the outset you're stuck with them, and there's not a lot you can do." (AH27)

"The area where we could do best is people… performance of people. (…) Things would be better for the institution if we did take it seriously." (L28)

Heads of department also complained about the excessive bureaucracy for academics:

"I think the biggest drawback by large is simply that there is a very small administration (…) that tends to put more of a burden on academics to do routine administration. (…) We pick up the slack because there is not a sufficient number of administrators to play the role that many academics would want them to play." (AH23)

This comment is interesting given that the ratio of academic staff to non-academic staff is 1:3 in UW, as seen in Section 5.2.1. In spite of this ratio, heads of department complained about the increasing bureaucratic burden for academics.

The interviewees pointed out other weaknesses: an excessive focus on research, which they justified by saying UW was a research university; lack of comparable data; not enough targets set; lack of generalisation of good practices across the university due to a lack of communication; and lack of discussion of PIs in the Council.

The following section will look at the interviewees' views on the way the university is governed and managed.
5.8. Governance and management structures

This section explores the interviewees' perceptions concerning the existing governance and management structures, namely the type and composition of governing and management bodies and their strengths and weaknesses. Moreover, the interviewees' views on the key actors in the governance and management of the university (academics, non-academics, students and external members) are looked at, namely in relation to: their influence on decision-making; the relationship between academics and non-academics; and their position towards PMS.

5.8.1. Characterisation of the governance structure

5.8.1.1. Council

All the interviewees that commented on the composition of the Council stated that it was well balanced:

"Council is an even balance between lay members and academic members. It just feels reasonably balanced." (A4)

Most of the interviewees, however, referred to the Council's big size, which used to be even bigger:

"There's a majority of lay members, but if you are going to have a certain number of representation from the Senate and you are going to have a majority of lay members, that immediately drives you to something like twenty-five people, which is not a very effective decision-making body." (L29)

In fact, all the surveys conducted to Council members showed they preferred a smaller body:

"Thirty-four... it's still too big, but it used to be fifty-three, so... our previous Vice-Chancellor wanted it to be eighty-three [Laughs]. So, everyone... the various sort of reports, and various other things, pointed everyone down towards twenty-two, twenty-four. We [didn't] get there yet, and there's no stomach for it either." (NA34)
In terms of composition, external members were the majority in the Council and were considered important by most interviewees for bringing in different perspectives and different areas of professional expertise, which could challenge the internal expertise and support the work of senior academics and the administration of management:

"It's just too easy to get wrapped up in institutional politics, basically. Therefore, having... sense checked from outside, and particularly those who have been through... similar activities in a management sense rather than a specific academic sense, I think is important." (A6)

"They bring in different areas of professional expertise, which we might have internally, but actually we need to challenge our internal expertise. (...) If you get the quality right, and you get people who can commit to the time (...) than we've got the right number." (A7)

According to a non-academic, the process of selection of external members, conducted by the Nominations Committee, was not easy:

"The university tried to pitch for very high quality people, who are in very influential positions in different places, and our process of selection is fairly robust. We go through lots and lots of iterations of people. The Vice-Chancellor and the Chair of Council will meet a lot of very high profile people, and then say no. So, it's quite a difficult process." (NA34)

Academics were the second most represented group in the Council. To an external member: "(...) one of the issues for the university is this sort of two gears steering, but academics are currently more senior, more important than non-academic staff, and so that's all right" (L29).

Even though non-academic staff did not formally sit in committees, they were involved in administering the university and their opinion was heard in those bodies:

"They (talking about non-academics) are not formally members of most of our committees, but (...) they are attendees at all our committees. And, of course, if you are attendee and you say... it's not like a Court of Law or anything like that. (...) Although they are formally not members, if administratives claim they thought they should have more... input into the committee structure, it's pompous to say that they are perfectly... the only think they... we never vote. We vote once every few years over some contentious issue. Okay, in that case they are not members of the committee, but we never vote, so it makes no difference." (A6)

To the interviewees, the number of students was also correct: "(...) you could not have less than two students. I mean one student, on his or her own, would be very lonely. (...)

200
More than two would not be very sensible" (L28). Moreover, even if, in terms of weight, students were thought to have the least weight amongst all the members, since they were outnumbered, their voice was respected and the university recognised that the few students that sat in committees were representing several thousand students.

5.8.1.2. Senate

As an interviewee put it: "Senate is the academic voice" (A4). No external member sat on this body:

"Senate is clearly the academic decision-making body of the university and therefore whilst I may speak, I'm not an academic. There's always that slight sort of issue. I have to be quite thoughtful in my approach to try to influence things there." (NA35)

"They (talking about academics) have an agenda, which is theirs, and they don't let ignorant people like me [Laughs] know what they are doing. But it seems to work (...) and we clearly have people in the Council who are nominated by the Senate. So we have a good interchange between Senate and Council there." (L28)

5.8.1.3. Steering Committee

Even though the Steering Committee was a Senate committee, all the interviewees considered it an extremely important one:

"That is really where a lot of decisions are taken now. That has grown out of the structure to be the most important committee because of those who sit on it." (S39)

"It's where all the university's decisions (...) get past through on their way to ratification." (NA37)

A non-academic member of staff explained why this body became increasingly important:

"Steering is a bit of an interesting body (...). A lot of universities have what we would call a Vice-Chancellor's Advisory Group or something like that, that similarly meets on a Monday morning, and has a range of people in it. (...) Steering was established (...) on behalf of the Senate. (...) It was brought in around about 1973, I think, and it was basically because the pace of decisions that the Vice-Chancellor had to make was running significantly faster than the meeting times for the Senate. (...) The Senate used to meet twice a term. Now it generally meets once a term with the exception of the Summer Term, where it meets twice for... for specific reasons." (NA34)
In terms of composition: "Steering is much more around heads of faculties, as well as senior officers" (A4).

The importance given to students in UW became clearer when looking at the composition of Steering. In fact, the University of Warwick was the only university in the UK where the President of the Students' Union sat in the Steering Committee, seeing "(…) properly ninety-five per cent of the business that goes through that. (…) We have a section of reserved business every week, but that's for things like looking at examination results and stuff like that" (NA34).

5.8.2. Characterisation of the management structure

In terms of management structure, all interviewees regarded the one that exists at Warwick as a typical structure of UK universities, well understood by everyone. The interviewees saw that structure as fairly lean, with a lot of power lying on top, in the Vice-Chancellor and the Registrar, and, at a lower level, in heads of department.

Changes occurred in the management structure of the university, both in terms of academic management and administrative management, particularly in the last six or seven years. For example, the number of Pro-Vice-Chancellors changed and they assumed a more professional approach to their time commitment. Most interviewees appreciated the fact that Pro-Vice-Chancellors came from departments within the university and were still academics. They felt that raised their credibility.

The management body referred to by almost every interviewee was the Senior Management Team, since, even though it was not a formal university committee, it "(…) has (…) a fairly sort of significant influence" (NA35). Most interviewees believed "(…) the membership of the Senior Management Team [to be] just about right" (A5). This body was regarded as effective, by most interviewees, helping to speed things up. Its role became increasingly important in a time where decisions within higher education were no longer week-to-week but day-to-day.

Heads of department were in the middle level of management and they argued that they should be given more responsibilities in terms of decision-making.
In fact, some interviewees thought the management structure should be reviewed, since it probably worked better when Warwick was a smaller organisation. Nevertheless, everyone recognised that the university was well managed and able to grow, by using a "(…) strange combination of a quite centralized organisation with a lot of scope for individuals to be entrepreneurial" (AH17).

In the next section, the perceived strengths and weaknesses of the existing governance and management structures will be discussed.

5.8.3. **Strengths and weaknesses of governance and management structures**

5.8.3.1. **Strengths**

When talking about governance and management structures, the interviewees pointed out several strengths. Several interviewees highlighted the importance of having academic bodies with decision-making power and capacity to take independent decisions, visibly talking about the Senate. Even if "(…) it doesn't yield authority very much (…) it can, and when it has been tested it has done that" (NA34), clearly referring to the Senate's opposition to the decision of opening a Campus in Singapore. That campus never opened.

A number of interviewees mentioned the inclusiveness of the bodies, since they believed that by involving a lot of people, with different perspectives, the structure enabled the development of some good decisions: "You very rarely miss anything" (S39).

Interviewees also regarded the different perspectives brought by external members as strength, namely their "(…) willingness to challenge the university as a critical friend, based on the enormous experience that the members of Council bring" (A7).

The flat management structure was also praised by some interviewees:

"In terms of being able to pick up the phone and talk to someone. In that sense it is not as hierarchical as it would be in other institutions." (AH23)

"What's distinctive about Warwick is how centralised and how lacking hierarchy it is. When I want a decision I go straight to the Vice-Chancellor and to the Deputy Vice-Chancellor. I don't have to go to the Dean of the Faculty or anything like that." (A6)
Finally, some interviewees highlighted the existence of bodies with the necessary agility to decide, such as the Steering Committee and the Senior Management Team. To them, these bodies sped decision-making, since they were "(...) able to react quite quickly to things and take action" (A11). An academic even went further, stating: "The Steering Committee is (...) effectively replacing Senate as a decision-making body at the university" (A12).

5.8.3.2. Weaknesses

The majority of the interviewees also pointed out the weaknesses of the governance and management structures, being the most relevant to them the ineffectiveness of the committee structure. These interviewees believed there were too many committees and that these committees were too large, leading to excessive bureaucracy, and duplication. Moreover, the committee structure was perceived to be too time consuming, contributing to delay decision-making: "(...) the problem is how that [governance structure] fits with the more sort of project-based faster moving, more flexible kind of requirements" (AH17).

Another problem reported by the interviewees was the poor communication inside the university. This issue came up not only in the interviews, but also in the Pulse Survey. People complained about the communication at different levels: between the centre and departments; between departments and individuals; between individuals; and between committees. Several quotes illustrate this idea:

"There is very little communication between the Senate and the Council." (L30)

"The communication largely consists in sending minutes and papers that one committee as discussed somewhere else. I think there are better ways of stealing the essence of discussion and decision." (L29)

"I suspect [academics] don't even know decisions are being made, because there is no mechanism to tell them. (...) I don't think the information (...) is getting down... and I put heads of department in that as well. We don't get to hear certain things until very late." (AH16)

Some interviewees also referred to the rubberstamping character of some bodies: "(...) there are very few committees in which decisions are taken" (AH21). Talking about the Council, two interviewees stated:
"Councils are typically very large. (…) That's a kind of classic way of keeping a committee ineffective. Then [they] can fulfil [their] decorative function very well." (AH17)

"Very often the issues (…) are discussed for ratification purposes rather than for actual deliberative decision-making processes." (A5)

That can be linked to what other interviewees stated concerning the lack of efficient use of external members. A student stated: "(…) they are underused because these people are very high up in organisations (…). Their networks, contacts, and relationships could be used much better" (S32).

A number of interviewees also complained about the excessive centralisation of decision-making. They believed power was concentrated in a very small group of people (namely those sitting in the Senior Management Team and in the Steering Committee).

Moreover, a few interviewees believed academics in management roles should be given "(…) some training and support expertise" (AH17). They felt that was missing.

Additionally, some interviewees recognised the lack of engagement of some people in decision-making. The statement of an interviewee is clear:

"They want everybody to be involved in every decision, the same decision trundles through… and it gets to the stage where the naughty people like me don't read their Council papers until during the meeting sometimes, because I know that everything that's there I've seen several times before. It's a shock when you get to a paper that you haven't actually seen and you were supposed to have done something, but I usually get those before hand. And what happens is nobody reads the papers, because they're then taken for granted. So, actually, people aren't paying attention in the meeting, and are doing other things, because they a) have got no other time to work and they are totally overloaded; and b) it's going through the motions… therefore, there needs to be a dramatic cut in the models and more delegated authority. More things will go wrong, but then, does it matter? You have to let go of the little things, otherwise you will never choose the big things." (NA14)

Finally, some isolated interviewees highlighted other weaknesses: rigid time frame of committees, which put a lot of pressure on the administration to have things ready for the committees; no succession planning for the Vice-Chancellor or for Pro-Vice-Chancellors; meetings called at short notice; lack of gender and ethnic diversity in committees.
After looking at the interviewees' perceptions in relation to the governance and management structures of UW, the next section will focus on the views of the interviewees concerning the key actors in the governance and management of the university. First, the perceived influence of actors on decision-making will be discussed; secondly, the view of the interviewees on the relationship between academics and non-academics will be analysed; thirdly, the perceived position of the different actors towards PMS will be presented; and fourthly, the changes that occurred in the role of the actors that sit in governing and management bodies – the four Estates (Academic, Administrative, Student and External Representatives) will be explained.

5.8.4. Key actors in the governance and management of the university: the four Estates

5.8.4.1. Influence of actors on decision-making

In relation to the influence on decision-making, some interviewees, the majority of which academics, stated that academics, namely senior academics (especially those sitting in the Steering Committee and the Senior Management Team), were still the most powerful group inside the university. According to them, decision-making processes were still controlled by academics:

"There is still that academic judgment (...). What academics think about something still makes a difference to whether it is implemented or not." (AH25)

"As our environment has become more competitive, the scope of special interests has shrunk (...). So, (...) the university probably has become a little more managerial, and I don't mean that necessarily in a bad sense. I think that there is strong pressure on the university to become efficient in the administration. (...) You go back half a century and the idea of what the university was... it was a sort of self-governing body of academics, and I think what academics want to do more (...) is their own research and teaching and rightly so; and let somebody else do the administration. So, I don't see the voice of academics shrinking; if anything I think it is and should remain decisive." (AH27)

An interviewee highlighted the importance of the Vice-Chancellor being an academic and not a manager like in most post-1992 universities:
"It is probably our good fortune that our Vice-Chancellor is a proper academic, a real academic. And that's not always the case in all British institutions (…) [where] a lot of Vice-Chancellors are from completely different areas of life, and that may be less, kind of, integrated in terms of academic ways of thinking." (A11)

Some interviewees (academics, external members and students) believed the power was shared between academics and administrators, namely through the Steering Committee or the Senior Management Team. According to these interviewees, even though decisions made there usually went to the Senate or to the Council afterwards, they rarely were changed.

Very few interviewees believed administrative management to influence decision-making the most. Nevertheless, some did, and interestingly, a non-academic member of staff stated:

"I think it's designed for an external consumption of image that (…) the academy is actually running the university, and here's the evidence and proof. Well, I don't think it adds up, I don't think it's true. It's (…) the Registrar and all that." (NA39)

In the next section, the way the interviewees regarded the relationship between academics and non-academics will be explored.

5.8.4.2. Relationship between academics and non-academics

Opinions were divided concerning the relationship between academics and non-academics. Some interviewees defined this relationship as pretty good. To these interviewees, this was mainly due to the existence of mutual respect and trust and to the fact that each group knew its role. To an external member, Warwick always had a history of strong administrations and their role was probably stronger than in many other pre-1992 universities, where "(...) academics run everything and the administrators, even senior administrators, are kind of servants of the academics" (L29). This interviewee believed administrators had a strong place at Warwick, but: "(...) they know they have got to take the academics with them, because if a gap opens up it is really quite dangerous for everybody" (L29). On the other hand, "(...) the majority of academics, the majority of time, have considerable respect for the administrators and recognise that they are exceptionally
talented people" (A7). Some of the interviewees argued that Warwick's success was, in effect, a result of the combined efforts of both groups.

Other interviewees stated that the relationship between the two groups was bad, recognising that there were tensions between them from time to time. Some academics believed there was a tendency for administrative staff to move into areas that should not be theirs and to tell academics what they should do most of the time. According to these interviewees, tensions emerged mainly because they had different jobs and different objectives, and due to a lack of understanding of what each other did. To them, academics did not understand what administrative staff did, largely because they were not trained as administrators, and administrators did not really understand academics very well, because their only experience of academics was when they were at the university. Moreover, there was, according to some, poor internal communication, and the culture of complaining about others:

"Academics complain about administrators, who they see as burdensome and unproductive. Administrators complain about academics, who they see as out of touch and sort of dreamers. Everybody complains about students. Students complain about everybody. This is what makes us work as a university." (AH27)

Finally, some interviewees believed the relationship varied. To them, it depended on: a mutual understanding of each other's roles; people's personalities; and knowing whom you were dealing with.

In the following section, the interviewees' perceptions on each group's position towards PMS will be analysed.

5.8.4.3. Position towards performance management systems

According to most interviewees, external members would be the ones to push more towards the introduction of PMS: "they come from a business background" (AH26).

Contrarily, according to several interviewees, academics would be the group that would present more resistance to the introduction of a PMS:
"People are not keen on things that are changing. (...) The other aspect is that there is deep concern about the motives behind it, as with any employer/employee type of relationship (...) and so that touches a bit on the trust issue (...), and there is a very, very strong fierce feeling that academics should be given freedom to speak. (...) It is the concept of academic freedom, which is very important. (...) I think they don't necessarily understand why it's being done... or if they are told why it is being done, they don't necessarily believe in it." (AH16)

A few number of interviewees also believed non-academics to be against these systems:

"The accountability is on the academic and the non-academic staff. So, quite naturally, there's an element of feeling concerned about... being measured, about performance management (...) and, inevitably, people feel quite protective of their own particular area." (NA35)

In the next section, the changes that occurred in the roles of the four Estates (Academic, Administrative, Student and External Representatives) will be analysed.

5.8.4.4. Changes in the roles of the Estates

Several changes occurred in the role of the four Estates that integrate the governing and management bodies of UW.

Academic Estate

Data analysis showed that the role of being an academic changed:

"There is a much greater expectation now that academics will take on duties that are external; that they will think about fund raising; that they will be aware that they cannot do anything they like because the QAA will monitor what they do." (A3)

The majority of the academics interviewed argued that they were used to having a lot more autonomy and academic freedom, having now to 'share' their decision-making power with different groups, which included administrators and external members. One academic stated: "Administrators should leave the academic operations to us and make it easier for us to perform various roles in the university" (AH23).
Administrative Estate

Even though UW has always had a history of strong administrators, being their role probably stronger here than in many other pre-1992 universities (ruled by statutes and charters), the influence of non-academic staff became, according to some interviewees, increasingly important as the university grew, competition increased, and decisions needed to be made faster:

"There is a genuine concern that there is more management. More top-down management... but there has to be, because of the whole political situation and the funding situation, [which] is so different." (A3)

However, most interviewees considered that even though administrators had a strong place, they worked very closely with academics.

Student Estate

According to most interviewees, students' role also changed over the years, especially since they began to be seen as consumers of higher education. Students started to look more at league tables, and to worry more about the quality of the education they have and about the kind of job they can get after graduation.

External Representatives Estate

External members were the majority in the Council, the ultimate decision-making body, and chaired key Council committees, such as the Finance and General Purposes Committee (FGPC). Even though most interviewees considered them important to the university, especially due to the fact that they bring in completely different perspectives from insiders, some of the interviewees, including external members, felt they could be better used, especially their networks, contacts and relationships.

5.9. Summary of the findings at the University of Warwick

The analysis of the data collected at UW showed that the university had a formal strategy, with clearly established goals. Even though some of these goals were not consensual, as
discussed in Section 5.3.4, they were well known by the entire community and people knew what they were striving for.

Data also showed a considerable increase in the measurement of performance in the university over the years. Most areas were assessed, albeit many interviewees agreed that better measures could be in place in some of them. The areas that lacked measurement were third mission, alumni and employers, even though most interviewees considered these important areas to explore in the future.

This increased level of measurement was greatly influenced by the external environment (see Figure 10), being mainly a consequence of the greater competition between universities, and demands to become more efficient, effective and accountable, translated from the policies implemented by the British government since the 1980s (as seen in Section 5.1.1). Additionally, the role of the market grew over the years, with universities becoming more concerned with their image. Therefore, it could be stated that the main pressures to measure came essentially from the state and the market (two of the external coordination mechanisms of the 'outer ring' of Figure 6). Internally, pressures to measure came largely from the Council, composed by a majority of external members, and increased with the arrival of the new Vice-Chancellor and with the formalisation of the new strategy.

In terms of reporting, reports on performance were produced in relation to most areas, being, not surprisingly, third mission, alumni and employers the areas where there was less reporting.

In relation to performance management, many of the interviewees mentioned the lack of action regarding the data. This issue was particularly raised regarding individual performance, both of academic and non-academic staff.

These results suggest that the focus is on measurement, leading to the collection of a large amount of data with some reporting but insufficient action. Even though most interviewees regarded PMS as something positive, and several examples of performance improvement were given, the interviewees also mentioned the existence of unintended consequences, such as obsession with numbers, and deliberate strategies to conform to what was demanded. Thus, it could be stated that there was not yet a fully developed PMS at UW. As a matter of fact, despite the existence of clear and formally defined
strategic goals, closely linked to the measurement process (as foreseen when looking at performance management from a systems perspective – see Figure 10), and the measurement and reporting of most areas’ performance, there was still a lack of management practices in some areas, namely individual performance.

In terms of the factors believed to inhibit the introduction and functioning of PMS, the interviewees mentioned contextual factors, such as international economic trends, and the absence of clear job descriptions for academics; institutional factors, such as the lack of resources (financial, human and physical) and the committee structure, considered too complex and lacking a clear responsibility structure; and personal factors, related to resistance to changes, especially from academics, who feared losing their 'academic freedom' to administrators and external members.

In relation to the factors that enabled the introduction of PMS, the interviewees mentioned: the need for an external ‘push’; cultural and political factors, which included the existence of a 'performance culture' within the organisation, and the political and institutional will to implement control mechanisms; trust building, accomplished through effective leadership, communication and incentives; and the preoccupation with the inputs of the system, translated into hiring high quality people and training them. In fact, in terms of the components of the PMS (see Figure 10), findings indicate a concern with the ‘inputs’ of the system at UW, with multi-references to the quality of incoming students and staff. The quality of the inputs could be one of the reasons explaining the success of the university over the years. Analysing Figure 10 further, apart from the inputs, the university also showed some concern with the processes and with outputs. In relation of the former, several committees accompanied the main components of the university mission, especially teaching and learning and research and scholarship (third mission was not that developed). Regarding outputs, several areas were measured, the exceptions being third mission, alumni and employers. Outcomes were not measured, given the difficulties in doing it, as explained in Section 3.6.

As far as the governance structure was concerned, the excessive number of committees and their size was regarded as inefficient, inflexible and time consuming, arguably preventing decisions from being made faster, thus promoting ossification and constraining the implementation of a PMS. Nevertheless, the university seems to have managed to get around this hierarchy, by centralising decision-making, operating on a day-to-day basis
through the Steering Committee and the Senior Management Team, considered more agile. Here the importance of the relationship between PMS and governance starts to become apparent. The governance structures of the university should be using the data not only to drive performance and improvement, but also to reflect on the relevance and adequacy of the structure of the university itself.

Even though there were some reviews of the governance structure, namely of The Council, which decreased its membership, the introduction of PMS led not so much to changes in terms of the existing governance structures, but more in terms of the roles and influences played by each one of the Estates that governs and manages the university.

Pressures to become more efficient, effective and accountable changed the role and influence of the Administrative Estate, even though administrators have always had a strong role at the university. As the university grew and decisions needed to be made faster, the influence of non-academic staff became increasingly important. They represent 62 per cent of the university staff (as seen in Section 5.2.1), and some academics were concerned that administrators would 'step too far' over the line, endangering the 'collegiality' element. Nevertheless, the 'collegial type' of coordination still persisted at this university, contributing to a fairly consensual partnership between managers and academics, sometimes shadowed by a lack of communication (intentional or not).

Also the roles and influences of the Student Estate and the External Representatives Estate changed. Even though students had the least weight in decision-making, they were increasingly heard in the governing bodies, as they became 'customers' of the higher education system. They paid high fees and demanded value for money. In what external members were concerned, they were the majority in the ultimate decision-making body of the university – The Council. Nevertheless, there was the general feeling that they could be more active in the university.

After analysing the external coordination mechanisms and the role and influence of the four Estates in decision-making, UW could be placed in the governance framework presented in Figure 6 (see Section 2.4.4.2).

The 'outer ring' of Figure 21 represents the role of the state and the market as external coordination mechanisms for UW, being the role of the market slightly more prominent.
than that of the state, given the tough competition between British HEIs. It also shows the absence of Europe as a pressure to introduce control mechanisms.

Figure 21 – Governance structures in higher education: UW

The 'inner ring' represents the internal coordination exerted by the four Estates – Academic, Administrative, Student and External Representatives – and shows that UW could be placed between the Academic Estate and the Administrative Estate, since decision-making was mainly taken by academics and non-academic staff. External members also exerted some influence in institutional governance, even though some interviewees argued that they could and should have a more active role in strategic decision-making.

In the next chapter, the findings of the second case study – the University of Aveiro – will be presented.
6

The Portuguese Case: University of Aveiro
"Hear the meaning within the word.

William Shakespeare

"From its origins, [UA] has pioneered and promoted research and education in innovative interdisciplinary areas and has achieved international standards in some of them."

EUA Evaluation Report

In this chapter the findings that resulted from the fieldwork conducted at UA are presented. The researcher personally collected all the data, from January to June 2009.

Similarly to what was done in the previous chapter, before presenting the findings, the context will be set. Therefore, to start with, the Portuguese higher education system will be presented. This will be done, first, by discussing the main pieces of legislation and policy documents that have influenced the Portuguese higher education, especially since 2007; secondly, by describing the evaluation exercises that were/are conducted at a national level; and, thirdly, by explaining the Portuguese higher education funding system. After setting the context, UA will be characterised, in terms of history, student and staff numbers, finances, and governance, management and administrative structures. Then, the findings resulting from the thirty-nine semi-structured interviews conducted at UA will be displayed.

6.1. The Portuguese higher education system

6.1.1. Brief history

In Portugal, the collegial traditions of universities are related to the social dynamics created after the 1974 Revolution. It was by then that rectors began to be elected by their peers, instead of being appointed by the government (Decree-Law 781/76, of 28 October).

Figure 22 presents the main laws and events that have influenced Portuguese higher education from 1976 (the year of the first free elections) until now.
From 1976 to 1986, the binary system, which included universities and polytechnics, both public and private, consolidated and government policies moved away from centralised control. There was also the creation of democratic collective decision-making bodies at all levels, with strong participation of students and non-academic staff. The election mechanism became the main source of legitimating power.

From 1986 to 1989, the government conceded more autonomy to universities, mainly through the *University Autonomy Act* (Law 108/88, of 24 September). This Act reinforced collegiality as the norm for managing and governing HEIs. The Ministry of Science, Technology and Higher Education (MCTES) approved all new study programmes and degrees, although these decisions were not based on quality evaluations or accreditations, but mostly on the fulfilment of legal requirements.

From 1989 to 1999, "institutional autonomy was reinforced while two coordinating bodies, the Council of Rectors of the Portuguese Universities (CRUP) and the Coordinating Council of the Polytechnic Institutes (CCISP), emerged as important actors in the definition of higher education policies" (Amaral et al. 2003b: 136).

In 1999, Portugal signed the *Bologna Declaration*, together with other twenty-eight European Countries, agreeing on the creation of a European Higher Education Area (EHEA) by 2010.

In 2003, the *Law for the Funding of Higher Education* (Law 37/2003, of 22 August) established the foundations for the financing of higher education under two basic principles: the adoption of objective criteria, PIs and standard values concerning the quality and excellence of the education provided.

In 2005, Decree-Law 42/2005, of 22 February, established the principles that regulated the development of the instruments that would contribute to the creation of the EHEA, namely the new European Credit Transfer and Accumulation System (ECTS).

In May 2005, Portugal, and other forty-four European countries, committed to adopt the *Standards and Guidelines for Quality Assurance* in the EHEA, as proposed by the European Association for Quality Assurance in Higher Education – ENQA (see Annex 2).
In order to address questions related to the quality of the system, in June 2005, MCTES commissioned an overall assessment and quality review of the Portuguese higher education system. The first task was commissioned to OECD and the second to ENQA.


In September 2007, a new Legal Regime of Higher Education Institutions (RJIES) was approved (Law 62/2007, of 10 September). According to this Law, universities could choose to continue as public institutions subject to public law or become public foundations subject to private law, in terms of financial, patrimonial and human resources management. The decision to become a public foundation is subject to the approval of the Portuguese government. If accepted as such, public foundations are administered by a Council of Curators, nominated by the government. The financing of the foundations by the state is determined through contracts, of no less than three-years, according to pre-determined performance objectives. Decree-Law 97/2009, of 27 April, approved the transition of three institutions to the foundational regime: the University of Aveiro, the University of Porto and Instituto Superior de Ciências do Trabalho e da Empresa (ISCTE). So far, only these became foundations.

In August 2009, the University Teaching Staff Statute (ECDU) was reviewed through Decree-Law 205/2009, of 31 August, thirty years after its initial publication. The new ECDU aims at "contributing decisively to create the conditions for the modern scientific development of Portugal, by inscribing scientific research as a central element of the university career and by establishing conditions for the exclusive dedication of academic staff" (ECDU 2009 – see Annex 2).

In January 2010, MCTES signed a Contract of Confidence with universities and polytechnics aimed at increasing the levels of qualification in Portugal until 2014 (the government wishes to increase the number of graduates by 100,000 between 2010 and


26 The Polytechnic Teaching Staff Statute (ECDESP) was reviewed through Decree-Law 207/2009, of 31 August, twenty years after its initial publication.
In this contract, the government reaffirms the need to develop higher education and science, since they are "fundamental instruments for the country's future" (Contract of Confidence: Universities 2010 – see Annex 2). The Contract of Confidence included the basis of the Development Plan for Higher Education 2010-2014 (published by MCTES in September 2010), which was translated into individual Development Programmes (one per institution). In exchange for their commitment, HEIs would be given extra 100 M€ in 2010, in comparison to 2009. With the sovereign debt crisis that Portugal is facing, this extra payment was never made.

6.1.2. Evaluation exercises

The first report on higher education evaluation was produced in 1989 by a Commission nominated by the former Minister of Education Roberto Carneiro. This Commission recommended that evaluation should be made at three levels: the 'cabinet level', where the main guidelines for higher education and for each HEI would be defined, based on statistical information; the 'horizontal level', where the performance of institutions working in the same disciplinary area would be measured, allowing comparisons; and the 'institutional level', where each institution, voluntarily, would do self-evaluation (mission evaluation) (Lopes 1998). It recommended that the evaluation process should be mainly conducted by external panels, constituted not only by peers, but also by other individuals that would bring perspectives from professional agents and/or employers. Moreover, it suggested that this evaluation should be based on the critical analysis made by each institution (Lopes 1998).

In 1993, the Council of Rectors of the Portuguese Universities (CRUP) launched a pilot project, with the support of the Ministry of Higher Education, covering five scientific disciplines: Physics, Computer Science, Electrical Engineering, Economics and French. The pilot project was designed with the assistance of the Dutch Agency for the Evaluation of Universities (VSNU) and the research institute CHEPS from the Dutch University of Twente (also a member of the ECIU).

In 1994, quality became a key issue for rectors and institutional managers, with the promulgation of the Higher Education Evaluation Act (Law 38/94, of 21 November), which established the rules for the Portuguese quality assessment system for both public and
private institutions. It determined that the evaluation of higher education should include procedures of self- and external-evaluation. The Evaluation Act also legitimated governmental action according to evaluation results.

Soon after the publication of Law 38/94, the Minister of Education signed a protocol with the presidents of CRUP and the Foundation of Portuguese Universities (FUP), recognising FUP as the representative entity for public universities and the Catholic University, and defining the general guidelines of the evaluation system. The pilot project that had been launched by CRUP in 1993 was integrated into the new framework and regarded as the ‘first round of evaluations’. This first round, which adopted a programme-oriented approach, took place from 1995 to 2000, and included public universities and the Catholic University.

In 1998, Decree-Law 205/98, of 11 July, created the National Council for the Evaluation of Higher Education (CNAVES), regarded as the global coordinating body of the evaluation system, and instituted the general rules for the implementation of the higher education evaluation and monitoring system.

In 1999, Decree-Law 125/99, of 20 April, defined the legal regime for research institutions, including the basis for the evaluation of research units.

In 2003, the Law for the Development and Quality in Higher Education (Law 1/2003, of 6 January) introduced an amendment to Law 38/94. This new Law clarified the consequences of the results of the evaluation process and determined the rating of the evaluated programmes. It also introduced the concept of academic accreditation. Since it was not regulated afterwards, in practice, it produced no effects.

In 2005, the second round of programme evaluations, which had started in 2000, came to an end. However, after two rounds of evaluations, and according to ENQA (2006: 86 – see Annex 2):
"A systematic approach to monitor and to support higher education institutions was never developed. Follow-up of the assessments was inexistent and, in many cases, the reports failed to provide consistent, clear and sufficient information to the stakeholders. The reports were not easy to read, and it is doubtful that the different stakeholders of higher education, including employers, students and their parents, used them consistently. (...) Most significant was the general perception that the evaluation results had no consequences. There were no plans of action drawn up to overcome or attenuate weaknesses or reinforce strengths. There were neither procedures nor timings for follow-up actions. Neither governments nor higher education institutions took any follow-up action. Consequently, the impact of the evaluation approach was negligible."

In June 2005, and in order to address questions related to the quality of the system, the Minister of Science, Technology and Higher Education commissioned an overall assessment and quality review of the Portuguese higher education system. The first task was commissioned to OECD, and the second to ENQA, as already discussed in the previous section.

OECD was approached to conduct a review of the Portuguese higher education system, under the Education Committee's programme of national reviews. The OECD review team's report was drawn upon the Background Report prepared by Portuguese authorities, literature searches and evidence gathered during a two-week study visit to Portugal in May 2006. Published by OECD in 2007, the report, entitled *Reviews of National Policies for Education: Tertiary Education in Portugal*, contains the analysis and recommendations of the review team.

ENQA was invited to appoint a panel of international experts with two interrelated tasks. First, to review the existing Portuguese quality assurance practices as conducted by the National Council for the Evaluation of Higher Education – CNAVES (ENQA's main conclusions on CNAVES quality assurance practices are displayed above). Secondly, to provide recommendations to the Portuguese government on the organisation, processes and methods of establishment of a national accreditation system, which should meet the European Standards and Guidelines for Quality Assurance in the EHEA. ENQA's report, entitled *Quality Assurance of Higher Education in Portugal: An Assessment of the Existing System and Recommendations for a Future System*, was published in 2006.

According to Dispatch 484/2006, of 9 January, there should also be voluntary institutional evaluations, conducted by the European University Association (EUA), and supported by
the European Association of Institutions of Higher Education (EURASHE) and by specialists from the US, Canada and Australia. In 2006/2007, MCTES commissioned and co-financed the first evaluations, which integrated ten HEIs, including public and private universities and polytechnics. Since then, thirty institutions have been evaluated by EUA, being co-financed by MCTES. The other HEIs that have voluntarily asked to be evaluated by EUA have totally supported the costs of the evaluation.

Research is also assessed nationally. Research institutions are placed under MCTES and organised in Research Units and Associated Laboratories\textsuperscript{27}. These units are evaluated by the Portuguese Foundation for Science and Technology (FCT) every three years. The last exercise occurred in 2007.

The FCT evaluation system, established in 1994, comprises a periodic evaluation of reports and activity plans by panels of international experts, including direct contact with researchers through visits to all units. This process culminates with the panel attributing a qualitative grade ('Excellent', 'Very Good', 'Good', 'Fair' or 'Weak'), which determines the amount of multi-annual funding to be granted. This evaluation process is usually preceded by a self-evaluation report developed by each unit.

\textbf{6.1.3. Funding system}

Even though, in the last three decades, Portugal followed the Western European generalised trend towards the development of a policy model based on institutional autonomy and stronger self-regulation, with the state reducing its level of intrusive regulation and moving to a more supervisory role, the funding system of higher education is still a very powerful steering instrument to implement national higher education policies (Teixeira et al. 2004). In fact, the funding coming directly from the government is by far the largest funding source. Despite a slow steady decrease, the combined effect of public funds for current expenses and for investment still represented 63.9 per cent in 2004 (it was 70.7 per cent in 2001) (OECD 2006a). This means that, although the Portuguese public higher education system became slightly less reliant on governmental sources

\textsuperscript{27} Associate laboratories are "research units which demonstrate (...) capacity to cooperate, in a stable, competent and effective manner, by carrying on specific objectives of the scientific and technological policy laid down by the government". In \url{http://www.fct.pt/apoios/unidades/index.phtml.en} (accessed 21 December 2011).
during this period, it is still largely dependent on this source of funding. If the system seems to be more proactive in terms of alternative fundraising, this still has limited visibility in terms of the funding structure (Teixeira et al. 2006).

The funding of Portuguese public universities that comes from the state budget consists of three separate strands: funding for teaching, covering salaries and other current expenditures, funding for research and funding for investment.

The funding formula has been through several changes and adaptations, but it is fair to say that until 2003 it was based on inputs and did not contain indicators that explicitly took into account the quality or efficiency of the institution. Even though the 2006 formula is based on the overall number of students, it also includes quality factors, such as the qualification of teaching staff (measured by the percentage of academic staff holding a doctoral degree) and graduation rates.

In terms of research, apart from direct funding, two categories were implemented since 1996: core funding and competitive funding. Core funding is dependent on the specific allocation of funds by FCT to research institutions and is based on the number of researchers and results of the evaluation conducted by FCT. Competitive funding consists of individual scholarships and advanced training research and development projects, prizes, and other. This type of funding is carried out through public tender calls (OECD 2007).

In September 2007, with the approval of the new Legal Regime of Higher Education Institutions (RJIES), universities could choose to continue as public institutions subjected to public law or become public foundations subject to private law, as discussed in Section 6.1.1. The financing of the foundations by the state is determined through contracts, with the duration of no less than three years, according to pre-determined performance objectives.

Having presented the Portuguese higher education system, in order to set the context, our second case study – the University of Aveiro – will be characterised in the following section, in terms of history, student and staff numbers, finances, and governance, management and administrative structures.
6.2. Characterisation of the University of Aveiro

6.2.1. Brief history and figures

The University of Aveiro (UA) is a new generation public university, established in 1973. Its main campus (Campus Santiago) is located in Aveiro, a medium-sized city in Portugal’s Centro Region, known for being an industrial and prosperous centre for commerce and services.

The university is positioned between two large, traditional and prestigious public universities (Coimbra and Porto). Even though this represents a constraint in the competition for attracting students, particularly high quality students, it has always been regarded as an opportunity for innovation and for the development of a strong relationship with the socio-economic fabric of the region, characterised by a not highly qualified workforce.

UA built a profile based on science and technology and in pioneering areas. The university chose to take advantage of transdisciplinary approaches and to prioritize a small number of innovative fields. This strategy allowed it to achieve international quality standards in some domains. Today, telecommunications engineering, environment, materials science and education sciences are recognised as areas of excellence, confirming the initial strategic choices of the university (EUA 2007 – see Annex 2).

In fact, according to recent national and international rankings, UA is consistently ranked as one of the best universities in Portugal in terms of scientific productivity, mainly in the fields of science, engineering and high-tech. In 2010, UA occupied the 172nd place in the Performance Ranking of Scientific Papers for World Universities, produced by the Higher Education Evaluation & Accreditation Council of Taiwan, in the area of Engineering, Computing & Technology. Moreover, it has recently been considered the best Portuguese university by the Times Higher Education World University Rankings 2011-2012 (being placed between rank 301 and 350).

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28 Before 1973, there were only four universities in Portugal – the University of Coimbra, the University of Lisbon, the University of Porto and the Technical University of Lisbon.
Additionally, UA is the only Portuguese institution in the European Consortium of Innovative Universities (ECIU), already described in Section 4.2.3.2.

UA is divided into 15 departments, 1 autonomous section\(^{29}\), 4 polytechnic schools (see Annex 5), 12 research units and 4 associated labs. These units encompass a range of educational possibilities: university, polytechnic and post-secondary.

In the academic year 2009/2010, 10,820 undergraduate and 3,822 postgraduate students were registered at the university.

Figure 23 – Evolution of registered students at UA (1973-2009)

*Source*: UA's database

*Note*: From the academic year 2000/2001 on, the number of registered students includes a polytechnic school: ISCA-UAA.

As Figure 23 shows, the total number of students rose steadily over the first fifteen years of existence, and increased rapidly in the 1990s. Since 2000/2001, the number of undergraduate students has stabilised around 10,600 students and the number of graduate students rose from 910 in 2000/2001 to 3,676 in 2009/2010. This growth pattern reflects the general trend in Portugal, where a period of rapid expansion in higher education was followed by a slowing of undergraduate intake, especially in the areas of exact sciences and engineering, owing mainly to demographic factors and to an

\(^{29}\) Units that have not yet fulfilled the criteria needed to become departments.
imbalance between supply and demand, where the first clearly exceeded the latter. In fact, the declining birth rate in Portugal, low levels of immigration and the increased life expectancy of the population are leading to the ageing of the population. This, combined with the percentage of students failing to earn a high school diploma and the poor performance of those who stay in school, represents a particular challenge to the higher education sector in Portugal and is increasing competition for students among universities (OECD 2006a).

As a response to this trend, and having already reached the target of 12,500 students, set in 1998, UA adopted two strategies: first, it tried to adapt its undergraduate offer to demand; and second, it expanded and varied its postgraduate programmes. Both strategies were successful. For example, UA's admission rate is now around 100 per cent and, between 2006/2007 and 2009/2010, the number of PhD students grew 62.3 per cent and the number of Master students 96.7 per cent.30

In terms of internationalisation, the number of international students and international academics is still quite small at UA.31 On 31 December 2010, the university had 15,176 registered students, only five per cent of which international students (this was less than in secondary education, where eight per cent were international students).

Regarding human resources, in the academic year 2009/2010, the university employed 1,604 members of staff: 994 academics, 499 non-academics and 111 researchers. This analysis shows that the ratio of non-academic to academic staff was almost 1:2. Even though this ratio is in line with other Portuguese universities, it is quite low when compared, for example, with UW, where it is almost 3:1 (see Section 5.2.1).

In terms of finance, from a total budget of €97.6 million in 2009, the largest revenue stream came from the state (around 75 per cent of the total). The state allocation was divided into three components: current funding (representing 50 per cent32) and investment funding (2 per cent), both coming directly from the state budget; and other funds (23 per cent), provided by FCT (see Figure 24).

30 This increase in the number of Master students was influenced by the reorganisation of degrees and study programmes according to the Bologna Process.
31 UA kindly provided this data to the researcher on demand.
32 Accomplishing the criteria needed to become a foundation.
The state allocation is attributed to the university in a lump sum (and according to an overall ceiling established for all HEIs) before the start of the civil year and transferred on a monthly basis. This sum is calculated through a formula based on the number of students, cost of subject areas, pedagogical efficiency and quality of academic staff. The percentage of state current funding has fallen significantly since 1999, when it was around 69 per cent of the total revenue sources (see Annex 6).

The investment funds allocation (PIDDAC), which is attributed to the university annually in a lump sum on the same date as current funding, is tied to the execution of a number of investment projects, previously approved by the Ministry. It is also paid on a monthly basis, on request, through demonstration of the necessity of the expenses to specific projects. The remaining funds, directly linked to competitive money from research projects, are reimbursed in accordance with a previously established contract, after presentation of accounts. FCT funding has been increasing, being, in 2009, around 23 per cent of total revenue (see Annex 6). The other revenue streams were: tuition fees, which represented 13 per cent of the total revenues; EU funding (4 per cent), which contributed mainly to research and development; and other funding sources (6 per cent), integrating

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33 Students pay a tuition fee of 987 Euros for first and second cycle degrees and study programmes, and between 2,000 and 2,750 Euros at doctoral level.
contract services and other types of cooperation with society. The weight of tuition fees has been rising. In 1999 they represented 6 per cent of the total revenue, and in 2009 around 13 per cent (see Annex 6). Other funding sources included private subsidies, which integrated contracts with companies, other student revenues (e.g. certificates, fines), and extraordinary sources of revenue.

Personnel costs were the largest single expenses item (see Figure 25) and have been steadily rising, from 55 per cent in 1999 to 63 per cent in 2009 (see Annex 7). This increase was partly justified by the rise of social security costs and the contracts signed with researchers, under the Contract-Programme "Doctorates for the National Scientific and Technological System (SCTN)". Additionally, the higher qualifications of staff led to pay grade increases.

![Expenditure structure at UA, 2009](source: UA's database)

Current funding from the state budget is earmarked to pay personnel costs and finance the running of the university. In 2009, this funding only covered 82 per cent of personnel costs.
6.2.2. Structure

UA does not have the traditional faculty structure, being organised in departments and polytechnic schools. Departments are the university's basic organisational units, created and developed around a main scientific area, even though more than one area can be found in some of them. Study programmes and research units are organised in an interdisciplinary and transdepartmental way, following a matrix organisation (see Annex 8), arguably allowing for a better management of resources.

The university has a very centralised organisational functioning, in which central-level governing bodies, mainly the Senate and the Rector, in the former structure, and the Council and the Rector, in the new one, are the most important decision-making bodies, being heads of department (now called departmental directors) their main interlocutors (UA Statutes 1989 and 2009 – see Annex 2).

The previous structure contemplated an intermediary level of coordinating structures in key functional areas, which stood between central governing bodies and departments. These have disappeared in the new structure (UA Statutes 1989 and 2009).

Central decision-making processes are assisted by support services and other services, physically located in the central administration building and in departments, as an extension of central services (UA Statutes 1989 and 2009).

6.2.2.1. Governance and management structures

Before RJIES

At the time the interviews took place (between January and June 2009), and similarly to what happened in every Portuguese university, the university governance was exercised by five bodies: the University Assembly, the University Senate, the University Council, the Administrative Council, and the Rector (Figure 26).
Figure 26 – Bodies, Committees and Functional Units at the University of Aveiro (old structure)
The University Assembly was composed of a large number of members (approximately 110, comprising academics, students and non-academic staff). This body only held formal meetings on occasions such as the election of the Rector or the approval of the University Statutes and their alteration, which meant meeting ordinarily not more than twice a year (UA Statutes 1989).

The University Senate was the most important collective decision-making body, since it decided not only on academic matters, but also on the approval of the budget, annual plans and strategic plans. The University Senate was composed of nearly 50 members (academics, non-academic staff, students and external members). It met in a plenary session once every trimester and, more regularly, once a trimester, in committees, namely: the Management and Planning Committee, the Scientific and Development Committee, the Disciplinary Committee and the Pedagogic and Academic Committee.

The University Council, restructured in 2007 by Normative Dispatch 14 669-BB/07, of 6 July (see Annex 2), aimed "to contribute actively to the definition of the global strategy, to promote the permanent relationship with the exterior and to accompany the governance and management of the university" (Article 19). The total number of members should not exceed seven, the majority of whom should be external to the university. It rarely met.

The Administrative Council was responsible for executing the directives of the Senate regarding the administrative, financial and patrimonial management of the university. Its membership included the Rector, Vice-Rectors, the Administrator, heads of services, and a representative of the Students' Union Board.

The Rector, who served a four-year term, represented, directed, oriented and coordinated the university's activities (UA Statutes 1989). He or she could appoint up to five Vice-Rectors for a four-year term, and Pro-Rectors, for specific tasks and for shorter mandates (see Figure 27).

The university also had two coordination bodies: the Scientific Council and the Pedagogic Council (see Figure 26).
Figure 27 – Rectory at the University of Aveiro (old structure)
The Scientific Council was composed of all teaching staff with a doctoral degree (over 600 members). According to the 1989 Statutes, this body aimed "to stimulate and increase research and training development, having, in general, to deliberate about all scientific matters (...)" (Article 22). It met twice a year in plenary sessions, and monthly in a Coordinating Committee (comprising one representative from each department) and in Departmental Committees (comprising all academic staff holding a doctoral degree in each department).

The Pedagogic Council was a consultative body, expected to "coordinate all degrees and [to] define the rules for all the teaching and learning activities of the university, in order to supervise the quality of teaching" (Article 24). It was composed of an equal number of teaching staff members (all study programme directors) and student representatives (one for each study programme), which meant a membership of around 100 people. It functioned in plenary sessions and through Coordinating Committees and Study Programme Committees (UA Statutes 1989).

The Statutes also contemplated a second type of structures, at an intermediate level, which had the role of coordinating the basic functions of the university: education, research and cooperation with society. These functional units included: the Research Institute, the Undergraduate University Education Institute (IFIU), the Postgraduate University Education Institute (IFPG) and the Polytechnic Higher Education Institute (IFSP) (see Figure 26).

Additionally, there were other functional units (see Figure 26), with the mission of administering specific programmes or services by using the university resources for that particular effect. These were: the Integrated Centre for Teacher Education (CIFOP); the Multimedia Centre for Distance Learning (CEMED); the Central Analysis Laboratory (LCA) and the Computing and Communications Centre (CICUA).

The running of departments was, according to the 1989 University Statutes, guaranteed through four management bodies (see Figure 26): first, the Plenary, whose main competence was to approve Departmental Statutes; second, the Assembly of Representatives, whose main aim was to elect the head of department and approve the annual activity plan and the annual financial report; third, the Department Board, the main executive body; and fourth, the Scientific-Pedagogical Council, which could act in plenary,
or through two sub-committees (scientific and pedagogic). In practice, the Plenary and the Assembly of Representatives did not function in most departments. The Scientific Committee was the only one that met regularly.

After RJIES

The new legal regime (RJIES) introduced changes to the existing decision-making bodies and authority structures. According to the 2009 Statutes, the university has now three governing bodies: the General Council, the Management Council, and the Rector (see Figure 28).

The General Council, elected in July 2009, is composed of 19 members (10 academics, 3 students, 1 non-academic staff and 5 external representatives) and is presided by an external member. This Council has the power to elect the Rector and to approve the budget, annual plans and strategic plans. It is also responsible for creating, transforming and closing units and for approving the strategy of the institution concerning scientific, pedagogic, patrimonial and financial matters. While other members are elected by their peers, following a proportional representativeness system, external members are co-opted. The General Council meets ordinarily four times a year (UA Statutes 2009).

The Management Council's functions are very similar to the former Administrative Council's responsibilities. It is responsible for the administrative, patrimonial and financial management of the university, and for human resources management. It is nominated and exonerated by the Council of Curators, following a Rector's proposal, and is composed of 3 members: the Rector, who presides; a Vice-Rector; and the Administrator (UA Statutes 2009).

The Rector, who serves a four-year term, "represents the university externally and presides over the Management Council and the Scientific and Pedagogic Councils" (Article 23). Moreover, "it leads the institutional policy, directs and represents the university, speaking on its behalf" (Article 23). It maintains the possibility of appointing Vice-Rectors and Pro-Rectors to assist him or her (see Figure 29).
Figure 28 – Bodies, Committees and Functional Units at the University of Aveiro (new structure)
Figure 29 – Rectory at the University of Aveiro (new structure)
The 2009 Statutes maintained two bodies that already existed, even though with slightly different competences and composition: the Scientific Council and the Pedagogic Council (see Figure 28). The Scientific Council is now much smaller, being composed of 33 members (academics and researchers), whose mandate is 3 years. The Pedagogic Council also shrunk considerably, being composed of 25 members (the Rector, who presides, 12 students and 12 academics).

The university also decided to nominate a Student Ombudsman (an external member) and to create three consultative bodies: the Ethics and Deontology Council, the Cooperation Council and the Disciplinary Committee (see Figure 28).

The functional units are now only two: the Integrated Unit for Continuous Education (UNIFOC) and the Central Analysis Laboratory (LCA) (see Figure 28).

The running of departments and polytechnic schools is now guaranteed through three management bodies: the Director, the Executive Committee and the Unit Council. The Autonomous Section only has a Director, nominated and exonerated by the Rector, and the Unit Council (see Figure 28). The Director, who is responsible for governing and representing the department or school, is now nominated, for a four-year mandate, by a committee composed of the Rector, two permanent members, appointed by the Rector, and two members from the department or polytechnic school.

Statutes also contemplate research units (basic or transversal) and a transversal unit of teaching and research – the Doctoral School (see Figure 28), which coordinates all teaching and research activities related to the third cycle.

Being a foundation, the university is obliged by law to have two other governing bodies: the Council of Curators and 'Fiscal Único' (an External Auditor) (see Figure 28).

6.2.2.2. Administrative management structure

Structure – Old Statutes

Before the homologation of the new Statutes, the Rectory used to be assisted by support services directly linked to it (see Figure 30).
Figure 30 – Administrative Management Structure at the University of Aveiro (old structure)
Figure 31 – Administrative Management Structure at the University of Aveiro (new structure)
These support services comprised: the Secretariat; the Office for Quality, Evaluation and Procedures (GaQAP); the Office for Information Management and Management Indicators (GaGI); the Legal Advisory Office; the Pedagogical Office; and the Office for Technology Transfer (UAtec). Executive services, which included, for example, the Academic and Administrative Services, and the Financial and Patrimony Services, were managed by the Administrator (see Figure 30).

At departments, autonomous sections and polytechnic schools there were also technical and administrative staff, which ensured, in cooperation with central services, the functioning of these units' infrastructures and the necessary means for the accomplishment of the university's functions (see Figure 30).

Structure – New Statutes

The Rectory is now assisted by the following support services (see Figure 31): Support Office; Strategic Planning Office (GPE); Legal Advisory Office; Pedagogical Office; and Office for Technology Transfer (UAtec). The executive services have been restructured. For example, Human Resources are now under the aegis of the Human and Financial Resources Services. The Administrator still coordinates and supervises these services, under the direction of the Rector.

Units (departments, the autonomous section and polytechnic schools) still have technical and administrative staff, working in cooperation with central services (see Figure 31).

Having presented the Portuguese higher education system and characterised UA, the next sections will present the main findings that resulted from the case study conducted at this university.

6.3. Strategy

6.3.1. Existence of a strategy

As stated in Section 6.1.2, in 2006/2007, MCTES commissioned and co-financed the evaluation of ten HEIs, including public and private universities and polytechnics. Given
that UA was not included in those ten institutions, it voluntarily required an evaluation by the European University Association (EUA), to be included in the national evaluation scheme. That evaluation happened in 2007, being the final report published in November 2007. A Self-Evaluation Report, produced by a Steering Committee especially constituted for that purpose, and published in February 2007, preceded EUA’s Report.

After the publication of EUA’s Report, the Rector asked a group of people from the Statutory Assembly to build up a Development Plan for UA. This Plan, entitled Development Project for the University of Aveiro (dated January 2008), was structured around three main ideas: development and consolidation of the university; transformation of the university into an international excellence centre; and intervention in cooperation with society. This Development Plan was delivered to MCTES, serving as a baseline study for the building of the Contract-Programme.

This Contract-Programme, signed in September 2009, established objectives for five areas, with targets set for three and five years. The five year targets were the following: increase the number of post-graduate students from 4,000 to 5,025; increase the number of publications from 4,400 to 6,800; increase the number of citations from 15,900 to 38,000; increase the number of foreign students from 850 to 1,100; and, finally, increase the amount of external contracting from 35,500 K€ to 41,800 K€ (Contract-Programme 2009 – see Annex 2).

Additionally to these objectives, and as demanded by the Contract of Confidence signed with MCTES (already discussed in 6.1.1), UA delivered a Development Programme to the Ministry, committing itself to increase the number of graduates by 4,382, between 2010 and 2014 (UA 2010 – see Annex 2).

Thus, when the new Rector presented an action plan for his candidacy in January 2010, entitled Action Plan 2010-2014, he based it on the documents mentioned above. The Action Plan had two major goals: to consolidate Project UA; and to transform UA into an international reference. In order to achieve the first goal, ten strategies were proposed: reassert the attractiveness of the university; reinforce research; improve the educational offer; contribute more to the development of society; guarantee a greater integration between the three components of the mission – teaching, research and third mission; pay special attention to the area of Health; promote quality and management capability; value
university assets; recruit the best, qualify people and take care of the human environment; increase institutional autonomy and guarantee financial sustainability. To transform the university into a world-class institution, four actions were proposed: increase the international character of UA; reinforce institutional partnerships and define an alliance policy; reassert itself as an institution of reference, in specific domains; prioritize the development of the Doctoral School (Assunção 2010 – see Annex 2).

In the Activity Plan for 2010, approved by the General Council, three strategic initiatives were presented as being part of the development project for UA: development and consolidation of the university; reassertion of the university as an international centre of excellence; and building partnerships with society (these goals had already been proposed in the Development Plan for UA 2008).

When asked if the university had a strategy, all the interviewees stated that the university had one (see Table 26).

<table>
<thead>
<tr>
<th>Yes</th>
<th>13</th>
<th>11</th>
<th>24</th>
<th>9</th>
<th>4</th>
<th>1</th>
<th>38</th>
</tr>
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<tbody>
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<td>4</td>
<td>8</td>
<td>1</td>
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<td>10</td>
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<tr>
<td><strong>Informal</strong></td>
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<td>7</td>
<td>16</td>
<td>8</td>
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<td>28</td>
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<tr>
<td><strong>No</strong></td>
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<td>11</td>
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<td>24</td>
<td>9</td>
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<td>38</td>
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Nevertheless, most argued that this strategy was informal, not being formally written in any document:

"It is not a process with a great formality." (NA50)

"Strategic goals, in the last eight years, have been built in what the British call 'follow your nose' (…). Maybe there are some, but… they are not explicit." (AH63)

"The university has been playing it by ear." (AH71)

In fact, only a number of interviewees stated that there was a formal strategy, being some of them academics in top-management roles.
According to the interviewees, several factors contributed to the definition of the strategy, being the university structure one of them: "(...) the university has the advantage of not having an intermediate structure! It does not have faculties! (...) The interactions between the Rectory and units are more frequent" (A46), helping the existence of a more coherent strategy. Also, according to a head of department, the new structure will also contribute to the definition of a strategic plan: "(...) the existence of a General Council and the election of the Rector by the General Council (...) will require the existence of a strategic plan, well defined and assembled" (AH67).

Some interviewees also mentioned the Contract-Programme, which led, according to them, to the need to define clear strategic goals: "(...) you have very clear goals and indicators" (AH71).

The Rector's personality was also referred to by a number of interviewees: "(...) the university has always had excellent rectors that have set strategies that have marked [its] development" (A48).

Also, the need to change was considered important for the development of a strategy by some interviewees. According to them, the urge to be more competitive and more internationally recognised, led to the need to change and develop clear goals and targets:

"The university has to position itself in the modern world (...) by changing (...) by questioning what exists (...). It has to face bigger risks (...) [instead of doing just] a small cosmetic operation." (L81)

The strong links to the region and the geographic location were also highlighted by a number of interviewees. In relation to the former, the interviewees believed the university defined itself as a "(...) regional university" (AH66) since the beginning, owing to its clear links to the region: "The three stronger thematic areas of the university had to do with the region... Electronics and Telecommunications... where the university started functioning... Ceramics and Glass... and Environment!" (A48). The latter, since, according to the interviewees, the location of UA between two well-established universities (Porto and Coimbra), constituted an opportunity for the definition of a strategy that would differentiate it from the others.
A few interviewees also mentioned the *legal imposition* as a driver to the definition of the strategy, since the changes imposed by law led to the need to define strategic goals more clearly.

Finally, a couple of interviewees referred to the *implicit framework of values* that existed at the university, which had arguably helped the development of a strategy:

"There is an implicit framework of values (...). This university was 'marked' by the colleagues that came from Mozambique (the 'Mozambique generation')! (...) [For example], the fact that most of our professors work exclusively for the university and do it naturally." (A48)

Thus, it seems that, even though not formally written, the university has always had a strategy (as stated by all the interviewees – see Table 26). To a head of department: the university "(...) has always had a clear strategic orientation" (AH62). The problem seems to be the perceived inexistence of a formal strategic document.

Actually, strangely enough, when asked about a strategic formal plan the interviewees' answers varied:

"There have been several formal documents over the years." (A44)

"[The strategy] results, very directly, from the candidacy programme of the Rector." (A43)

"It's [now] more tuned, with the passage to foundation." (AH62)

The documents that the interviewees saw as being mostly related to the strategy were: the *Candidacy Programme* of the Rector, being the strategic plan usually the Action Plan developed by the Rector for a four-year mandate; the *Contract-Programme* where the university had to define strategic lines for the coming three and five years; *development plans*, namely the Development Plan 2000-2006, developed by Professor Júlio Pedrosa (a former Rector), and the Development Project for the University of Aveiro; the *Self-Evaluation Report* that preceded EUA's Report; and *EUA's Report*, considered important to the establishment of guidelines for the university's development plan;

After the completion of the interviews, the interviewer had the perception that quite often people confused strategy with strategic plan. In fact, even though some started by saying there was a strategic plan, when asked about the location of that plan, the majority could
not name or find it. Some mentioned they "(...) vaguely remember to hear about it" (A51) or "(...) have some version of that document" (NA58), or are "(...) almost sure that there was a development plan four years ago" (AH64), but when asked for it, they were unable to show the researcher any plan.

Data supported this 'mix-up' of concepts, since one would expect that those who stated that there was a formal strategy (10) would be the ones confirming the existence of a strategic plan. However, when asked if the university had a strategic plan, more than expected argued that there was one.

Another apparent misconception was the mixing-up of operational and strategic goals. A non-academic member of staff, who stated that "(...) sometimes [people] confuse what is operational with what is strategic" (NA55), corroborated this perception.

But not all the interviewees confirmed the existence of a strategic plan. In fact, the majority of the respondents stated very clearly that there was none:

"There are two answers to that question. One is that I've heard there is one! The other one is that I have (...) the perception that the way things happen at the University of Aveiro have nothing to do with a strategic plan." (A51)

"Explicitly drafted, as many of us would like, there isn't one." (NA58)

The interviewees identified several reasons for the nonexistence of a strategic plan, being one of them the external context. To some interviewees, the strong dependency on the government made the university very susceptible to legislative and financial changes, which were many in the last years:

"The strategic plan does not depend solely on the university. It depends a lot on the context and on the policies applied. Unfortunately, we have had policies that go here and then go there (...). We don't know very well where we are." (AH52)

"After being evaluated by EUA, [the university was preparing the development of a strategy when] a profound alteration was made to Portuguese Law." (S77)

Other interviewees mentioned the Portuguese history and the Portuguese culture. To some interviewees, after the 1974 Revolution, Portugal had to react in the short run to fulfil basic needs. Afterwards, in the 1990s: "(...) even though there were some attempts to
build strategic plans, there were no competences or professional skills to do it" (A48). To other interviewees, Portuguese find it hard to think strategically. People seem to fear the unknown and usually do not like difficult challenges, fearing to commit to greater goals: "There is no one that comes and says 'we want this'. Not at the country, nor at the university" (L81).

The interviewees also indicated some internal reasons for the inexistence of a strategic plan. The first reason was the difficulty to create consensus. To these interviewees, it was very hard to get people to agree upon the same strategic lines: "Create consensus between different partners (...) is very difficult, and implies a different methodology... different technical skills... a different set of concerns" (A48). The second reason presented was the difficulty to mobilise people to work on a strategic plan, since many did not see its immediate result: "Academics are people that like to do things that are different... 'Don't bother me with that. Strategic plan??'" (AH66). The last reason was the ineffectiveness of the Rectory, given that, according to a number of interviewees, the Rectory could have done it, if it was really willing to.

The Rector himself acknowledged that even though the building of a strategic plan was fundamental, and that the university had been working on it, there was still a lot to do. In fact, on his webpage34, he recognised:

"[The] six indicators [that resulted from the Contract-Programme and from the Contract of Confidence], together with the Development Plan (talking about the "Development Project for the University of Aveiro", then reformulated in the Action Plan of the Rector's candidacy) (...) are important elements of a strategic plan. Nevertheless, this [strategic plan] must be translated into more measures and key performance indicators (...). A strategic plan presumes even more structured actions, with targets and a timetable for completion; and, in their definition, greater interaction with the university as a whole."

In the next section, the interviewees' perceptions concerning the importance of having a strategy will be analysed.

6.3.2. **Importance of a strategy**

In spite of the shortcomings, it was common understanding that the university should have a strategic plan. A head of department argued: "(...) the more complex the organisation is, the more it needs a plan with strategic guidelines" (AH68). According to the interviewees, a plan would be important to: establish a direction for an organisation; be accountable; and to motivate and mobilise staff:

"The university should be more proactive, in order to anticipate problems." (AH49)

"If the university has a clear project, and a clear development policy, it will have better instruments to do things." (AH68)

In the next section, the way the strategy was developed and the level of engagement of the interviewees in that process will be explored.

6.3.3. **Development and level of involvement**

When asked about the development of the strategy, the majority of the interviewees agreed that the Rectory defined the strategic goals centrally:

"Fundamentally the Rector and Vice-Rectors." (A43)

"It is a top-down exercise." (A46)

This was not surprising since, as seen before, most interviewees believed the strategy was linked to the Candidacy Programme of the Rector:

"It became commonly accepted that the candidacy programmes of rectors would be strategic plans." (NA54)

With the old governance structure, after being developed, the Rector used to take the final plan to the Senate in order to be approved. To an interviewee, the plan was not really discussed there: "When it [went] to the Senate it [was] almost only to be approved" (L82). According to the new Statutes, the plan is now taken to the General Council for approval.
Apart from governing and coordination bodies, interviewees also pointed out other units and actors they considered as taking part in the development of strategic goals. To some of them, there was a process of consultation of departments and research units in relation to the strategy:

"Only those who did not want [to participate] did not participate. (...) The Rectory, and particularly the Rector, conducted partial meetings in each department to present the main strategic goals." (AH62)

Based on those strategic lines, each department and research unit was asked to develop a Contract-Programme for the unit, to be then discussed with the Rectory. As an interviewee argued: "(...) the definition of more concrete... more short-run goals is done by the units! (...) Always under the command of the Rectory!" (NA50).

Other actors were considered to have participated in the definition of the strategy: the Administrator, who was said to be working closely with the Rectory in the definition of strategic goals, indicators and targets; service directors (only mentioned by non-academics), who defined the main goals for their services and then discussed them with the Administrator; the Students' Union and students (only mentioned by students), who were asked by the Statutory Assembly about their needs; and an external consulting firm, which was said to be working with the Rectory and the Administrator in the definition of a strategic plan: "It has studied the financial sustainability of the university (...) [and] identified potential areas of investment" (S75).

In the following section, the perceived strengths and weaknesses of the strategy will be discussed.

6.3.4. Strengths and weaknesses of the strategy

When commenting on UA's, only weaknesses, and no strengths, were pointed out by the interviewees. To the vast majority of the interviewees, the main problem was the lack of communication of the strategy, since it was not known by the entire community:
"I think that at least the mission and the main strategic guidelines are
known within the university, but it's not a generalised knowledge. These
are mainly known by those involved in the management of the
university." (A80)

"The strategic plan is not visible enough to be incorporated by the entire
university community." (NA54)

"The lack of communication seems to be the weakest point of the
university." (AH69)

In fact, when the Steering Committee conducted a survey to all members of the Senate
asking about their knowledge concerning the strategic plan, not everyone knew about it.
To some interviewees, this lack of communication was due to, amongst others: the lack of
disclosure (this was confirmed by the inexistence of a formal strategy, already discussed
in Section 6.3.1); the inexistence of more governing bodies meetings, where people could
discuss strategy; departmental leaders, who kept the information for themselves;
employees (both academic and non-academic), who did not bother to know the strategy;
and the lack of more systematised information.

Other interviewees also regarded the lack of a strategy for the long run as a weakness:

"The university seems to have (...) some difficulty in defining a strategy
for the future." (AH66)

"One of the problems of the university is perhaps its strategic guideline,
or let's say, not having ten-year plans, so that it can anticipate things." (AH49)

A few interviewees (all academics in top management roles) also mentioned operational
problems: "(...) there are some problems in formally taking strategic guidelines to the field,
especially to departments" (A80).

Having looked at the way UA devised its strategy, the next three sections will analyse the
interviewees' perceptions concerning the way the university deals with the measurement,
reporting and management of performance.
6.4. Measurement of performance

The results of the interviews showed that the existence of measurement (see Table 27) and the degree of measurement (see Annex 9) varied considerably according to the area.

Table 27 – Areas where performance is measured at UA

<table>
<thead>
<tr>
<th>Area</th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning</td>
<td>34</td>
<td>0</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>Research and scholarship</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Third mission</td>
<td>3</td>
<td>22</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Academic staff</td>
<td>30</td>
<td>5</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Non-academic staff</td>
<td>32</td>
<td>0</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Students</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Support services</td>
<td>15</td>
<td>10</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Employers</td>
<td>2</td>
<td>21</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Alumni</td>
<td>11</td>
<td>12</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>Finance</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note:* It should be noted that the answers to this question were guided by the Prompt Card (see Annex 1).

6.4.1. Teaching and learning

According to the vast majority of the interviewees, the performance of 'teaching and learning' was measured at the university (see Table 27), even though some considered that "(...) more could be done" (A80). To these interviewees, the instruments used to evaluate this area's performance were mainly internal (see Table 28), being the most used instrument, according to them, the Quality Assurance System (SGQ), comprising the Student Survey, the Student Report (a qualitative evaluation performed by student representatives) and Academic Reports (evaluations performed, first, by all the academics teaching a particular subject, and, then, by the academic responsible for each subject). They claimed that data from the Student Survey was summarised in a graphical form by the Systems and Information Management Office and that a score from 1 to 9 was attributed to the way each course was taught.
Table 28 – Instruments used to assess the performance of teaching and learning at UA

<table>
<thead>
<tr>
<th>Internal instruments</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality Assurance System (includes the Student Survey, the Student Report and Academic Reports)</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>Internal database</strong></td>
<td>7</td>
</tr>
<tr>
<td><strong>Feedback forms</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>External instruments</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>External assessments</strong></td>
<td>11</td>
</tr>
</tbody>
</table>

Some interviewees also mentioned the data collected by the Systems and Information Management Office, including success and failure rates, and the feedback forms that some departments (e.g. Electronics and Telecommunications Department) used to ask students to fill in after the end of each course.

Apart from internal measures, some interviewees also mentioned the external measures defined by the different external auditors that used to assess the performance of teaching and learning at the university, even though as discussed in Section 6.1.2 and as confirmed by the interviewees, the national evaluation stopped in 2005: "(...) we are experiencing a certain hiatus" (A43). More recently, A3ES started a preliminary process of accreditiation.

In addition to the national evaluation system, professional associations\(^{35}\) used to visit the university periodically, in order to measure the effectiveness of teaching and learning and accredit degrees. Since the creation of A3ES, all the accreditation procedures performed by these bodies were suspended (Decree-Law 369/2007).

Internally, there were two Vice-Rectors responsible for education, one for undergraduate and the other for postgraduate studies (now there is only one), and three institutes: the Undergraduate University Education Institute, the Postgraduate University Education Institute and the Polytechnic Higher Education Institute. These institutes, which were extinguished with the new structure, as seen in Section 6.2.2.1, were responsible for coordinating teaching and learning within the university.

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\(^{35}\) These are public corporations for liberal professions (e.g. doctors, lawyers and engineers), which are organised in the form of public bodies with an associative basis, working within public law.
According to the interviewees, internal measures concerning teaching and learning were defined by the Rectory, who decided to introduce the Student Survey and to develop SGQ. Some interviewees stated that the survey was developed in collaboration with the Pedagogical Council and a task force created for the implementation of Bologna instruments – the 'Bologna Task Force' –, which integrated academics from different departments and schools and a student. Some task force members did not agree with this perspective, stating that the last version of the survey had little to do with the version proposed by them.

To the interviewees, external assessors, namely the National Council for the Evaluation of Higher Education (CNAVES) and professional associations before, and A3ES now, defined the external measures used.

When asked about their thoughts concerning the measures used to assess the performance of teaching and learning, and even though some recognised that the internal system created to assess the area (SGQ) enabled improvements, most interviewees pointed out several flaws. To some of them there was a lack of qualitative measures to assess the area:

"We have many instruments that give us quantitative parameters. But we still haven't got rigorous qualitative parameters." (A46)

To these interviewees, the performance measurement of teaching and learning should result from the integration of several measures, both quantitative and qualitative: the Student Survey, the Student Report, the Academic Report, the Alumni Survey and the Employers' Survey.

Most interviewees were very critical of the Student Survey, mentioning several problems: its low response rates (slightly above 50 per cent in the past year), even though "the effort to convince students to reply has been enormous" (AH49); the inadequacy of some of the questions and the length of the survey, which discouraged students from answering it; and the lack of validation of survey results:

"The results should be validated, in order to understand the type of students that answer it and why they do it." (A45)
A few interviewees also claimed that there should be a stronger link to employers. To them, it was fundamental to assess the adequacy of the degrees to the market, mainly through the measurement of employability. They believed it would also be important to assess: the type of job the student had; the position he or she had; and if the training/education received had any influence in the performance of certain tasks.

6.4.2. Research and scholarship

All the interviewees that discussed the performance measurement of 'research and scholarship' confirmed that this area's performance was assessed at the university on a regular basis (see Table 27): "(…) this is the most evaluated area, without a doubt" (AH67).

To the interviewees, this area's performance was mainly assessed through external instruments, namely the external assessment performed by FCT to research units and associate labs (already described in Section 6.1.2), and the evaluation of research projects conducted by FCT and by the EU (see Table 29).

Table 29 – Instruments used to assess the performance of research and scholarship at UA

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td></td>
</tr>
<tr>
<td>Internal databases (e.g. number of contracts signed, income generated)</td>
<td>8</td>
</tr>
<tr>
<td>External instruments</td>
<td></td>
</tr>
<tr>
<td>Evaluation performed by FCT</td>
<td>18</td>
</tr>
<tr>
<td>International citation databases</td>
<td>10</td>
</tr>
<tr>
<td>EU's evaluation system</td>
<td>1</td>
</tr>
</tbody>
</table>

Internally, there was a Vice-Rector looking after research and there used to be a Research Institute, which was responsible for coordinating research activities within the university. This institute tried to collect some data on research, but it did not publish it. To an interviewee, this lack of interest could be due to the "(…) existence of well-established systems outside the university to measure this area's performance" (AH64).
According to a few interviewees, the Systems and Information Management Office also collected statistics on research, but only on demand. To gather the information needed, it usually used international citation databases (namely the ISI Web of Knowledge).

Additionally, the Financial Resources Office gathered financial data concerning research, namely, the percentage of research projects successfully completed, number of research contracts signed, and income generated.

In terms of the definition of measures, according to the interviewees, each research unit and associate lab decided on the measures used to assess this area's performance, even though they had to comply with the ones needed for the assessment exercises performed by FCT and the EU.

When asked about their thoughts concerning the measures used, a number of interviewees considered there were already well-established and well-developed indicators:

"Research and scholarship are assessed by international indicators. I would say that it is the area where we have evolved more." (A42)

Given that the majority of the interviewees perceived the performance evaluation of research and scholarship to be almost entirely external, some interviewees pointed out, as a weakness, the inexistence of an internal system to assess it:

"The university does not know very well what it is doing [in terms of research]. It knows it is doing well, given the good external classifications it gets. It has good publication and citation marks, but if I wish to know now how many articles the university has published in the past year... I know how many articles have been published in ISI, because I can search there, but the university does not keep an adequate record of that." (A80)

Interviewees also complained about the different parameters used by different assessors, thus increasing the workload tremendously:

"Quite often, the indicators are not the same from evaluation to evaluation! That requires different answers from the researcher, generating displeasure... sometimes, almost dullness... for having to fill in indicators once again." (A46)
Another weakness reported was the lack of assessment of the societal impacts of research, meaning the outcomes of research:

"We are giving too much emphasis to the number of scientific publications. (...) That has impacts (...). That should be measured." (AH49)

"There is the scientific production on its own, but the impact of the research on the outside world is not measured." (L81)

Moreover, some interviewees from 'soft-applied' and 'soft-pure' subjects argued that the criteria used to assess their areas' performance should be different from the criteria used to assess the performance of 'hard-pure' and 'hard-applied' areas. Nevertheless, according to an interviewee, this was starting to change:

"With much negotiation and some quarrels in the middle, it was possible to demonstrate that the standards for a job opening to Associate Professor for [our department] have nothing to do with the standards for the Department of Biology, for example. (...) An article with 2 pages of text (...) would be impossible in humanities, design or music. (...) Good musicians do not comment on music. They make it!" (AH71)

Finally, some interviewees also mentioned the subjectivity underlying the publication criteria used by each research unit and associate lab:

"Praxis varies a lot between research units. There are research teams that privilege individual publications, valuing articles with one or two authors (...), while others think that each article is the result of teamwork... not only in Portugal, but also abroad. There are scientific areas where it is common to put the name of everyone in the team in every article. (...) So, we have an instrument that was objective transformed into something subjective! There are people there that have done very little or nothing, and that causes some problems." (A46)

6.4.3. Third mission

Even though the university always had strong links to the community, as described in Section 6.2.1, most interviewees considered the performance evaluation of this area to be:

"Merely impressionistic." (A42)

"Not explicit. It is mainly based on the prestige of the university." (AH73)
In fact, almost all the interviewees that expressed their opinion on the performance measurement of third mission stated that this area's performance was not measured at the university (see Table 27): "The performance of third mission is not assessed on its own" (A51).

Even those who argued it was measured mentioned informal measurement, mainly through financial data. This tendency was confirmed by the measures identified by the interviewees for this area. Actually, it was almost consensual that the measures used were mainly financial (e.g. income generated by services provided to society) or finance related (see Table 30). For example, the university kept track of the percentage of contracts fulfilled: "I want to receive the money" (NA50). The same applied to patents. To the interviewees, the revenue generated by this third stream became "(...) increasingly relevant in an organisation that became a foundation" (AH52). Moreover, they believed the revenue generated to be relatively easy to measure.

### Table 30 – Types of measures used to assess the performance of third mission at UA

<table>
<thead>
<tr>
<th></th>
<th>n = 13</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income generated</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Patents registered</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Number of protocols and contracts signed and fulfilled</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Number of businesses on campus</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Number of invitations for external events</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Number of events organised</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>External measures</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

In governance terms, there were a Vice-Rector and a Pro-Rector responsible for this area. The new structure also contemplated the Cooperation Council (see Figure 28).

So far, and given that third mission was hardly measured, the few indicators that existed were, according to the interviewees, developed by the Rectory. The few departments that assessed this area's performance decided on which measures to use.

When commenting on the measures used to assess the performance of third mission, everyone considered this a difficult area to measure: "It is a very heterogeneous area"
(A44), which integrated a lot of things. In fact, in its report, EUA signalled third mission as an area in need of further development.

To an interviewee, so far: "(...) third mission has been done on the basis of voluntarism... almost structural! (...) The leaders of the university encouraged that voluntarism" (A46). That was helped by the departmental structure of the university, allowing things to be done in a more informal way. According to an academic, this was now changing:

"In 1985/86, we were 150, 200 academics... everyone knew almost everyone else... and we knew what each other was doing. (...) This voluntarism was based on a direct response. (...) People did not have to go to the Rectory to ask 'Can I do this?'" (A46)

That does not happen anymore and some coordination was deemed needed in order to avoid the risk of having, for example, two research teams competing on the same market for the same project.

Nonetheless, everyone considered third mission an important area to look at in the future. To most interviewees, the measurement of this area's performance should not only be based on financial measures, looking at it merely as a good opportunity to generate income, but also as "(...) something new that should be strategic" (L81). It was argued that its impact should also be assessed.

6.4.4. Academic staff

The majority of the interviewees argued that the performance of academic staff was measured at UA (see Table 27), even though most agreed it was not measured on a regular basis and that the instruments used were not adequate:

"It is not regularly measured." (AH63)

"The evaluation methodology is not adequate." (L82)

In terms of the instruments used to assess academic staff's performance, most interviewees mentioned internal ones, namely the Quality Assurance System (SGQ), explained in Section 6.4.1 (see Table 31).
Table 31 – Instruments used to assess academic staff’s performance at UA

<table>
<thead>
<tr>
<th>Internal instruments</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Assurance System (includes the Student Survey, the Student Report and Academic Reports)</td>
<td>25</td>
</tr>
<tr>
<td>Evaluation criteria when applying for posts</td>
<td>15</td>
</tr>
<tr>
<td>Internal database (e.g. number, gender)</td>
<td>6</td>
</tr>
<tr>
<td><strong>External instruments</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>International citation databases</td>
<td>6</td>
</tr>
<tr>
<td>Automatic progression</td>
<td>3</td>
</tr>
</tbody>
</table>

Traditionally, academics were mainly evaluated in terms of research. According to most interviewees, this happened not only because it was the most easily measured area, but also because it was the one that contributed the most to their career progression. To a few interviewees, this eligibility criterion changed. More recently, post announcements started to incorporate teaching and managerial roles, even though their weight is still low when compared to research.

To a number of interviewees, the Systems and Information Management Office and the Human Resources Office also collected statistics on academics, including numbers and categories, sorted by age, gender, department and area of speciality. Additionally, the Systems and Information Management Office collected data that "(…) showed whether class summaries and grades [were] registered in due time by academics" (A44). In financial terms, the Financial Resources Office gathered data on the cost of staff, per category and department.

According to the old University Teaching Staff Statute, the career progression of academics was practically automatic:

"The progression from Assistant to Assistant Professor was based on having a doctoral degree and a number of years at the university. (…) That would be automatic if the Assistant was already in the career." (NA55)

"After becoming Full Professors, academics were not assessed anymore." (AH69)

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36 Being public servants, academics used to rise automatically through pay scales within the university. Owing to financial constraints, the Portuguese government froze this progression from August 2005 to December 2007 and again in 2011.
"The parameters that were used were completely unrealistic. They had nothing to do with performance, but with the time spent teaching. That made no sense." (S77)

The University Teaching Staff Statute that came out in 2009 established tougher criteria for career progression, making assessment mandatory for all academics (at least every three years). Based on this Statute, evaluation parameters were discussed at UA, and the assessment regulation was published in August (Regulation 489/2011), with effect from September 2011 on. The following parameters were established: teaching; research and artistic creation and cultural production; third mission; and academic management. The performance of each academic can be considered 'Non-Adequate' (3 negative points at the end of a triennium), 'Good' (3 positive points at the end of a triennium), 'Very Good' (6 positive points at the end of a triennium) or 'Excellent' (9 positive points at the end of a triennium).

According to Regulation 489/2011 (art. 49), a positive assessment is necessary to: hire assistant professors on a permanent basis; and renew the contracts of non-tenured temporary staff. It also has an effect on the alteration of each academic's pay scales, even though this is dependent on the maximum amount of money that can be allocated for that purpose on an annual basis (this would be determined by the government as a percentage of the total amount of money spent by each institution on salaries) and on the university budget\(^37\). A negative assessment for six consecutive years has the consequences determined by the general law. Given that this piece of legislation only came out very recently, it was not commented by the interviewees, nor will be analysed further in this research.

Concerning the establishment of internal performance measures for academic staff, the interviewees argued that even though the Scientific Council defined the basic criteria that had to be met to select the candidates for a certain position at the university, the particular criteria for a post and the composition of the recruitment committee were mainly defined by each department. In terms of teaching, the Rectory developed the Student Survey and created SGQ. Very recently, and as stated above, the Rectory defined the criteria to assess academics' performance.

\(^{37}\) If an employee is graded 'Excellent' for six years in a row, the university is obliged to change his or her pay scale, independently of everything else.
Externally, the government imposed the criteria to be used by universities for academic progression, through the Teaching Staff Statutes, and FCT decided on the parameters to be used when academics submitted research projects or applied for individual research grants.

All the interviewees that commented on the measures used to assess the performance of academic staff identified weaknesses. They were particularly critical of the Student Survey, namely the way it is used to assess academics’ performance, its technical validity, and the way it was built:

"Given that there is not a true evaluation of academics, they have to turn to students to get that information." (AH70)

"What is the technical validity of the survey? (…) What about the universality of the survey, if you teach a course with five students? (…) It can have an influence, for better and for worst." (A46)

"What kind of students answer that survey? Those who have failed? Those who have passed? It makes you wonder… and this discredits the tool." (AH68)

"What is the relevance of knowing whether an academic uses PowerPoint? Does that make him or her a better teacher? I just want students to learn." (AH68)

The argument of lack of validity of results was reinforced by the low response rates of students to the survey, which questions the representativeness of the sample.

As a result, most interviewees argued that survey results should be analysed carefully, given that, the way students answer, "(…) may not be very serious" (NA56). Furthermore, according to some interviewees, there were big asymmetries between disciplines:

"You cannot compare the results of a discipline with half a dozen students… with other with 500 students… they have to have different readings. With this I am not saying that it is easier for an academic to get better results by the number of students… but they can deliberately influence each other and thus manipulate results (…) and then we fall into a perverse action-reaction system." (A46)

According to a few interviewees, there were also disciplines that were never assessed because they had a low number of students: "These will never be assessed, and they should" (AH70).
Even though the vast majority of the interviewees regarded the Student Survey as imperfect, a number of academics claimed that it was better than nothing: "(...) it gives heads of department some guidelines and data to act upon" (AH49) (whether this actually happens will be discussed later on) and academics "(...) some feedback on their teaching" (A45). Nevertheless, almost all the interviewees stated that the Student Survey should not be an instrument used on its own, needing to be complemented with other instruments (other than the ones that composed SGQ). Even though Regulation 489/2011 added other criteria to assess academics' performance concerning teaching, the Student Survey remained the most important instrument to assess this component.

Several interviewees also complained about the excessive focus put on research to assess the performance of academics, even though this was starting to change:

"There are not many indicators at the moment that allow people to show their pedagogic quality." (A48)

"I know of no case where a candidate has been awarded tenure for, although having a weak scientific performance, [having] an excellent, extraordinary, teaching performance!" (A45)

Finally, a few academics questioned the uniformity of the criteria used to assess the performance of academics from different areas. To them, the criteria should not be the same for all academics: "(...) there are areas in which it is easier to publish than others" (A53). Concerning this matter, interviewees from hard-pure and -applied areas would argue that problem does not exist since academics and researchers are compared to their peers and not to people from other areas. Regulation 489/2011 actually establishes different weightings for publications according to the scientific area (social sciences, engineering and sciences).

4.5. Non-academic staff

Although most interviewees agreed that the performance of non-academic staff was measured (see Table 27), they distinguished between the measurement that existed at central level and the one that existed at departments, which was, according to some, "(...) lighter" (NA56) and more difficult to do: "[In departments] employees have less specific tasks" (AH65).
As for the instruments used to assess this area's performance, the majority of the interviewees mentioned a national system developed by the government to assess public servants – the Integrated System for the Evaluation of Performance within Public Administration (SIADAP) (see Table 32). This system, created in 2004, through Law 10/2004, of 22 March\(^{38}\), integrated the definition of objectives and indicators for each non-academic staff member. The university started to implement it in 2005.

### Table 32 – Instruments used to assess non-academic staff's performance at UA

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td>2</td>
</tr>
<tr>
<td>Internal database (e.g. number, gender)</td>
<td>2</td>
</tr>
<tr>
<td>Staff satisfaction surveys</td>
<td>1</td>
</tr>
<tr>
<td>External instruments</td>
<td>31</td>
</tr>
<tr>
<td>SIADAP</td>
<td>31</td>
</tr>
</tbody>
</table>

According to the interviewees, within central administration: "(...) the director of each service defines objectives for each employee" (NA58). Each member of staff discussed with the director of his or her service his or her objectives and ways to reach them, being their performance then compared to pre-established objectives. Within departments, objectives were defined by the head of department in cooperation with non-academic staff, being then assessed by him or her at the end of each year. The performance of each member of staff was considered 'Non-Adequate' (1 – 1,999), 'Adequate' (2 – 3,999) or 'Relevant' (4 – 5). Only 25 per cent of the workers could be awarded a grade between 4 and 5, and, among these, only 5 per cent could be considered 'Excellent' (5). Departments were then grouped, in order to distribute classifications. In 2006/2007, each group included 4 departments, comprising between 20 and 24 employees each. There could be 4 'Relevant' in each group and 1 'Excellent'. In 2008, bigger groups were formed. The Evaluation Coordination Council (CCADUA), responsible for coordinating the evaluation process within UA, received all the results and revised them.

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\(^{38}\) Based on the recommendations of the committee that evaluated the implementation of the performance evaluation system created in 2004, the government decided to implement a restructured SIADAP at the end of 2007 (Law 66-B/2007, of 28 December). The new SIADAP includes the performance assessment of services (SIADAP 1), top and middle level managers (SIADAP 2) and employees (SIADAP 3).
Finally, a few interviewees mentioned the data collected by the Systems and Information Management Office and the Human Resources Office on the number of employees, by service, gender, position and echelon salaries, and number of absences.

In terms of the definition of measures, and according to the interviewees, within departments, head of department established objectives and indicators for each employee, in agreement with them. Results were then sent to CCADUA, presided by the Administrator. Within central services, the director of each service or support unit assessed his or her staff and was assessed by the Administrator or, in some cases, by the Vice-Rector. SIADAP was mandatory by law for all public servants.

When asked about their thoughts concerning the measures used to assess the performance of non-academic staff, most interviewees argued that it was very difficult to assess people, especially if the assessors did not see those who are assessed on a daily basis:

"There are people that work [here] that I do not see for days. There are cases where I do not see them for weeks." (NA55)

The law changed this situation and people started to be assessed by their immediate supervisor. Before this, service directors relied on the opinion of division directors.

Even though there was not a single interviewee that was completely happy with SIADAP, some interviewees recognised its strengths: it allowed differentiation, since, according to them, under the old system everyone was graded Very Good; and people started to think more strategically, in terms of objectives and indicators.

In spite of these strengths, there were a lot of complaints concerning SIADAP: "It is the most boring thing I have to deal with as head of department" (AH62); or "(...) it is a terrible system!" To the majority of the interviewees, SIADAP was unfair. They complained about the quota system, which only allowed 20 per cent of the employees of each service to be Very Good and 5 per cent Excellent:

"It assumes that services have to fight against what they want to achieve, which is excellence!" (AH52)

"[The fact that] quotas have to be applied independently of the final result of the evaluation, makes the evaluation very subjective." (NA50)
Moreover, to these interviewees, the evaluation criteria varied from department to department, depending on the people that represented each department:

"Some heads of department use the entire scale to assess their staff."
(AH63)

"I kept the Very Goods. If the grade changes to Good, that will be their fault (talking about CCADUA), not mine!" (AH64)

What CCADUA did in these cases was to respect the quotas, ranking the employees and distributing the grades accordingly.

To other interviewees, SIADAP was considered *unfit*, being built for non-skilled workers and for big groups of employees:

"The objectives that are established for each employee are just a small part of the work he or she has to perform on a daily basis, and sometimes it is not [even] the most representative part of their work. Because [sometimes] what is representative can be defined as an objective, but it will be hard to assess." (NA61)

"The system was built for directorates-general, where the director-general knows the employees in a pyramid system. In the group I am inserted in, there are departments where I do not know a single employee." (AH71)

A number of interviewees also argued that SIADAP was *too bureaucratic*: "(…) too heavy and time consuming for the outcome generated" (AH63), especially "(…) when compared to what existed before" (NA61).

Other interviewees mentioned the *difficulties in defining objectives and indicators*:

"There are some difficulties in defining objectives, find indicators and set things that can be measured without having a member of staff behind the other looking at what he or she is doing! That makes no sense!" (NA61)

"The objectives that (…) [are proposed] for employees are merely support objectives (…), such as money saved in photocopies, implementation of documental management, or implementation of cost accounting. Quite often, the assessors and those who are assessed find it difficult to understand how these objectives relate to the mission of the university." (AH66)
The lack of preparation of those who assess was also highlighted by a small number of interviewees: "(...) academics are not prepared for that kind of administrative tasks" (NA61). Moreover, a few interviewees complained about the constant changes in the system:

"In three consecutive years I had to do three different evaluations, because the forms changed." (AH69)

"When I already had a set of indicators... everything changed." (AH49)

"When we finally reached an understanding, they changed the groups in 2008. Everything went down the drain. We were working for nothing." (AH69)

A small number of interviewees also mentioned the lack of instruments and resources to support measurement: "(...) there are no reliable instruments yet. It still is very empirical, and we know that we are influencing somebody's life" (NA56). Furthermore, in order to have a well-built system: "(...) the number of administrative and technical staff should increase" (AH65). Apparently, the opposite was happening (the ratio of non-academic to academic staff was almost 1:2, as seen in Section 6.2.1).

Finally, a few interviewees highlighted the lack of preparation. They argued that the system did not go through an experimental phase, so that people could believe in it and trust it: "The way the system was introduced in universities jumped over a series of important steps" (NA54).

Even though SIADAP allowed differentiation, as a consequence of the perceived negative features, non-academic members of staff felt unhappy with the system and did not believe in it, feeling "(...) disappointed (...)" (NA56). They did not feel their efforts were recognised and felt discouraged: "(...) they thought the system would help them to progress in their career and that has not been the case" (NA58). Moreover, the subjectivity of the system also favoured gaming. Some interviewees, for example, argued that the trick was to establish less demanding objectives, so that everyone accomplished them easily.
6.4.6. Students

Even though the assessment of students' performance was the area that interviewees were least interested in commenting (see Table 27), all of those who decided to discuss it, stated that the university assessed this area (see Table 27): "Students' performance is clearly measured" (A80). According to these interviewees, the instruments used were essentially internal, being students' performance very closely monitored in terms of educational success: grades, success rates and failure rates (see Table 33).

Table 33 – Instruments used to assess students' performance at UA

<table>
<thead>
<tr>
<th>Instrument Type</th>
<th>Number of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal instruments</strong></td>
<td></td>
</tr>
<tr>
<td>Educational success (e.g. grades, success rates, failure rates)</td>
<td>19</td>
</tr>
<tr>
<td>Internal database (e.g. number of students, attendance rates)</td>
<td>5</td>
</tr>
<tr>
<td><strong>External instruments</strong></td>
<td></td>
</tr>
<tr>
<td>RAIDES</td>
<td>1</td>
</tr>
</tbody>
</table>

According to some interviewees, the Systems and Information Management Office and the Academic Records Office also collected some data on students: number of undergraduate and postgraduate students; number of international students; number and type of internships; attendance rates; entrance grades; university of first, second and third choice; region of origin; and so on. To these interviewees, this information was mainly gathered due to the need to send it to MCTES on a yearly basis. MCTES created a national survey, in 1989, entitled Statistical Survey to Graduates and Students Enrolled in Higher Education (DIMAS). This survey, registered in the Portuguese National Statistics Institute (INE), was mandatory by law and had to be filled in on an annual basis by every HEI. This survey was designed to supply data concerning the number of students, having as sampling date the 31st of December. The data collected resulted from the sum of the students of all degrees. In 2008, the Survey to the Record of Enrolled Students and Graduates in Higher Education (RAIDES) replaced DIMAS. The main difference between the two is that RAIDES integrates individual records.

In terms of the development of measures, the Rectory defined the type of data to be collected by the Systems and Information Management Office and by the Academic
Records Office, even though the data gathered had to be in accordance with the information that had to be inserted into RAIDES.

When discussing the strengths and weaknesses of the measures used to assess students' performance, a few interviewees stressed the difficulty of knowing the exact number of enrolled students, since they kept on coming and leaving. Therefore, the university decided to "(...) take two pictures every year... thirty-first of December and thirty-first of July" (NA57)\(^{39}\).

### 6.4.7. Support services

Even though all interviewees agreed that support services were fundamental to the good functioning of the university, there was no unanimity concerning the measurement of their performance (see Table 27). Two different quotes reflect this dichotomy of opinions:

"The performance of support services is assessed." (AH52)

"Even though people know how each support service is doing, in an intuitive way, their performance is not formally assessed." (NA56)

By the time the interviews were conducted, the university was starting to implement an Evaluation and Accountability Framework (QUAR), integrated in the System for the Evaluation of Performance within Public Administration (SIADAP), and mandatory by law. This framework aspires to measure the attainment of pre-established targets and attribute each service a grade. That is why several interviewees stated that this area's performance would be evaluated through QUAR (see Table 34), even though it was still starting to be implemented:

"It is still in an experimental phase." (AH64)

"I still have had no time to look at it." (AH63)

The recently created Strategic Planning Office (GPE) was coordinating the development of QUAR inside the university.

\(^{39}\) RAIDES defined the 31st of December as the sampling date.
Table 34 – Instruments used to assess the performance of support services at UA

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 25</strong></td>
<td></td>
</tr>
<tr>
<td>Internal instruments</td>
<td></td>
</tr>
<tr>
<td>Satisfaction surveys</td>
<td>15</td>
</tr>
<tr>
<td>Evaluation system of non-academic staff</td>
<td>8</td>
</tr>
<tr>
<td>Internal databases (collect general data on services)</td>
<td>5</td>
</tr>
<tr>
<td>External instruments</td>
<td></td>
</tr>
<tr>
<td>QUAR</td>
<td>15</td>
</tr>
</tbody>
</table>

Some interviewees also mentioned the satisfaction surveys launched on an annual basis by a small number of support services (e.g. Social Services, Academic Management Services, the Library, and the Information Technology and Communication Services). These online surveys were sent to students, academics and non-academic members of staff, in order to assess their level of satisfaction towards the service. They were entirely voluntary.

Other interviewees argued that support services were assessed through the performance of non-academic staff, especially service directors: "When service directors are assessed, services are evaluated, because they have to accomplish some goals" (NA50). At a central level, service directors established their own budgets and goals, together with the Administrator, who, at the end of the year, assessed whether those goals had been accomplished or not. Each director controlled his or her own budget. If there were extraordinary situations, where more money was needed, this had to be approved by the Administrator or by the Rector. According to some interviewees, departmental services were assessed through the evaluation of non-academic staff's performance, conducted by the head of each department, based on the targets set for them.

Additionally, a few interviewees stated that some services developed databases to collect some data on the service, even though those databases were not integrated.

In terms of measures' development, according to the interviewees, the director of each service set, in cooperation with the Administrator, at a central level, and the head of department, at a departmental level, the indicators within the plan established for each year. Each support service had its own indicators. The Vice-Rector for Strategic Planning, Information Management and Quality Enhancement evaluated the Strategic Planning
Office (GPE). He set out the objectives for that office, in agreement with the employees, being the evaluation of GPE done through the assessment of the person responsible for it.

In relation to the measures used, the interviewees reported some problems, namely: the lack of an integrated system; the excessive focus on administrative tasks; and the lack of preparation of assessors, which is then reflected, according to some, in the poorly defined activity plans:

"Even though services have tools that allow them to define some indicators and collect data systematically, that is not integrated into a single system yet." (NA60)

"QUAR distorts the function of the university completely (given its focus on administrative tasks)." (AH71)

"There are people who are not completely prepared to work in these things (talking about SIADAP and QUAR) in every department." (NA57)

"The activity plan developed by service directors should not just be a repository of the activities developed during an academic year. It should be a plan of what should be done, with well defined objectives and measures." (NA55)

6.4.8. Employers

Apart from third mission, 'links to employers' was one of the areas of the university that more interviewees perceived as not being measured (See Table 27): "If it is done, I have not heard about it" (NA56). Some interviewees justified the absence of measures:

"It is a very difficult area to measure." (AH63)

"It is not easy to get feedback from employers." (AH69)

In fact, one of the major criticisms made by EUA to the way the Bologna Process was implemented in UA, was the non-inclusion of employers in the revision of curricula.

In terms of the instruments used to assess links to employers, the one most referred to by the interviewees was the Employers’ Survey (see Table 35): "The university is thinking of launching a survey to employers now" (A43).
Table 35 – Instruments used to assess links to employers at UA

<table>
<thead>
<tr>
<th></th>
<th>n = 10</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal instruments</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Employers' Survey</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Internal databases (e.g. contracts)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>External instruments</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>External assessments</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

According to the interviewees, the Rectory conceived the survey, together with a task force. The survey included questions such as: level of satisfaction with employees and level of satisfaction with the competences acquired by those employees during their degree: "The idea is to be able to cross what alumni say with what employers say" (NA60). In fact, the majority of the interviewees linked these two areas (alumni and employers). By the time the interviews were conducted, the university was planning to start gathering data on employment rates and places of employment, through their alumni database.

Some interviewees also mentioned the data on employers collected by some departments, even though this was not done systematically, according to them. The departments that kept in touch with employers knew whether or not they were satisfied with their employees or trainees. The Rectory asked departments to send them all the information they had on this area, so that the Systems and Information Management Office could compile it.

To a number of interviewees, other offices also collected general data on employers, even if not systemically. For example, the Internships and Professional Opportunities Office (GESP), which was part of the Academic Management Services, kept records on employers and their level of satisfaction with trainees. The Academic Management Services created a website called PORTA, ran by GESP, where it linked students and alumni to employers. To some interviewees, this site provided indirect indicators. For example, if a lot of employers registered in that website, it meant they were probably satisfied with the university graduates.

Externally, when degrees were evaluated (either by the National Council for the Evaluation of Higher Education – CNAVES, or by Professional Associations), the evaluation
committee always asked for a meeting with employers, although it was nothing systematic.

In terms of the development of measures, and according to some interviewees, the Rector and his or her team created the few indicators that existed. The few departments that assessed this area decided on which measures to use individually.

To most interviewees there was still not a good employers database and "(…) that should be the starting point" (A48). This would be important to "(…) ask them for advice concerning the curricula" (AH68) and to "(…) have their feedback on trainees and employees" (AH49).

Another interviewee showed some concern in relation to the data collected through the Employers' Survey: "It can be biased and should be analysed very carefully, since the bigger businesses will probably be the ones that will fill in the survey, even though they do not represent the majority of the employers" (AH69).

6.4.9. **Alumni**

Although opinions were divided concerning the measurement of 'links to alumni', this was one of the areas that more interviewees perceived as not being measured, similarly to what happened with third mission and employers (See Table 27). Even those who argued that some data was collected agreed that this area was hardly measured: "There may be some data available, such as the number of alumni, but not measures" (AH52). Some explained the absence of a more rigorous measurement: "This area is extremely hard to measure" (AH63). Nonetheless, all interviewees considered links to alumni an important area:

"It is a critical area for the university. (...) They are important not only in terms of funding, but also to support the creation of new areas and to participate in the governance of the university." (AH68)

"Alumni are the best ambassadors of the university. They are the showcases of what we do." (A44)

"[Alumni] can come back to the university as students." (S77)

"They are possible employers of future alumni." (NA55)
Even though alumni were considered important, the university did not have an 'alumni culture' yet, according to some interviewees: "It still does not have 'alumni culture', since [it] has not been able to show alumni the benefits of maintaining their links to their former university yet" (A46).

In relation to the instruments used to assess links to alumni, the interviewees mentioned the Alumni Survey and internal databases (see Table 36).

<table>
<thead>
<tr>
<th>Table 36 – Instruments used to assess links to alumni at UA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 16</strong></td>
</tr>
<tr>
<td>Internal instruments</td>
</tr>
<tr>
<td>Alumni Survey</td>
</tr>
<tr>
<td>Internal databases</td>
</tr>
<tr>
<td>External instruments</td>
</tr>
</tbody>
</table>

According to some interviewees, at the time the self-evaluation report was being prepared, the committee responsible for it decided to conduct a Survey to Alumni. This was done through the Office for the Information Management and Management Indicators (GaGI)\(^{40}\). This unit developed an integrated system to manage alumni, which promoted the contact between them and the university, through an IT platform called SIGAAA (Integrated System to Manage the Follow Up of Alumni), in cooperation with the Alumni Association. The Systems and Information Management Office kept a database with the data collected from the survey. By the time the interviews were conducted, the Rectory was preparing to launch the second survey together with the Alumni Association. The questions did not change a lot since the first edition of the survey, in order to allow for comparisons.

Before this central interest in alumni, some departments (e.g. Biology) had, according to a number of interviewees, a website where alumni inserted data stating where they were working. These sites were deactivated when the Rectory decided to build a single alumni database for the entire university.

Additionally, some interviewees referred to the data on alumni kept by the Internships and Professional Opportunities Office (GESP).

\(^{40}\) GaGI is now called Systems and Information Management Office and it has been integrated into the Information Technology and Communication Services (STIC).
In terms of the development of measures, the Rectory developed the Alumni Survey together with a committee created for that purpose. The few departments that assessed this area decided on which measures to use.

When asked about their thoughts concerning the measures used to assess links to alumni, the interviewees mentioned several weaknesses. Some pointed out the lack of adequate instruments or indicators to measure this area, "(...) namely employability" (S75). Some complained about the technical problems that emerged with the treatment of the survey data. And others complained about the lack of feedback on survey results to heads of department.

An additional problem identified by a few interviewees was the possible bias of survey results. This could happen because, according to them, those who filled in the survey were usually those who were still looking for a job or were still doing a postgraduate degree and were still around. These were usually still living with their parents, being thus more easily reachable.

6.4.10. Finance

It was consensual among the interviewees that discussed the measurement of financial performance that it was thoroughly measured, both at university and departmental levels (see Table 27): "It is super-scrutinized. It is an area with such a tight control that it becomes unreasonable" (A42).

Most interviewees believed financial performance was mainly assessed through external measures (see Table 37): "It is mainly measured externally, even though there is an internal system" (NA50).

<table>
<thead>
<tr>
<th>Table 37 – Types of measures used to assess financial performance at UA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 17</strong></td>
</tr>
<tr>
<td>Internal measures</td>
</tr>
<tr>
<td>Measures contemplated in SIGEF</td>
</tr>
<tr>
<td>External measures</td>
</tr>
<tr>
<td>Budget and financial execution</td>
</tr>
<tr>
<td>Measures defined by external assessors</td>
</tr>
</tbody>
</table>
The measure most referred to by the interviewees was the budget and financial execution:

"There is a budget that is attributed to the university, which has to be managed. At the end, the university has to show what has done with the money and what has been accomplished." (NA56)

Departments also had limits that could not be overcome: "The rules have to be strictly followed. Otherwise, there are penalties" (NA50). At the end of each year, the Consolidated Accounts Report had to be presented to the Ministry of Finance.

Additionally, some interviewees mentioned the external assessments performed on an annual base by the Ministry of Finance and by the Court of Auditors. Moreover, other external assessors of different levels (e.g. audit firms) visited the university. Each of these assessors defined their own indicators.

Internally, the Financial Resources Office developed a control system – SIGEF –, which integrated some KPIs. Nevertheless, at the time the interviews were conducted, the Financial Resources Office was working on a new set of indicators (e.g. the average payment period or the average collection period).

In terms of the development of performance measures, most interviewees argued that some data had to be collected by law. These indicators were thus defined by MCTES, who asked for them. Even though the KPIs used by the Financial Resources Office were developed by that office and agreed upon by the Administrator, they had to comply with the ones defined by the law that regulates public spending. Departments had their own budget and some autonomy in running that budget, within pre-established rules defined by the Financial Resources Office. When there were external assessments, assessors defined the indicators used.

When asked about their opinion concerning the measures used to assess financial performance, some of the interviewees pointed out weaknesses, even though most of them considered that the existing financial measures were already consolidated. An

41 At the jurisdictional level, and working as an independent authority, the Court of Auditors ('Tribunal de Contas') is responsible for the external technical-jurisdictional control. It is mainly in charge of scrutinizing the legality of expenditures and auditing the state budget implementation in each administrative unit.
interviewee complained about the financing formula used by the Ministry, which was considered 'very tricky': "They are not sufficiently clear" (NA57).

Additionally, heads of department complained about the excessive bureaucracy: "It is a lot of paperwork" (AH70). Another head also argued that the financial management done at the central level was sometimes not adequate for departments: "The areas of intervention are different, the projects are different and the cost centres are different" (AH62).

In the next section, the way interviewees perceived performance to be reported in UA will be discussed.

6.5. Reporting of performance

Similarly to what happened with measurement, reporting also varied according to the area.

In terms of teaching and learning, some interviewees mentioned the annual evaluation reports, written by degree directors, to assess the implementation of the Bologna Process in each degree. These reports imposed by MCTES were available on the Pedagogic Council website.

A number of interviewees highlighted the Activity Reports heads of department had to present to the Rectory on an annual basis, which included data on teaching and learning. To some interviewees, not every head of department sent these reports.

Other reports on teaching and learning were also referred to. These included: reports on the creation of new degrees or the restructuring of existing ones that were sent to the Scientific Council, in order to get approved; and the reports that the National Council for the Evaluation of Higher Education (CNAVES) produced when it came to the university in order to assess degrees.

No reports were produced with the data collected from the Student Survey, even though data was reported. A head of department stated: "I don't get reports. I get data from the surveys. Then, each head of department decides on whether to treat that" (AH62). Data on each course was published on the intranet, in SGQ's website.
Student Reports on the courses taken and on the academics that taught those courses were available to: the Degree Director (who inserted the data); the academic that taught the course and the one responsible for it (these could be the same or different people); the head of department; and an Analysis Committee appointed to examine the improvement changes proposed.

In relation to research and scholarship, the interviewees argued that the results of the evaluation conducted by FCT were publicly available. Moreover, each research unit and associate lab produced a self-evaluation report on their research activity. These reports, required by FCT, were not published. The Research Institute (now extinguished) used to have them and analyse them.

*Third Mission*’s performance was not reported, according to most interviewees: "There are not many reports, even though there is some information available" (AH71). For example, departments sent some financial data to the Financial Resources Office on the services provided, but nothing very structured. Some information on this area (e.g. cooperation with the community, protocols signed) used to be taken to the Senate.

Regarding academic staff, most interviewees confirmed that the individual data that came out of the Student Survey was sent to the academic, to the degree director and to the head of department: "Students do not have access to data on academics (...) and that would be the most appealing information for them" (S76). Few heads of department reported taking that data to the Scientific Committee of their department to discuss results and compare their department to other departments.

Also, some interviewees argued that the Scientific Council got reports on academics, namely: reports on sabbatical leaves; activity reports presented when academics applied for posts; and so on.

Additionally, according to a number of interviewees, some data on academic staff was incorporated into the Activity Report that some heads of department sent to the Rectory annually. Moreover, data on the research of academic staff was integrated in the self-evaluation report produced by each research unit or associate lab.
Finally, a few interviewees mentioned the data on the number and qualifications of academic staff per institution published online by the Planning, Strategy, Evaluation and International Relations Office (GPEARI) of MCTES.

According to the interviewees, no reports were produced on non-academic staff's performance. Within SIADAP, each head of department and service director had to fill in a form for each employee, sending everything to the Evaluation Coordination Council (CCADUA). Nevertheless, SIADAP results were never published. Only the people that integrated CCADUA had access to that information. The final decision made by this committee went to the head of each department or to the director of each service, who then discussed it with each member of staff.

The Systems and Information Management Office collected some data on students and used to publish it on a webpage, accessed through login and password. At the time the interviews were conducted, that page was being restructured. Nevertheless, according to some interviewees, this Office did not produce any reports with that data, unless a Vice-Rector or the Rector asked for them.

Some interviewees also mentioned the 'Bologna Report' produced annually by Degree Directors. In this report, the way Bologna was implemented in each degree was described. These reports, which integrated data on students (e.g. success rates, employability, and so on), were published on the Pedagogic Council website.

Additionally, a number of interviewees reported the data received by heads of department, every year, on the number of students enrolled by degree. That data was available on the intranet, being its access restricted.

Finally, GPEARI also published data online on the number of students enrolled and number of graduate students per degree and institution.

All interviewees agreed there were no reports on support services. To them, data on support services was only disclosed in the Annual Report and Accounts, even though some believed there should be reports on this area: "There should be results on the level of satisfaction towards these services, especially on the perceptions about life on campus" (AH64).
It was consensual among the interviewees that there were no reports on the *links to employers*, even though the data from the Employer Survey was being treated, compiled and sent to departments, by the time the interviews were conducted.

Most interviewees perceived that no reports were produced on *links to alumni* either: "Very rarely, there [were] reports on the employability of students that [went] to the Senate" (AH64).

Concerning *finance*, the interviewees argued that the Financial Resources Office and the Administrator produced an Annual Report and Accounts every year, since the external financier demanded it. After being certified by an external auditor, the Consolidated Accounts used to be "(...), presented to the Senate by the Rector, with the help of the Administrator" (AH66), and ratified by this body. These were now taken to the General Council for ratification. In the Annual Report and Accounts, the university attempted to analyse several areas, "(...), trying not to reduce it exclusively to a financial dimension" (A51). An external member considered it "(...) a well done job" (L82). More details concerning financial data used to be more thoroughly discussed at the Management and Planning Committee of the Senate.

Some interviewees also mentioned that, occasionally, the Financial Resources Office produced reports on demand to the Administrator or to the Rector.

Moreover, a few interviewees argued that departmental annual activity reports also integrated some information on the expenditures and on the revenues generated by each department.

From what was presented, it could be argued that, even though certain areas' performance was reported, these reports were not produced systematically, being most of them mainly produced on demand. The exceptions were those that were mandatory, namely 'Bologna Reports' and the Annual Report and Accounts, and the results of the evaluation performed by FCT to research units and associate labs, which were published online and available to everyone.

Having looked at the way UA reported performance data, Section 6.6 will analyse the way the interviewees perceived performance information to be used.
6.6. Management of performance

Most interviewees believed it was possible to act upon all areas, or at least most of them:

"The way of acting is probably different, the diplomacy must differ, but I think that if there is will and means to do it, we can act upon all of them." (NA61)

Nevertheless, these interviewees stated that was not done. To an interviewee, that happened mainly because there was no tradition of doing it:

"The problem is that we are people of 'gentle ways', with a culture of 'gentle ways', and that is the reason for not acting upon something. We have ways to act. We have something called 'disciplinary action'. But until you get there... There is no tradition. But it is also true that the instruments that exist are very heavy (...). We normally have atomic bombs to swerve an ant from its path. It is not even to kill it. And that is not good. It produces no results." (A42)

Similarly to what happened with measurement and reporting, performance data was not used in the same way across the different areas of the university.

Some interviewees argued that the management attitude concerning teaching and learning was quite recent. It had mainly to do with Bologna (showing the influence of European policy) and with the evolution of the job market:

"The university reoriented its educational offer in 2002 (...) in order to respond to changes in the job market. (...) Some degrees were restructured (...), others disappeared... new degrees were created in growing areas." (A43)

According to other interviewees, the Rectory could also act upon departments with difficulties in attracting students, and it did so in some occasions. It could, for example, lower the numerus clausus, try to convert academics to other areas, and so on.

Some heads of department also mentioned the curricular alignment departments did periodically, in order to "(...) correct eventual mistakes that have been made when the degrees were created, and also adapt to new realities" (AH62). A head stated that the reviewing cycle brought by Bologna was good, since it enabled some changes for the better.
Moreover, to a number of interviewees, when students complained about certain classes or other issues related to teaching and learning, the degree director could intervene and try to solve the problem.

Additionally, according to some interviewees, when results from the Student Survey were bad and failure rates were high, an intervention strategy could be implemented. The head of department could, for example, talk to the academic and ask him or her to change the programme content or the methodology of teaching, give extra-classes or tutorials, and so on.

According to the majority of the interviewees, data on research was closely analysed, especially due to the need to prepare for external evaluation exercises. This issue was considered particular relevant, since the grade attributed by FCT to research units and associate labs was directly linked to the financing of those units. To an academic, since the implementation of this evaluation system:

"Some action was taken in order to improve the performance of research teams. The success of these measures varied between units. (...) Most indicators and actions were implemented reactively, as a response to recommendations, but some were pro-active, anticipating what could be mandatory in the future." (A46)

Another interviewee argued: "(...) the university has been really pro-active in relation to research and scholarship, not only in terms of improving its research units, but also in terms of creating new research areas" (A43). A non-academic member of staff was less optimistic, believing there was still a long way to go:

"[In] a university that wishes to maintain a strong component of earned revenue, with services to society... its attractiveness should be linked to the idea that the research that is conducted here is excellent. And, therefore, if it is true that the number of units and labs graded Excellent or Very Good rose from 75 per cent to 82 per cent, which is a good result, it is also true that the media has only published the results of our excellence niches, which are not those units that got Very Good, but those that got Excellent. (...) It is very important to have research and scholarship as the university's trademark." (NA55)

Most interviewees believed third mission was not acted upon, probably because it was an area that was not much measured and upon which few reports were produced. Nevertheless, most interviewees agreed that more needed to be done.
It was consensual among the interviewees that it was not easy to act upon the performance of academic staff:

"We cannot fire people." (AH63)

"(…) Unless they kill the Rector or the President." (A51)

"People have a job for life." (AH71)

Some interviewees argued that the Academic Statutes were very protective and restrictive on what could be done to reward merit and punish bad performances. To these interviewees, there was something called tenure that was an "(…) aberration (…)" (AH62), since it gave people a job for life, regardless of what they did:

"Even though, with the new foundational regime, people without this type of nomination will have problems, the others will not." (AH62)

The interviewees mentioned the existence of two different sets: if an academic without tenure did not perform, "(…) his or her contract [was] not renewed" (NA56); if academics had tenure it would be much more difficult: "I do not know of any cases where there have been consequences" (NA56). This does not mean that these cases were not analysed and that people did not try to solve them by talking to the people involved, but not much else. In face of the latter scenario, some action could be taken: the university could exert pressure on that person, by, for example, giving him or her less power within the department, less money to do research, and so on; if the situation was not solved, there were more radical procedures, even though, in practice, they were seldom applied: "There is a Disciplinary Committee that looks at these processes" (AH73). But, although possible, it was rather complicated:

"If a head of department establishes a disciplinary process against an academic, most likely nothing will happen, and he or she can be sued for persecution." (AH71)

Moreover, according to several interviewees, only very sporadic actions were taken based on the results of the Quality Assurance System (SGQ). Cases where tougher action was taken were "(…) rare and not systematic, because the information [was] still not very trustworthy" (A43). For now, the results of SGQ were "(…) merely informative" (S77). Some interviewees believed continuous bad results could eventually lead to some action.
According to several heads of department from all types of subjects (hard-pure, hard-applied, soft-pure and soft-applied), the lack of action towards poor performers had a lot to do with the weak position of some heads of department, who did not have enough authority or seniority to feel sufficiently powerful to correct, for example, a full professor:

"Very hardly you see an assistant professor telling a full professor 'look, I have your survey results. They are miserable! Next week you have to attend that training programme.'" (A51)

Moreover, some interviewees argued that assistant professors sometimes felt a bit constrained because full professors would evaluate them when they applied for posts:

"They (talking about assistant professors) depend on some full professor's will to help them with their careers. People are afraid and fear saying or doing something sometimes. That creates multiple powers and makes management more difficult." (A80)

Some heads of department also argued that they would like to have more freedom to act upon academics: "If they don't perform well, they should do something else" (AH62). Heads also thought they should be given more support to act.

Other interviewees questioned the relevance of assessing academics given the difficulty to progress in the academic career in Portugal:

"Even though sometimes academics have the conditions to get promoted, there may not be a place for them, and that is disappointing." (A45)

According to some interviewees, it should be easy to act upon the performance of non-academic staff, given the existence of a new system – SIADAP –, which produced direct consequences. However, they stated that the actions that could be taken towards the performance of non-academic staff were very dependent on the legal framework, which was very protective. Since most of the university's employees were public servants, they were very difficult to fire. That could be done through formal disciplinary action, but it seldom happened:

"It is very difficult to deal with extreme cases. It is very difficult to fire someone who is incompetent and very difficult to reward very good employees." (NA58)
In relation to students, in order to attract them, some departments tried to make degrees more appealing: "It was a strategy (...) that contributed to bring better students to the department." (AH62)

The global results of the Student Survey used to be presented in The Senate, even though they were more discussed in the Students' Union, the Pedagogic Council and the Undergraduate University Education Institute. Nonetheless, according to a number of interviewees, "(...) these discussions led to no action" (NA54).

A group of people, comprising the Administrator, service directors, and some of the people who did FORGEP\(^{42}\), tried to readjust the structure of support services, according to the current circumstances, mainly to comply with the changes imposed by RJIES. When the new Statutes came out, the university had six months to put everything in order and implement changes. These changes are visible when comparing Figure 30 with Figure 31 (see Section 6.2.2.2).

Some service directors argued that sometimes it was difficult to manage a service when staff did not cooperate and nothing could be done with those people. Sometimes, underperformers were sent to another service, but other times they were kept in the service and kept on doing nothing. A non-academic member of staff stated that many times they chose not to hire anyone new: "When you have a sink with dirty water and you put clean water inside, the new water becomes bleary" (NA59).

Another non-academic argued that even though the law demanded human resources planning, the budget plan of most services was based on last year's or the year before plan. There was not a needs analysis, mainly because not all services had an Activity Plan: "There is no planning, no accountability, and it is difficult to monitor what is happening" (NA55).

When CNAVES evaluated the degrees, they produced some recommendations on employers. The university used to look at that data. By the time the interviews were

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\(^{42}\) FORGEP is a training programme in public management, conducted by the National Institute of Administration (INA). It is mandatory by law to those with middle management roles in services or public institutions.
conducted, there was no information to act upon, according to the interviewees: "When we have information we will be able to act upon it" (A47).

The Rectory sent a copy of the Alumni Survey results to every department. This data showed that alumni perceived "(...) the transversal competencies that they acquired during their training were not enough for their job" (A44). Even though the Rectory did not give instructions for departments to act upon this data, it expected they would make an effort to try and give students more of these competences.

Finally, financial performance was, according to most interviewees, well acted upon in the university, based on the data available. The Financial Resources Office managed finances centrally. Each department managed the money it received every year up to a certain amount, being their financial autonomy quite limited:

"In terms of financial management, I believe that the degree of freedom that I have is reduced, because departments are limited to the processing of invoices and not much else. (...) The head of department can try to bring in more money to the department, for example, by encouraging his or her staff to do it, but not much else, since finances are managed centrally." (AH62)

6.7. Performance management systems

Having looked at UA’s strategy and to the way the university measured, reported and managed its performance, the next sub-sections will explore: the importance attributed by the interviewees to PMS; the pressures felt by the interviewees to implement control mechanisms; the factors perceived to influence the implementation and functioning of PMS; and the positive and negative aspects concerning the integration of measurement, reporting and management practices.

6.7.1. Importance of performance management systems

When asked about the importance of PMS, all the interviews stated that they considered it either 'fundamental' or essential.
Performance management systems were considered important for a number of reasons, being the primary reason, according to the interviewees, to *inform decision-making*:

"The existence of faithful and replicable instruments to measure will enable less asymmetries and more justice in terms of decision-making." (A46)

"If we do not have indicators, we cannot make decisions concerning the alteration of the strategy. (...) Many times, decisions are based on subjective criteria and it is increasingly necessary to decide based on objective facts and well measured indicators." (AH62)

Several interviewees also considered PMS important for a *process of continuous improvement*:

"It should be intrinsic to the development of processes (...), in order to enable the readjustment always needed." (AH72)

"We can improve based on objective measures and not because there is a feeling that things are not going well." (NA58)

To some interviewees PMS also *give people a focus*, since their attention becomes focused on the objectives they have to accomplish, thus helping individuals and institutions to evolve: "If we want to evolve, we have to have the means to do it" (A80).

Other reasons pointed out by the interviewees were: to increase efficiency; to enhance transparency and increase accountability; and to increase competition by allowing comparisons.

Even though data analysis showed that most interviewees, from the four groups (academics, non-academic, students and external members), perceived PMS as something important, that helped organisations to focus and improve, some interviewees argued that the university and individuals should be careful with some of the unintended effects that could emerge with the introduction of PMS. According to them, measurement should not be seen as an end in itself, since sometimes metrics did not tell the whole story:

"With this fashion of measuring everything (...), we all gather around something that leads us nowhere and adds no value." (NA50)
Other interviewees believed that, by enabling comparisons, PMS could increase competition in an unhealthy way.

Some interviewees also argued that PMS could lead to deliberate strategies to conform to what was demanded, and gave examples of this type of behaviour:

"People make up indicators (...) and learn how to go around them and how to distinguish worthy indicators from other indicators." (AH71)

"Even now, with quotas, it is easy to determine internally who gets certain grades one year and who gets those grades in the following year. The system is undermined." (NA54)

"We create the indexes that we want! Those that suit us better! (...) And that is not very difficult." (NA57)

In the following section, the pressures felt by the interviewees to measure, report and manage performance will be discussed.

6.7.2. Pressures to measure, report and manage performance

The vast majority of the interviewees argued that there were several pressures, both internal and external, to measure, report and manage performance, being the latter the most influential ones (see Table 38).

<table>
<thead>
<tr>
<th>Types of pressures</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>External pressures</td>
<td>39</td>
</tr>
<tr>
<td>Internal pressures</td>
<td>25</td>
</tr>
</tbody>
</table>

Nevertheless, most interviewees still considered these pressures subtle, and argued that "(...) there should be more" (NA50), "(...) in order for things to work" (L82).

The next sections will explore the type of internal and external pressures felt by the interviewees.
6.7.2.1. External pressures

All interviewees stated that there were external pressures to measure, report and manage performance. Some argued that they were beneficial, or, otherwise, "(…) the way of acting would be more relaxed" (AH67). To these interviewees, the main external pressures came from the state, the market and Europe.

State

Most interviewees felt that the main pressures to measure came from the government and were imposed on universities by law: "Law imposed the big changes that are happening, otherwise no one would move!" (NA50). In fact, a lot of legislation came out since 2007, creating: a new evaluation framework for Portuguese HEIs; the National Agency for the Evaluation and Accreditation of Higher Education (A3ES), perceived to be the main pressure; a new legal regime for HEIs; and new Statutes for Academic Careers. Moreover, the imposition of SIADAP and QUAR to all public institutions, including universities, made the definition of objectives and indicators mandatory. These laws, which showed the increased interest of the government to know if public money was being well spent, led to huge reforms in the Portuguese higher education system:

"The government has 'turned off the tap' and said 'from now on there is only money based on indicators'." (AH71)

Additionally, and as stated in Section 6.2.1, when the university became a foundation, it had to sign a Contract-Programme with the government, which established a set of objectives and indicators that had to be accomplished:

"Now that we are a foundation, we will have new rules. (...) Even though it is not a company, it will not be the same thing." (A53)

In spite of these pressures, some interviewees believed this legislation did not correspond to an effective demand:

"Am I obliged to do it because of that? The proof I am not is that it has not been done yet! (...) Most organisations do not do evaluation, either those under the direct administration of the state or those under indirect administration (...). They do not do it!" (NA50)
"The state does not consolidate its accounts. (...) And what is the QUAR of the Ministry? I know the one of the General Directorate, but I do not know the Ministry's QUAR (...). I would like the Ministry to demand things more systemically." (NA54)

**Market**

Even though some interviewees believed the market had not a strong influence in Portugal and that it had not influenced what happened inside the university, almost all agreed that the competition between universities increased, and some even argued that this competition had "(…) benefited universities and other sectors of the Portuguese economy" (NA55). To the interviewees: "(…) the number of students is decreasing and the students that exist are just those. (...) We are competing for the same universe" (AH67). Actually, some departments struggled and others are struggling to get students. That was why a number of interviewees mentioned that attracting students became an important issue and that universities felt the pressure to be better, which meant "(…) reinforcing their marketing (…)" (A43) and "(…) image (…)" (A80):

"It is interesting to see the level of communication of universities now. Before, there was no communication because universities were at the top (...). Today, there is competition, isn't there? Generalised competition. There are marketing strategies and communication strategies." (S77)

Moreover, some departments started to involve primary and secondary education students in their activities and to visit secondary schools regularly. In order to attract students, some interviewees highlighted the importance of measuring performance and of showing good performance:

"If we do not show good indicators to the exterior, we will not be able to attract good students." (S75)

"It is important for the university to show that it measures." (A80)

"Performance evaluation can give good indicators (...) that may bring more revenues from outside and increase the visibility, not only nationally, but also internationally." (AH65)

Additionally, society started to demand more accountability from public institutions, especially educational ones:
"We have to be accountable to taxpayers, to justify the money spent."
(S75)

"There is a public environment that makes it difficult for more traditional sectors to say 'I do not want to be evaluated'. From that point of view, evaluation, at least as a political symbol, cannot be turned down. (...) The public opinion exerts pressure and, from that point of view, any governmental action that imposes measures will have their support."
(AH68)

Finally, a few interviewees argued that it was fashionable to measure:

"Society wants to evaluate everything, to standardise everything and to 'mcdonalise' everything." (AH64)

To a number of interviewees, it was almost certain that evaluation would lead to a hierarchy: "Families will prefer those universities that are well ranked" (AH72). In fact, some interviewees argued that there had been an increased interest of the media for quantitative data, even though not all interviewees agreed with this trend: "They (talking about rankings) are dangerous. They can kill an institution" (A44). Nevertheless, to most interviewees:

"Rankings are still not that important [in Portugal]. (...) Even though we are walking towards that, it is still not very relevant for decision-making."
(AH68)

Europe

The European Commission published a modernisation agenda for universities, which was welcomed by member states and the main stakeholders in higher education. The main fields of reform were: curricular reform (also promoted through the Bologna Process); governance reform, accomplished through more university autonomy, strategic partnerships (e.g. with businesses) and quality assurance; and funding reform, which meant finding diversified sources of income better linked to performance (Communication from the Commission to the Council and the European Parliament 2006 – see Annex 2). It became clear that the implementation of these reforms needed to be assessed, thus demanding increased measurement. In fact, several interviewees mentioned the pressure exerted by European policy to measure:
"There have been international pressures (...) mainly European [ones]." (A47)

"Bologna brought a lot of changes." (AH68)

"If we look at the European rankings where are we? And if we are not there, why is that? (...) In order to be there, we have to improve, because we will be evaluated by international accreditation agencies." (AH52)

6.7.2.2. **Internal pressures**

When the university started to grow, it realised it needed more quality. Some interviewees argued that the quality efforts put some pressure on the measurement, reporting and management of performance. To an interviewee, the university needed to measure for two reasons:

"To improve, and to become an institution of reference, so that it gets Chinese, Dutch and African students. Any countries that know what they are doing do not send students to institutions that no one knows about." (A42)

Thus, the majority of the interviewees stated that the Rectory and the central administration were pressuring units to prepare for what was coming: "(...) by anticipating certain actions, they will be prepared and able to respond more quickly" (AH69). For example, the university chose to be evaluated by EUA.

Furthermore, when it became a foundation, the university started to feel an increased pressure to measure, in order to see if the objectives established in the Contract-Programme were being achieved. Plus, according to some interviewees, the shortage of funds, enhanced by the international economic downturn and governmental financial cuts, and the will to build a stronger image, also made the university realise that it needed to measure and manage things more.

Even though many interviewees pointed out several types of internal pressures and motivations to measure, others argued: "(...) there are no real internal pressures" (NA50), or otherwise a PMS would already have been implemented.

Section 6.7.3 will look at the factors perceived to influence the implementation and functioning of PMS.
6.7.3. Factors that can influence PMS

The interviewees pointed out several factors believed to influence, either negatively or positively, the introduction and functioning of PMS. On the negative side, the factor most referred to was the lack of evaluation culture:

"Portugal does not have an evaluation culture. Our society does not have an evaluation culture (...) and so, evaluation is seen as a negative thing." (AH72)

Most interviewees agreed that the institutional culture could not be changed overnight and that, probably, "(...) the academic environment [was] not the most favourable for that" (A80).

A number of interviewees also highlighted resistance to changes. According to them, employees (both academics and non-academics) tended to dislike new systems, being difficult to convince them about the benefits brought on by the introduction of a PMS, especially if it brought extra work and bureaucracy. To them, this resistance could be due to: inertia, meaning that there could be a lack of will to change, being, in this case, "(...) very difficult (...) to mobilise people" (A48); or difficulties of adaptation to new systems.

Other interviewees mentioned the fact that too many changes were happening at the same time, giving employees a sense of insecurity:

"We are in a period of so many great changes that the first thing we want, me inclusively, is to ensure that the basic gets done within the department and that the transition to Bologna is done. (...) There is no point in dedicating our time, that is scarce, to performance evaluation methods, if they are not taken very seriously." (AH68)

To some interviewees the lack of resources also influenced the implementation of PMS negatively. According to them, even though, sometimes, the university would like to have more people involved in the development and introduction of PMS that was not possible due to financial constraints: "It is a relatively small team (...) and there are many different requests (...). This creates difficulties" (NA60).

The unclear Teaching Staff Statutes were also considered a drawback to the implementation of a PMS: "Who evaluates whom? (...) "I do not think that the new Statutes (...) from what I have heard (...) will change things substantially" (A46).
Finally, a few interviewees mentioned the *hierarchical administrative structure*, believing that a flatter administrative structure, with less hierarchical levels, would enable faster and better decision-making:

"The is a very vertical administrative structure. (…) The ambition of a non-academic member of staff here is to get to the end of the day and send an official letter to the service next door that has in the first page the following sentence 'please find enclosed'." (A51)

On the positive side, several factors were mentioned, especially *strong leadership*. According to several interviewees, from all groups, top managers had to be interested in implementing a PMS: "(…) there has to be a strong leadership of the process (…) recognised by everyone" (AH69).

Other interviewees mentioned the need to *build an evaluative culture within the organisation*. To them, PMS would only succeed in an institution if they were incorporated into institutional practices as something natural and as instruments to improve both individual and institutional performances:

"People have to perceive [PMS] as something fundamental for the functioning of the institution." (A51)

The need to *introduce the system step-by-step*, to *have a simple system*, and the existence of a *centralised IT system*, were also regarded by a number of interviewees as essential for a well-built and well-functioning PMS:

"Performance management systems should be implemented step-by-step and not in an abrupt way. Give it time to mature." (NA54)

"The simpler the system, the easiest it is to implement." (AH63)

"It would be fundamental to have a centralised and well-organised IT system." (AH62)

Additionally, the importance of having *excellent employees* was also considered extremely important by some interviewees.

Finally, a few interviewees regarded the *legal obligation* to implement measurement, reporting and management practices as something positive.

Next, the perceived strengths and weaknesses of the PMS will be discussed.
6.7.4. **Strengths and weaknesses of the PMS**

Similarly to what happened in the Warwick case, although the majority of the interviewees did not recognise the existence of a fully developed PMS as such, they reported the existence of several measurement, reporting and management practices in different areas across the university (as seen in previous sections). Therefore, when discussing the strengths and weaknesses of the PMS, interviewees were referring to the existing practices (see Table 39).

<table>
<thead>
<tr>
<th>Table 39 – Strengths and weaknesses of the PMS at UA</th>
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<tbody>
<tr>
<td><strong>n = 29</strong></td>
</tr>
<tr>
<td>Strengths</td>
</tr>
<tr>
<td>Weaknesses</td>
</tr>
</tbody>
</table>

**6.7.4.1. Strengths**

The major strength pinpointed by the interviewees was the existence of efforts to measure: "We are starting. We are experimenting" (AH52). They gave examples of good practices: the Quality Assurance System (SGQ) that had been developed; the evaluation of research, "(… ) which is well established" (AH64); and the evaluation of finances, "(…) which is solid" (AH65).

Some interviewees also mentioned as strength, the internal awareness of the need to evaluate and the importance attributed to quality: "That is clearly a strength and facilitates the implementation of such a system" (A43). This issue was not consensual among the interviewees, since some considered the inexistence of an evaluative culture as a weakness, as it will be seen in the next section.

Another strength pointed out by the interviewees (all non-academics) was the university's matrix structure, since it allowed some coherence and took advantage of a series of synergies.

Finally, a few interviewees mentioned the good external image that the university was able to project, even though sometimes that did not correspond to the reality: "I have
participated in some things that I know are not well done, but because these services are provided by the university, the clients perceive [them] as excellent" (NA54).

6.7.4.2. Weaknesses

In terms of weaknesses, several interviewees recognised the need to improve the measurement of several areas. To some, teaching and learning still had to improve: "I do not know if those surveys are the most adequate" (AH49). Others argued that there should be some improvement in the measurement of research success, stating that a database that compared the productivity of research units should be built. Moreover, to a number of interviewees, the impact of the university on society should also be assessed, not only in terms of revenue generated, but also in terms of the quality of the service provided and client satisfaction:

"Society does not perceive the added value of the university (...) and we do not give them indicators to show them [that value] (...). When I tell entrepreneurs that the salaries of the university are around fifty million Euros, they gawk." (A46)

Other interviewees also believed that: academics should be assessed and not only in terms of research; the evaluation of non-academics should become less complex and bureaucratic; links to alumni should be improved and their professional and academic track followed; and the degree of satisfaction of employers should also be assessed.

Apart from the problems reported in the measurement of some areas, other weaknesses were pointed out. Some interviewees stated that the measurement processes had not been completely internalized yet: "The system is disintegrated" (AH72). To them, procedures were not well established and dissemination was considered weak. In fact, the level of communication was defined as poor at different levels. For example, to the interviewees, the main goals of the strategy should be "(...) assumed and communicated in an explicit way" (NA58).

Other interviewees complained about the lack of an integrated vision and about the lack of an evaluation culture within the university:

"There is not an integrated policy or an integrated vision." (A80)
"In our culture there is not an evaluation tradition. Therefore, people are very afraid when they see all the indicators. They retract because they imagine that they are going to lose their position... that there will be punishments. That's how people think." (AH70)

Moreover, most of the instruments that were used to assess performance (e.g. SIADAP and SGQ) were considered too bureaucratic and administrative: "The system worries so much about correcting mistakes that does not have time to produce results" (AH66).

A number of interviewees also mentioned the lack of training of those who were trying to implement those systems, especially in terms of defining objectives and indicators:

"The implementation of a performance management system is the most complicated part of the system (...), because normally those who define the objectives and the indicators (...), and evaluate, are people that do not have specific training." (AH65)

Additionally, a few interviewees also complained about the inexistence of consequences, discouraging people from participating and implementing evaluation procedures. To a non-academic, the culture that existed in public administration de-compromised institutions: "There will always be someone who will pay the bill in the end. (...) Within this framework resources will never be optimized" (NA50).

Finally, some interviewees mentioned the lack of an integrated system that would store all the performance information: "We still do not have information systems capable of storing all the information wanted (...) [and] indicators can only be defined if we have that database" (NA60).

The following section will look at the interviewees' views on the way the university was governed and managed.

6.8. Governance and management structures

This section analyses the interviewees' perceptions on the existing governance and management structures, namely the type and composition of governing and management bodies and their strengths and weaknesses, and on the key actors in the governance and management of the university (academics, non-academics, students and external
members), namely in relation to: their influence on decision-making; the relationship between academics and non-academics; and their position towards PMS.

6.8.1. **Characterisation of governing and management bodies**

By the time the interviews were conducted the old structure still prevailed. Therefore, the perceptions of the interviewees concerning the new bodies were based on what they expected it to be. The interviewees took into consideration the meetings they had been to, documents read, and discussions held with colleagues concerning the subject.

6.8.1.1. **General Council**

Even though there was no consensus among the interviewees, the majority agreed with the composition of the General Council, believing that the quality of the people was more important than quantity:

"It is well balanced." (A43)

"Its members represent the three groups of the university (...) and the surrounding society." (AH72)

Some interviewees argued that it was positive not to have everyone represented, because this way people were representing the university and not the interests of their units.

Concerning external members, most interviewees agreed with their inclusion in the General Council: "It works well in other countries and in the Anglo-Saxon world" (AH62), presenting several reasons for their presence in governing bodies: they bring in other visions and take the university outside; they are free to express their opinion since they do not have an hierarchical relationship with other groups; they bring in balance; they can be an asset in terms of direction and strategic planning; they can be future employers of students; and they raise the accountability of the university. Several quotes are illustrative of the reasons presented:

"Society will be fundamental for the development of the university." (A48)

"They help to create bonds and synergies with the world." (NA56)
"(Taking about the fact of the President of the General Council being an external member) If it was a member of the university (...) there would be two presidents of the Council or two rectors. If they agreed everything would be okay. On the first day they disagreed (...) there would be an imbalance inside the university." (A42)

"Having the executive power accountable to a body that has a strong external membership is extremely positive." (L81)

Even though most interviewees agreed with the increased participation of external members in governing bodies, some believed there should be some care in the choice of those members, who: should be the best; come from different areas; should not be alumni or former academics; and should be chosen independently of the Rector's choice:

"We have to choose the best." (A42)

"It would be profoundly negative if five of these individuals were engineers (...). Those five people have to have different sensitivities, in order to portray (...) what society wants." (AH52)

"I agree that former academics are external members of other university's bodies, and vice-versa. Now... a retired academic that comes up as an external member because he is no longer professor? I think that is an adulteration of the game." (A46)

"They should be chosen independently of the Rector's choice." (A80)

To all these interviewees, it would not be easy to find people with these characteristics, not only because they are busy, but also because other universities that started to co-opt earlier were able to choose first. Nevertheless, interestingly, to an external member more was needed than just increasing the inclusion of external members in governing bodies:

"Cultural changes are needed (...). Otherwise, external members will be mere decorative figures. (...) External members can be instruments to stimulate, accompany and assist or they can be mere decorative elements." (L81)

In terms of non-academics, and even though there was only one in the General Council, a few interviewees believed this number was right, since they did not interfere with the process of teaching and learning or with research: "They have a hierarchical relationship that may influence their opinions" (S75).
A few interviewees also agreed with the number of students (3) in the General Council, especially because all the subsystems were represented (university undergraduate degrees, polytechnic undergraduate degrees and postgraduate degrees).

Finally, a couple of academics agreed with the number of academics and researchers (10) in this body, if they were in alignment with external members: "Otherwise there will be trouble" (A53).

Even though most interviewees were happy with the composition of the General Council, a number of interviewees pointed out some problems. To begin with, a few of them claimed that the size of this body was too small:

"Nineteen is too small... too limited, because that means leaving an important component, that makes the machine work, which is non-academic staff, represented by one member only." (NA63)

In fact, some interviewees, both academics and non-academics, agreed that non-academic members of staff should be more represented in this body, especially given the increased need for this staff. Other interviewees, including a couple of non-academics, disagreed with this vision, believing that non-academic staff should not even sit in governing bodies. The strongest opinion came unexpectedly from a non-academic:

"Why on earth should non-academic staff, that is part of support services, that is here to work and to obey orders, be part of governing bodies?! Non-academic staff should not govern the house. (...) Support services have to support and that is it." (NA50)

In relation to external members, a couple of interviewees thought they were excessively represented.

Also, some interviewees felt the number of students was not correct, even though opinions differed. Some students believed they should be more represented because universities did not exist without them, and some academics argued that the number of students was too high:

"I do not like students with power (...). The number of students should always be inferior to the number of non-academic members of staff. (...) They are students... they are here to learn. They should have rights (...), but in a simple body where they could talk." (AH70)
Students also complained about the absence of the Students' Union from the new governing bodies: "The President of the Students' Union will always feel compelled to run for a position in the General Council" (S75).

6.8.1.2. Management Council

In terms of the Management Council, every interviewee agreed with its composition. Only a student complained about the absence of a student there: "The presence of the President of the Students' Union in the former Administrative Council was an added value, especially in matters related to students" (S77).

6.8.1.3. Scientific Council

The new Scientific Council was reduced to 33 members: "Now there [is] a list and people have to show their capabilities to be there" (A45).

Some heads of department complained about the non-representativeness of every department in the new body:

"Not every department will be represented in the thirty-three." (AH52)

"The Scientific Council should have all areas represented." (AH67)

"RJIES was made for universities with faculties. (...) Each faculty has its Scientific Council and everything works fine. (...) Since the University of Aveiro does not have faculties, it had to create a single Scientific Council that, facing restrictions concerning the number of members, means that not everyone will be represented." (A80)

6.8.1.4. Pedagogic Council

Similarly to what happened with the Scientific Council, some interviewees also complained about the non-representativeness of all departments in the 25: "We went from one extreme to the other (...). All areas should be represented" (AH67). To an academic: "(...) the Rector will have to mobilize Degree Committees to ensure their participation, otherwise things will not work" (AH52).
In the next section, the perceived strengths and weaknesses of the existing governance and management structures will be discussed.

6.8.2. **Strengths and weaknesses of the governing and management bodies**

6.8.2.1. **Strengths**

In relation to the new governance structure, the majority of the interviewees perceived the change to be positive, since the new structure was considered: simpler; more representative of the university's interests; more open to the outside world; more efficient; with a clearer leadership structure; and more adequate for strategic decision-making. Several interviewees discussed the strengths of the new structure:

"Things are more structured now." (NA56)

"The Rector is [now held] more accountable." (S77)

"It leaves time for coordination bodies (talking about the Scientific and the Pedagogic Council) to do exactly what they should (...), which is understanding the quality of teaching; if the people doing that are the right ones (...); what is the scientific policy of the university. And that is what they should be doing!" (A80)

"It will probably be easier to have twenty out of twenty-five people read the documents than three hundred." (A51)

"These bodies (talking about coordination bodies) are now unique and before they were not. They were replicated at departmental level." (A80)

Interviewees, from all groups, believed the bodies' smaller size to increase efficiency, since it made them more flexible, dynamic and operational. Moreover, the existence of a more direct line of communication between the Rector and departmental directors was perceived to speed decision-making and make management more agile.

6.8.2.2. **Weaknesses**

In relation to the new governance structure, interviewees identified several disadvantages. To most of them, it decreased participation and there was the danger of closing the university to a restrict group of people:
"There will be less people involved in decision-making and (...) there will probably be less people that understand what the strategy of the university is, if nothing is done about it." (A80)

A number of interviewees argued that the new structure was less democratic in terms of representativeness. They gave an example: before, the Rector used to be elected by the entire community, then by a house of representatives, which reduced the number of voters, and now that number was reduced even more.

To other interviewees, the new structure increased centralisation, with more power centred in the Rector, and disabled the emergence of counter-powers, since the Rector had now more influence on the choice of departmental directors: "This structure does not allow for potential leaders to make themselves visible to the entire community" (AH64).

Finally, the new structure was, according to a few interviewees, too government directed. To them, with the creation of the Council of Curators, the government was believed to be increasingly participating in university's affairs.

In spite of the perceived disadvantages, most interviewees regarded the change in the governance structure as something positive, that would facilitate the definition of a strategy, make decision-making more agile, and enable the introduction of performance measurement, reporting and management practices.

Having looked at the interviewees' views on the governance and management structures of UA, the next section will focus on their perceptions concerning the key actors in the governance and management of the university. First, the perceived influence of actors on decision-making will be discussed; secondly, their perceptions on the relationship between academics and non-academics will be analysed; thirdly, their views on PMS will be presented; and fourthly, the changes that occurred in the role of the actors that sit in governing and management bodies – the four Estates (Academic, Administrative, Student and External Representatives) will be explained.
6.8.3. **Key actors in the governance and management of the university: the four Estates**

6.8.3.1. **Influence of actors on decision-making**

All the interviewees that discussed the influence of actors (academics, non-academics, students and external members) on decision-making stated that academics were the most influential group:

"I believe that academics are still the most influential group for most options taken." (A48)

“They (talking about academics) are the most powerful group in terms of decision-making.” (NA59)

Nevertheless, according to a few interviewees, mostly students, a lot of decisions were made taking into consideration students’ opinion:

"I really felt that I could influence decision-making often, even when things were not related to students... as long as I was able to consubstantiate what I was saying.” (S76)

Even though external members became more represented in the new structure, an academic argued: "(…) [they] still have very low weight" (A48).

In the following section, the way the interviewees regarded the relationship between academics and non-academics will be looked at.

6.8.3.2. **Relationship between academics and non-academics**

Data analysis showed there was no consensus concerning the relationship between academics and non-academics.

Some saw it as good: "I would generically classify that relationship as very open... healthy. (…) I don't see any tensions" (AH62). The reasons supporting this perception were the following: each party knowing its role and mutual respect.
Others argued that the relationship was bad, due to a number of reasons: ignorance of each other's roles; sense of superiority of academics; poor internal communication; and different treatment for academics and non-academics:

"There is an insufficient perception of the importance of non-academic members of staff... and that is general." (A46)

"Non-academics think academics do nothing." (S74)

"Academics feel superior to non-academic members of staff. Sometimes I do not think they treat non-academics with the due respect." (AH49)

"If you go to Christmas reunions and other events... who do you see there? Non-academic members of staff." (NA59)

"The university should improve the internal communication a lot." (NA58)

"Even though I may be right, I know that if I do certain things [to academics], someone will come to rescue them and I will have to draw back!" (NA59)

To a number of interviewees, the other reason justifying the bad relationship between academics and non-academics was the lack of a well-defined hierarchy. An interviewee gave an example: "Sometimes more than one Vice-Rector asks for things at the same time, claiming that their quest is more important than the other. What should I do? Which Vice-Rector is in charge?" (NA59).

Even though some considered it good and others bad, according to the majority of the interviewees, the relationship between academics and non-academics varied. To them, it depended on: the mutual understanding of each other's roles; people's tempers; and personal relationships.

6.8.3.3. **Position towards performance management systems**

When asked about the position of the different groups that composed the governing and management bodies of the university (academics, non-academics, students and external members) towards PMS, most interviewees agreed that the groups that would be more favourable to the introduction of a PMS would be external members and students. The first, because "(...) they come from the private sector, and probably that is already being
done in their companies" (AH52). The latter, because "(...) they will like to see their professors and non-academic members of staff evaluated" (A51).

The vast majority of the interviewees also agreed that academics would be the group that would most likely present more resistance to the introduction of a PMS:

"They do not accept evaluation, especially individual assessment, because they already do doctorates, masters, and they have to apply for posts." (NA56)

"It is like doctors or judges." (NA59)

In fact, some academics argued that they feared the unknown: "Academics are not used to it" (AH67).

A few interviewees, mostly heads of department, also believed non-academics could be against PMS and some of the instruments used, namely SIADAP: "They see it more as a problem than as a management tool" (AH63).

In the next section, the changes that occurred in the roles of the four Estates (Academic, Administrative, Student and External Representatives) will be analysed.

6.8.3.4. Changes in the roles of the Estates

According to most interviewees, the increased pressures to measure changed the roles of the four Estates.

Academic Estate

Several interviewees argued that the role of being an academic changed. They stated that academics are now held more accountable for their actions, meaning they became increasingly assessed, mainly by their students (through SGQ). To an interviewee this did not mean they have lost their autonomy:

"I do not think they have lost their autonomy.... What they have now realised is that they cannot have the same future that academics had twenty or thirty years ago.... Today, an Assistant Professor does not know what chances he or she has to progress in his or her career." (A45)
To a number of interviewees, this uncertainty increased the competition between academics.

Moreover, academics felt they were increasingly asked to perform bureaucratic tasks, which deviated their attention from research and teaching, and for which they were not adequately rewarded in terms of career progression.

Although most interviewees agreed that academics were now more assessed (especially due to the introduction of the Student Survey), there seemed to be, according to them, little consequences for poor performers, rather than some not frequent 'internal reengineering' (e.g. attributing courses to other academics).

Additionally, academics also worried about having to 'share' their decision-making power with external members, whose role increased inside the university. Nevertheless, they were still believed to be the most powerful group: "It is obvious that at the end of the day, the power lies with academics" (AH49).

**Administrative Estate**

With the introduction of SIADAP, non-academic members of staff became more assessed than before. The introduction of this system raised competition and created a bad environment within services and departments, according to some interviewees. This group felt their efforts were not recognised and felt disappointed and discouraged. Moreover, similarly to academics, they felt the workload increased enormously and many of them highlighted the need to increase the number of non-academics in the university, especially when compared to the number of academics. Additionally, with the governance changes, their representativeness in university governing bodies was reduced to one member.

**Student Estate**

Students' roles and influences have changed over the years, especially since they started to be seen as 'consumers' of higher education. Therefore, in the last years, attracting students and maintaining them satisfied became a concern of every university.

In fact, and even though students always participated very actively in decision-making within this university, they became more influential in terms of assessment with the
introduction of SGQ. Actually, their opinions became the main tools used to assess teaching and learning. Nevertheless, most interviewees felt they were not very influential in terms of strategic management.

External Representatives Estate

Due to external demands (resulting first from European policy and later from RJIES) and to the internal need to improve quality and raise funds, the university felt, according to a number of interviewees, an urge to increasingly have external members participate in decision-making:

"What is behind these changes has to do more with a new paradigm, which is related to the need to open up universities to the exterior, to be more attentive to what goes on around them and worry more about the society that surrounds them... than with individual needs." (L81)

With the changes that occurred in the governance structure of the university, external members were now 30 per cent of the members sitting in the General Council, and chaired it. To some interviewees, they were co-opted by the university to participate in institutional life. Most of them were from the region and were chosen mainly because of their prestige and connections.

6.9. Summary of the findings at the University of Aveiro

Even though data analysis showed that UA had a strategy and that the indicators that resulted from the Contract-Programme and from the Contract of Confidence (both signed with the Portuguese government) were important elements of a strategic plan, it also revealed that there was not yet a formally devised strategic document, that looked at the university as a whole, with more structured actions, with targets, and a timetable for completion. Moreover, the Contract-Programme (the main strategic document) was not publicly available and the data collected from the interviews indicated that, with the exception of those working closer to the Rectory, the larger community did not know what the key objectives or targets of that Contract were. The absence of a formal strategic plan, with clear objectives derived from the 'Vision' and communicated to staff, made it difficult
to develop measures and targets that reflected those goals, thus complicating the implementation of a well-structured PMS.

Despite this shortcoming, which was recognised by the Rector on his webpage (see Section 6.3.1), there was a substantial increase in the measurement of performance in UA over the last years. Most areas were assessed, even though some interviewees did not agree with some of the instruments used to measure performance and argued that information was still very dispersed. The areas that lacked measurement were, according to the interviewees, third mission, employers and alumni, regarded as important, but particularly difficult to assess.

This increased level of measurement was greatly influenced by the external environment (see Figure 10), resulting mainly from the European policy, namely the Bologna Declaration; and from the state, which published a lot of legislation in the last years (see Annex 2). The new laws changed the Portuguese higher education system considerably. Additionally, the role of the market, even though minimal, started to show, as universities started to compete more for students. Therefore, it could be argued that the main pressures to measure came mainly from Europe and from the state, being little influenced by the market (the three external coordination mechanisms of the 'outer ring' of Figure 6).

Internally, the new Contract-Programme, which integrated some objectives, indicators and targets, led to a different attitude in terms of the need to measure performance. Interviewees also expected the external members of the General Council to push more towards the introduction of control mechanisms.

Concerning performance reporting, and according to the interviewees' perceptions, there was no systematic reporting in most of the areas of the university, unless these reports were externally demanded. Not surprisingly, given the low level of measurement, the areas where there was less reporting were third mission, employers and alumni.

Many of the interviewees also mentioned the lack of use of performance data, especially regarding individual performance of both academic and non-academic staff. The reasons presented were mainly related to the legal framework, which was considered very protective. Since most of the employees of the university were public servants, it was regarded as difficult to act upon poor performers, especially if they had tenure. Moreover, the existence of individual assessment was even questioned by some interviewees, given
the extreme difficulty to progress in the academic career in Portugal. The relevance of the assessment of the quality of teaching was also questioned by some students, who showed some reservations in filling in the surveys, given the lack of consequences.

These results suggest that the focus was on measurement, leading to the collection of some data with little reporting and even less action. Even though the majority of the interviewees regarded PMS as something positive, giving several examples of performance improvements, they also mentioned the existence of unintended effects, which included number fixation, negative competitiveness and deliberate strategies to conform to what was demanded.

These findings support the inexistence of a fully developed PMS at UA, since, in spite of the existence of measurement initiatives in most areas, like SGQ to assess teaching and learning and academics, there was still little reporting and a lack of management practices in some areas, namely regarding individual performance. Moreover, as explained above, the measurement process was not closely linked to the strategic goals, as it would be expected from a PMS (see Figure 10).

In terms of the factors believed to inhibit the introduction and functioning of PMS, the interviewees mentioned contextual factors (e.g. too many changes happening at the same time); cultural, since there was not, according to them, an evaluation and planning culture in Portugal; institutional, related to the lack of resources (financial, human and physical) and the lack of training for those who evaluated; and personal, in face of the resistance to changes, from both academics, who feared losing their 'academic freedom' to external members, and non-academic staff, who did not believe in the instrument used to assess their performance (SIADAP).

In relation to the factors considered to enable the introduction and functioning of PMS, the interviewees mentioned: the need for an external 'kick'; cultural factors, which included developing an 'evaluative culture' within the institution; the building of trust, accomplished through effective leadership, and the development of a clear and simple system, carefully introduced and communicated; the existence of a centralised IT system; and a focus on inputs, which meant hiring high quality people. In UA, the habit of bringing in high quality staff from other universities (both national and international) did not exist. The EUA team noted this in their report:
"There is an endogamous tendency in academic staff recruitment [in UA]. (...) 50 to 60 per cent of academic staff earned their doctorates in Aveiro. This is part of a national pattern and the compounded result of the Portuguese institution's behaviour, which reduces each institution's opportunity for exogamous recruitment. This issue will need attention at the level of the system" (EUA 2007).

In fact, in terms of the components of the PMS (see Figure 10), findings indicated a concern mainly with outputs, with several areas being measured (with the exception of third mission, alumni and employers). Data showed little preoccupation with inputs and processes, being outcomes also not measured, given the difficulties in doing it, as explained in Section 3.6.

In relation to the governance structure, although considered more representative, collegial and democratic, the previous structure (prior to RJIES) was regarded as inefficient and enormously time consuming, preventing decisions from being made faster and thus promoting ossification and making it more difficult to implement PMS. These criticisms were mainly due to the excessive number of decision-making bodies and their huge size, even though, many times, decisions were made in more agile bodies, such as the Senate Management and Planning Committee and the Scientific Council Coordinating Committee, and in the Rectory, which had a close relationship with most departments.

Even if it is still early to understand the real impact of the new structure (imposed on universities by law), it was generally regarded by the interviewees as more efficient, given the decrease in the number of committees and in their membership. Moreover, the leadership structure was considered clearer and the participation of the outside world bigger. The lighter, more centralised (the Rector became more powerful), and more externally participated structure was thought to enable more strategic decision-making and provide increased strategic coherence, which were considered fundamental for the introduction and functioning of a PMS.

Although, there were considerable changes in the university’s structure, essentially driven by European and national interests, the introduction of measurement, reporting and management practices also led to changes in the roles played by each one of the Estates involved in the governance and management of the university, with the exception of the Student Estate, who maintained relatively the same role in terms of decision-making.
In relation to the Academic Estate, the bureaucratic work demanded from academics, including work related to performance measurement, reporting and management, increased a lot and they were increasingly expected to perform other roles (e.g. management roles), which, according to them, left them less time to teach and research. Some academics also mentioned the possibility of a decline in the 'academic-voice' in institutional decision-making. Nevertheless, it was noted that they still had the most active voice in the university, especially in strategic decision-making, and that the 'collegial type' of coordination still persisted at this institution.

Concerning the Administrative Estate, and although non-academic staff were never very powerful inside the university, they were now almost not represented in the existing governing bodies (there was one non-academic member in the General Council).

In relation to the External Representatives Estate, the presence of external members increased significantly. In the previous governance structure there were two external representatives in the Senate, even though they felt they did not participate very much in strategic decision-making. Now, there are five external members in the most important decision-making body of the university – the General Council – and they chair this body.

After having analysed the external coordination mechanisms and the role and influence of the four Estates in decision-making, UA could be placed in the governance framework presented in Figure 6 (see Section 2.4.4.2).

The 'outer ring' of Figure 32 represents the role of the state and Europe as the main external coordination mechanisms, with the role of the market starting now to emerge.

The 'inner ring' represents the internal coordination exerted by the four Estates – Academic, Administrative, Student and External Representatives – and shows that even though the number of external members increased in the main governing body, the Academic Estate is still clearly the dominant one at UA.
In the next chapter, data from both cases will be crossed-analysed and discussed.
Cross-case analysis and discussion
In order to investigate the research aim, which is to explore how universities are measuring, reporting and managing performance and how governance structures relate to it, four specific research questions were posed at the end of Section 3.7.2: How have the changes in different higher education systems impacted on the governance of universities? How are PMS working inside universities? What factors are influencing the implementation and functioning of PMS in universities? How do governance structures influence and are influenced by the implementation and functioning of PMS in universities? In this chapter, a cross-case analysis of the data collected at the University of Warwick and at the University of Aveiro will be conducted and the main findings of this analysis will be discussed. This chapter is organised in light of the four questions delineated for the research. In Section 7.1, the impact of the changes that occurred in different higher education systems on the governance of universities will be discussed. Section 7.2 will focus on the commonalities and differences between PMS at UW and UA. In Section 7.3, the factors perceived to influence the introduction and function of PMS in universities will be examined. And finally, in Section 7.4, the links between governance structures and PMS will be established.

7.1. Impact of the changes in different higher education systems on the governance of universities

Literature review and documentary analysis showed that European higher education has gone through several reforms for more than two decades (Neave 1988; Stensaker et al. 2007), being considerably influenced by the changes that took place in the general public sector (discussed in Section 1.2).
As seen in Section 1.3.2, higher education reforms occurred partly due to the budgetary consequences of the continuous increase in the size of public higher education (Bleiklie and Kogan 2007), resulting in concerns about costs, value for money and efficiency. The massification of higher education, which started in the UK and in Portugal in the 1980s, led to the introduction of new steering mechanisms. These advocated a shift from state control to state supervision (van Vught 1989).

In fact, some authors (e.g. van Vught 1989) argued that a new state model would be more effective than the traditional state-control model. The basic idea would be to strengthen self-management in the name of efficiency and responsiveness to consumers’ demands. To this idea also contributed: the spread of NPM ideologies and the implementation of NPM approaches; and the ideological shift towards the market as a coordination mechanism, with authors like Teixeira et al. (2004) claiming that, today, in some countries, it seems the state is steering the market.

Indeed, the concept of ‘steering from a distance' was regarded as an important governance principle at the time (Neave and van Vught 1991), redefining the role of the state in the provision of higher education. In Portugal, for example, the development of the private sector was encouraged in order to overcome the insufficient supply of state higher education and many private HEIs were created. In other countries, such as the UK, the visible cuts made in the budgets of some UK universities in 1981, as seen in Section 5.1.1, led universities to search for new forms of funding. Moreover, reforms aimed at reinforcing the executive leadership of universities were introduced. In the UK, for example, the 1985 Green Paper (see Annex 2) stressed the need for positive attitudes towards business, and, in 1985, the Jarratt Report (see Annex 2) advocated new managerial models of governance in universities, designed to strengthen universities' capacity to act collectively and decisively in the face of financial pressures. Universities were equipped with managerial instruments (e.g. strategic plans, audits), tools (e.g. management software), indicators (Cave and Hanney 1992) and practices. As a result, new labels and images were proposed for HEIs (Stensaker 2006). To Stensaker (2006), the 'corporate enterprise' (Bleiklie 1998) and the 'entrepreneurial university' (Clark 1998) are only some of the new organisational ideals, which emphasise the need for more dynamic and adaptive institutions.
Nevertheless, this shift did not mean that governments did not play a strong and vital role in higher education systems (Goedegebuure et al. 1994). Actually, in a study commissioned by EUA to look at university autonomy in Europe, Estermann and Nokkala (2009) found out that national governments still retained "a central role in the regulation of higher education systems, and in a large number of countries, still [exerted] direct control" (ibid: 6). The CHEPS Consortium reached similar conclusions in a study of higher education governance reform across Europe, conducted in 2008. Results of the study indicated that while institutional autonomy had been enhanced in general, "many governmental reform efforts [could] imply even stronger state regulation than in the past" (CHEPS Consortium 2008). Thus, 'steering from a distance' did not mean a diminishing role for government, but rather a changing one. In fact, traditional tools did not disappear (Bleiklie 2000), remaining, for example, the governing by rules current in many countries (e.g. in Portugal, where many changes were implemented by decree – see Figure 22). However, new instruments of governance flourished (Ferlie et al. 2008). New intermediary bodies, such as research councils, funding councils and quality and accreditation agencies were created (the British funding councils, the research councils and the QAA are good examples of this distribution of power in the UK; and the recently created A3ES also an example of this practice in the Portuguese case) (Neave 2009), and, in some higher education systems, ex-ante control was abandoned in favour of ex-post evaluation, leading to the expansion of assessment/evaluation bodies (e.g. A3ES in the Portuguese case) (Ferlie et al. 2008; Neave 2009). Rather than a disengagement of the state, this reflects a new form of state engagement in higher education. Universities are being increasingly identified as 'key actors' in 'knowledge societies', being on the policy agenda in every country (Ferlie et al. 2008). For example, in the Contract of Confidence signed with universities and polytechnics in 2010, the Portuguese government reaffirmed the need to develop higher education and science, since they are "fundamental instruments for the country's future" (Contract of Confidence: Universities 2010 – see Annex 2).

Moreover, the nation states also seem to be losing functions, legitimacy and authority to the supra-national level (namely EU), where policy agendas and strategic choices are increasingly defined. In reality, globalisation, internationalisation and Europeanisation challenged the national boundaries of higher education systems, posing new questions to

governments and HEIs (CHEPS Consortium 2008). Several initiatives led to this blurring of frontiers (see Annex 2). Examples include: intergovernmental initiatives, such as the Bologna Declaration, focused on creating an European Higher Education Area (EHEA) by 2010 (signed, amongst others, by the UK and Portugal); the Lisbon Strategy, aimed at developing Europe into one of the strongholds of the new knowledge economy, where universities play an important role; EU framework programmes, encouraging HEIs to engage in large scale partnerships across national boundaries; the views and initiatives of the European Commission, expressed in several communiqués; OECD's initiatives to develop international benchmarking and best practices.

With HEIs having to engage with a wider range of stakeholders and with the distribution of power becoming more diffused and pluralist (Ferlie et al. 2008), several changes occurred in the governance of different higher education systems and institutions, being a common trend the widening of institutional autonomy (Eurydice 2008; OECD 2008). This increased level of autonomy meant high levels of accountability, as well as more detailed procedures of quality assurance (CHEPS Consortium 2008). Some authors (e.g. Rhodes 1997; Frederickson 2005) described this redefinition of the role of the state, where nation states are losing functions, legitimacy and authority to an increased range of institutional authors, as the 'hollowing out' of the nation state and the emergence of a 'Network Governance' mode of public management (Rhodes 1996; Jones et al. 1997; Goldsmith and Eggers 2004; Klijn 2005; Provan and Kenis 2008) or of a 'New Public Governance' (Osborne 2006), as described in Section 1.2.3.

In the UK, where NPM reforms emerged early, under the Thatcher government of the 1980s, several changes happened, as seen in Section 5.1.1. With the budgetary constraints of 1981, universities started to look for new sources of funding. Universities like Warwick developed ways to raise extra money, such as the 'save half, make half policy' or the 'Earning Income Policy' (discussed in Section 5.2.1). Later, tuition fees were implemented at a national level, empowering students as consumers. Increasing demands for quality, led to the implementation of new mechanisms to measure the performance of both teaching and research (the QAA's assessment and the RAE), with funds being attributed to the highest performing HEIs. This stimulated competition for students and research funding between HEIs, increasingly developing a 'higher education market'.
As a result of these changes, in terms of governance, UK universities became relatively autonomous and independent from the state. CHEPS Consortium (2008) defines four dimensions of institutional autonomy, based on Verhoest et al.'s (2004) taxonomy of institutional autonomy. They distinguish between: organisational autonomy, which refers to the capacity of HEIs to decide for themselves on their internal authority and responsibility and accountability structures, without any external interference; policy autonomy, which is the ability to constitute their own academic community in terms of student and staff and to determine their teaching and research programmes; interventional autonomy, which is the extent to which organisations are free from ex-post accountability requirements (Verhoest et al. 2004); and financial autonomy, related to the ability to manage their own financial affairs.

In terms of organisational autonomy, UK universities have some autonomy in changing their governance structures, being able to determine internally, for example, the number of Council members, or, in the case of the University of Warwick, the inclusion of a student in the Steering Committee.

In relation to policy autonomy, UK universities are responsible for determining their strategic direction (UK HE International Unit 2011). They are free to select staff and determine their salary. Moreover, they can select their own students and determine the number of study places; and they have autonomy to decide on teaching and research programmes.

As far as interventional autonomy is concerned, UK universities have to report formally on some areas, namely on the quality of teaching and research, and on finances, as showed in Section 5.5, where the reporting of performance per area at the University of Warwick was analysed.

In terms of financial autonomy, and even though UK universities receive a considerable amount of government funding, either through funding bodies or research bodies (as seen in Section 5.1.4), they have high autonomy in managing their own financial affairs. The UK's HEIs are not owned or run by the government.

As a result of the changes that occurred in the UK higher education system, namely the changing relationship between the government and HEIs, the governance structure of most UK universities was altered, with many of the existing university governing bodies
changing and some new bodies being established (De Boer et al. 2010). Following the recommendations of the Dearing Report and the Lambert Review (see Annex 2), the positions of the vice-chancellor and councils were strengthened, becoming the surveillance function of the Council more prominent and the relationships between vice-chancellors and chairs of the Council and other strategically crucial committees more intensive (Bargh et al. 2000). In fact, there seemed to be a strengthening of institutional leadership, with many powers being located at the top level of institutions and with university leaders often running the institution as chief executive officers, with a strong focus on strategic planning, management by objectives and results (Bleiklie and Kogan 2007), even if, sometimes, in reality, they did not always have the possibility to exploit these enhanced powers (CHEPS Consortium 2008).

Moreover, as advised in the Dearing Report and in the Lambert Review (see Annex 2), the role of external members in the governance of HEIs increased, being the majority in the Council and participating in other important committees (e.g. the Finance and General Purposes Committee and the Audit Committee at UW); and the size of university councils was also reviewed in an attempt to reduce it. In Warwick, for example, the membership of the University Council was reduced to 33 members.

Additionally, with the Council and the Senate only meeting a few times a year, specific committees that met on a regular basis were created in order to facilitate the functioning of universities (e.g. the Steering Committee, the Finance and General Purposes Committee, and the Audit Committee, in UW).

In Portugal, "due largely to the historical record of the hegemonic administrative law paradigm, public administration continues to maintain a strong legal tradition that emphasizes both normative and procedural dimensions" (Tavares and Alves 2006: 392). In fact, most of the changes that happened both in the public sector and in higher education were mandated by decree.

In relation to higher education, the major changes occurred after the signing of the Bologna Declaration in 1999, which foresaw the creation of a European Higher Education Area (EHEA), and especially after the commitment to adopt the Standards and Guidelines for Quality Assurance in the EHEA. Actually, since then, a lot of legislation came out, especially in the last years (see Annex 2), changing the Portuguese higher education
system considerably. The new laws introduced, among others, a new evaluation framework (SIADAP), a new legal regime (RJIES), new Teaching Staff Statutes, and created an Accreditation Agency (A3ES).

In terms of organisational autonomy, the government determined, through RJIES, the governance structure of HEIs, namely the main governing and coordination bodies, giving institutions some liberty to make decisions concerning, for example, the number of Council members (between 15 and 35 – UA decided to have 19), the inclusion or not of a member of the non-academic staff in the Council (UA opted for having one), or the maintenance of the Academic Senate (which UA decided to drop).

Regarding policy autonomy, Portuguese universities have to open public recruitment competitions to select their staff and are unable to determine their salary, given that most university employees (both academic and non-academic) are public servants, thus having their salaries determined by law. In terms of student selection, there are numerous clausus, which limit the number of students per institution. In relation to teaching programmes, universities have to submit new programmes or changes to existing ones to A3ES. Concerning the contents and teaching methods of the programmes offered there is almost full autonomy.

As far as interventional autonomy is concerned, the formal ex-post accountability requirements are relatively low in Portuguese universities. The findings on the reporting of performance at the University of Aveiro (see Section 6.5) showed this.

In terms of financial autonomy, Portuguese universities do not have much autonomy in managing their own financial affairs, given their dependency on state funding. The universities that became public foundations subjected to private law, such as UA, became more autonomous in managing their finances.

All the changes that happened in the Portuguese higher education system influenced the way Portuguese universities are governed. In fact, the existing governing bodies (General Council, Management Council and the Rector), and the coordination bodies (the Scientific Council and the Pedagogic Council) were established by law, even though HEIs could make some choices, as explained above. Moreover, UA chose not to have faculties since the beginning, which is not the case in most other Portuguese public universities.
According to some interviewees, this enabled a closer line of communication between the Rectory and departments.

The new structure is leaner, given that the number of committees decreased, as well as their membership, and more centralised, with the Rector becoming more powerful. Moreover, there is a clearer leadership structure, which increases individual accountability. The Rector and heads of department are not elected as they use to be, but appointed. Moreover, the participation of external members increased, being the Council now chaired by one. Looking at the changes that occurred, it could be argued that the governance structure of Portuguese universities became closer to the British one, following the trend of most European universities (Rhoades 1992; Amaral et al. 2002; Amaral and Magalhães 2002): increased centralisation; stronger institutional leadership; appointment of Rectors and heads of department, instead of election; increased accountability; and increased participation of the outside world in the governance of the university.

7.2. Performance management systems at UW and UA: commonalities and differences

One of the issues that motivated this research was the will to understand how universities were measuring performance, reporting the data collected and using that information for improvement purposes. In order to investigate this issue, performance management was presented through a systems view (see Figure 10 – Section 3.7), using three main dimensions – measurement, reporting and management – and performance measures were defined within the input-process-output-outcome model (Dochy et al. 1990; Cave and Hanney 1992; Bouckaert and Halligan 2008b). This section is structured according to the three dimensions mentioned.

The analysis of the data collected both at the University of Aveiro and the University of Warwick showed an increase in the measurement of performance in both universities over the years. As a matter of fact, most areas were assessed in both institutions (see Table 40), albeit some interviewees complained about some of the measures and instruments used to assess performance.
Table 40 – Instruments/Measures used to assess performance at UW and UA

<table>
<thead>
<tr>
<th>Area</th>
<th>Type</th>
<th>UW</th>
<th>UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning</td>
<td>Internal</td>
<td>• Student surveys</td>
<td>• SGQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Internal database (e.g. retention rates, dropout rates)</td>
<td>• Internal database (e.g. success rates, failure rates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Curricular review</td>
<td>• Feedback forms</td>
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<td></td>
<td></td>
<td>• Annual review process by heads</td>
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<td></td>
<td></td>
<td>• Postgraduate Review Experience Survey</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Assessment performed by AQSC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Evaluation of new courses and modules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>• External audit performed by the QAA</td>
<td>• Accreditation process conducted by A3ES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• National Student Survey (NSS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Accreditation performed by PSRBs</td>
<td></td>
</tr>
<tr>
<td>Research and scholarship</td>
<td>Internal</td>
<td>• Internal databases (e.g. costs, outputs, grants, income generated)</td>
<td>• Internal databases (e.g. contracts signed, income generated)</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>• RAE</td>
<td>• Evaluation performed by FCT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• International citation databases</td>
<td>• International citation databases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• EU's evaluation system</td>
</tr>
<tr>
<td>Third mission</td>
<td>Internal</td>
<td>• Data on volunteer work</td>
<td>• Income generated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Income generated</td>
<td>• Patents registered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Directory of people’s links to external organisations</td>
<td>• Number of protocols and contracts signed and fulfilled</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>• HE-BCI Survey</td>
<td>• Number of businesses on campus</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Number of invitations for external events</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Number of events organised</td>
</tr>
<tr>
<td>Academic staff</td>
<td>Internal</td>
<td>• Student surveys</td>
<td>• SGQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Appraisal system</td>
<td>• Evaluation criteria when applying for posts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pulse Survey</td>
<td>• Internal database (e.g. number, gender)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Internal database (e.g. number, gender, research data, number of PhD students)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Recruitment process</td>
<td></td>
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<tr>
<td></td>
<td>External</td>
<td></td>
<td>• Automatic progression</td>
</tr>
<tr>
<td>Non-academic staff</td>
<td>Internal</td>
<td>• Pulse Survey</td>
<td>• SIADAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Appraisal system</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Internal database (e.g. number, gender)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>Internal</td>
<td>• Internal database (e.g. number, attendance rates)</td>
<td>• Measures of educational success (e.g. grades, success rates, failure rates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Measures of educational success (e.g. degree results, completion rates, retention rates)</td>
<td>• Internal database (e.g. number, attendance rates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recruitment process</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Student tutoring system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>---</td>
<td>• RAIDES</td>
</tr>
<tr>
<td>Support services</td>
<td>Internal</td>
<td>• ASDAR</td>
<td>• Satisfaction surveys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Complaints</td>
<td>• Evaluation system of non-academic staff</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>• International Student Barometer (ISB)</td>
<td>• Internal databases (collect general data on services)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• QUAR</td>
</tr>
<tr>
<td>Employers</td>
<td>Internal</td>
<td>• Internal database (e.g. employment information)</td>
<td>• Employers’ Survey</td>
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<tr>
<td></td>
<td></td>
<td>• Employment rate</td>
<td>• Internal database (e.g. contacts)</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>---</td>
<td>• Measures defined by external auditors (e.g. level of engagement with employers)</td>
</tr>
<tr>
<td>Alumni</td>
<td>Internal</td>
<td>• Fundraising activities</td>
<td>• Alumni Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Internal database (e.g. contacts)</td>
<td>• Internal databases (e.g. place of work)</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>• DLHE</td>
<td>---</td>
</tr>
<tr>
<td>Finance</td>
<td>Internal</td>
<td>• Financial measures</td>
<td>• Financial measures</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>---</td>
<td>• Budget and financial execution</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Measures defined by external assessors</td>
</tr>
</tbody>
</table>
Table 40 also shows that the instruments and measures used by both institutions to measure the performance of most areas were not that different, being most of them externally driven, that is used to prepare for external assessment exercises. For example, in the Portuguese case, the data collected internally on students was then sent to MCTES to be integrated into the Survey to the Record of Enrolled Students and Graduates in Higher Education – RAIDES, and the financial data collected was also sent to the Ministry of Finance. In the British case, the data gathered on teaching and learning was used by the QAA and the data on research integrated into the RAE.

Nevertheless, it can be stated that there were more externally imposed instruments and measures in the Portuguese case (e.g. SIADAP to assess the performance of non-academic staff; or QUAR to measure the performance of services) than in the British one (where even the RAE and the assessment performed by the QAA are voluntary, although most universities engage in these exercises in order to get state funding). These differences are arguably related to the nature of both higher education systems, namely in relation to the level of institutional autonomy (as explained in Section 7.1).

Being generally less autonomous from the state, even though, as Teixeira et al. (2004) argued, the state had been reducing its level of intrusive regulation and moving to a more supervisory role, it would be expected that Portuguese universities would be more under externally imposed instruments or measures than British ones.

The areas that seemed to be more thoroughly assessed were, according to the interviewees, finance and research and scholarship (in both cases) and non-academic staff (in the Portuguese case) (see Annexes 4 and 9). To the interviewees, finance was mainly measured because it was essential for institutional survival. As an interviewee stated: "(…) finance is the heart of everything" (NA41). The performance of research and scholarship was carefully assessed due to the need to prepare for two well-established research assessment exercises: the RAE in the UK, and the assessment performed by FCT in the Portuguese case. Both exercises influenced the amount of funding to be received by institutions, which represented an important slice of the overall income, thus being fundamental for each university's survival. Finally, non-academic staff's performance was considered highly measured by Portuguese interviewees, due to the implementation of an instrument imposed by the state on public servants – SIADAP (see Section 6.4.5).
The areas that lacked measurement in both universities were, according to the majority of the interviewees, third mission, employers and alumni, regarded as particularly difficult to measure, but considered important by all. Third mission was seen as exceptionally hard to assess due to its heterogeneous character, integrating a lot of activities; and links to employers and alumni consisted mainly of keeping a database of contacts, even though, in the British case, alumni were carefully looked at in financial terms, since they represented an increasingly important funding stream.

In relation to the type of measures used, and following the components of the system presented in Figure 10 (see Section 3.7), data analysis showed an excessive use of output measures, in both universities, particularly in UA. In fact, the instruments and measures used tended to focus more on what was being achieved, that is to say, the products of the institution (Cave and Hanney 1992) concerning, for example, research (e.g. number of publications, number of citations, research income) or teaching (e.g. student surveys at the end of a course or a semester). In UW there was, however, according to most of the interviewees, also a concern with the inputs and processes. Indeed, several interviewees referred to the careful selection of students and staff (inputs of the system), which could explain the success of the university. Moreover, some of the committees at UW – both at university and departmental levels (see Figure 18) –, kept close attention to the organisational and administrative aspects related to some areas of the university, namely teaching and learning, and research and scholarship.

There were no signs of outcomes being measured in either university, even though some interviewees acknowledged their importance. For example, different people mentioned the importance of measuring the impacts of third mission and of research on society. One interviewee even stated: "There is the scientific production on its own, but the impact of the research on the outside world is not measured" (L81). Eckel (2007: 88) also discussed the need to measure the "impact of the students' education on their personal, professional and civic lives". To Bouckaert and Halligan (2008b), the measurement of outcomes is particularly difficult and challenging, due to a number of reasons. The first is the fact that outcomes are generally thought of in qualitative terms, thus being difficult to measure. Furthermore, it takes a long time to understand, for example, the contribution of universities to the building of a well-educated society or their participation in economic development. This contribution is particularly difficult to assess given the influence that other external factors can have on outcomes (Boland and Fowler 2000).
Regarding the instruments and measures used to assess performance, these were mainly based on peer review in the Portuguese case. Peer review instruments were used, for example, in the allocation of research funding, through FCT, or to judge the quality of a programme, through A3ES. More recently, some universities started to develop tools, which are not based on peer review (e.g. UA developed a Quality Assurance System – SGQ – to assess the performance of teaching and learning and of academic staff). In the British case, and even though instruments and measures based on peer review were usually used (e.g. to assess the quality of teaching and learning; to assess the research quality; to judge the quality of a department, programme or course), PIs were also developed, being widely utilised to inform policy-making and institutional planning and strategy, according to HEFCE (2008). Even most of the data collected through peer review assessments was then incorporated into PIs. The analysis of the type of measures and instruments used in both universities thus confirms the position of the countries in the triangle of performance measures presented in Section 3.7.1. UA would be closer to the Peer Review corner and UW to the PIs corner. However, both HEIs seemed to show some interest in combining different performance measurement tools in the future for a better assessment of performance (e.g. associating PIs with peer review).

As far as the definition or choice of the instruments and measures was concerned, some of these instruments and measures were decided externally, in both cases. In terms of teaching and learning, for example, these instruments comprised the assessment performed by FCT (in UA) and by research councils (in UW), in terms of competitive research funding, and the RAE (in UW), in terms of basic funding. In relation to teaching and learning, the external instruments used integrated the assessment performed by A3ES (in UA) and by the QAA (in UW). Moreover, there were: the indicators defined by MCTES (in UA) and by HESA (in UW) for students and teaching and learning; the indicators defined by the Ministry of Finance for finance (in UA); SIADAP and QUAR, mandatory for non-academic staff and services, respectively (in UA); and the indicators established by EUA, when it evaluated Portuguese universities, and by other external assessors for different areas (e.g. Professional, Statutory and Regulatory Bodies – PSRBs – in the British case).

Even though departments had a fair degree of freedom in deciding which instruments and measures to use in UW (e.g. the centre did not impose the exact nature of feedback forms on departments), those measures had to comply with QAA, RAE and PSRBs' guidelines.
Therefore, measures regarding teaching and learning, research and scholarship, academic staff and students were defined in an interaction between departmental and central levels. Indeed, and although each department could decide individually on the measures used to assess these areas, some of the information had to be delivered to the central administration, who prepared it for external assessment exercises. After measures were defined, the Senate, for academic matters, and the Council had to confirm their appropriateness, although they rarely rejected them. Measures concerning non-academic staff, support services and finance, were mainly decided by the central administration, essentially by the Finance Office or by the Steering Committee and usually, as stated by an external member, 'rubberstamped' by the Council. Third mission, employers and alumni were hardly measured, although the few measures that existed were also developed by the central administration. At the time the interviews were conducted, a list of KPIs was being developed centrally, as a consequence of the new strategic plan, and also to comprise a request from the Council.

In the Portuguese case, the process of definition of measures was more centred in the Rectory, which defined most of the instruments and measures used by the university. In terms of teaching and learning and academics, it did so by developing SGQ. Moreover, it recently decided on the criteria that will be used to assess academic staff's performance (Regulation 489/2011, of 16 August). Departments also defined measures concerning academics, when they opened academic posts. Nevertheless, these measures had to meet some of the criteria established by the Scientific Council. The few measures used to assess third mission, employers and alumni were defined by the Rectory and by some departments, which voluntarily chose to assess these areas. Even though the instruments utilised to measure the performance of non-academic staff and support services were defined externally, service directors and heads of department had to establish the objectives and indicators for each employee. The Administrator or, occasionally, a Vice-Rector, set objectives and indicators for service directors.

Therefore, it could be argued that the process of definition of instruments and measures to assess performance was more centralised in the Portuguese case than in the British one, where departments participated more in their development, even if in close collaboration with the central administration (see Annex 4). The centralisation of this process in the Rectory was perceived as a weakness by some Portuguese interviewees and could arguably endanger the trust in the measures developed and increase resistance towards
the introduction of control mechanisms. According to de Lancer Julnes (2001), participation in indicator development by users may increase the perception of usefulness.

What the analysis of the data also showed was the close relationship between UW's 'Vision', and subsequent strategic goals, and the measures chosen to assess the achievement of the targets set for each of those goals, especially when compared with UA. Indeed, in governance and management terms, there were project teams working in each area in UW, having each idea its project team and its project managers, as discussed in Section 5.3.1. In the Portuguese case, the absence of a formal strategic plan, other than the Rector's candidacy programme, or the Contract-Programme that the university had to sign with MCTES, made it difficult for the university to have a clear long-run vision, and clear strategic objectives that would be shared by the entire community, and from which measures and targets should derive (Blundell and Murdock 1997; Thomas 2004). Even if very concrete objectives were established in the Contract-Programme for five areas, with targets set for three and five years (see Section 6.3.1), these should be part of a broader vision and should, above all, be entirely disclosed to the university community in order to be owned by that community (Johnston and Clark 2008). Conceição et al. (1998) argue that values and objectives, if accepted and shared by all, will become organisational values and goals. To Thomas (2004: 18), "strategic planning helps organisations to clarify their mission, mandate and goals", being, according to Blundell and Murdock (1997), performance management the process of communicating organisational aims and objectives to all stakeholders, setting performance targets in order to measure the achievement of those aims and objectives, thus ensuring continual improvement. That did not happen in UA, making it difficult to successfully design and implement a PMS, as devised in Figure 10 (see Section 3.7).

It is not however unusual to find universities without clearly defined strategic plans. Actually, and although, according to Larsen and Langfeldt (2005), strategic planning is a widely accepted tool, it has been argued that the characteristics of HEIs are incompatible with strategic planning objectives. Universities as 'professional bureaucracies' (Mintzberg 1979), 'organised anarchies' (Cohen and March 1974) or 'garbage cans' (Cohen et al. 1972) are well-known labels for describing these institutions, as discussed in sections 1.3.1 and 2.4.2. According to Mintzberg (1979), strategy more or less loses its importance in professional bureaucracies, since it is hard to agree upon any common goal in this kind of organisation, as goal ambiguity is one of the chief characteristics of academic
organisations (Clark 1983). Not only are goals unclear in organised anarchies, but they are also highly contested when they are specified (Baldridge 1971). Moreover, given that a lot of power lays with professionals (academics), it is difficult for leaders at the central level to steer the organisation (Larsen and Langfeldt 2005). Cohen and March (1974) highlighted the difficulty to maintain management and leadership at universities in the traditional sense of administration.

As a consequence of the characteristics of HEIs, plans are often general and vague, and, consequently, they do not function as a guide to future decisions (Larsen and Langfeldt 2005), as they should. According to Dill (1996), it would be necessary to design a process that integrated the organisation and encouraged cooperation. If the planners succeeded in incorporating these elements, strategic planning would be an important tool in integrating highly fragmented organisations such as universities (Dill 1996).

In UA, the reasons presented by the interviewees for the inexistence of a formal strategic plan were mainly:

- **Contextual** – related to: the strong dependency of Portuguese universities from the state, making the university more vulnerable to legislative and financial changes, which according to some interviewees, made strategic plans more difficult to devise; the history of the country, which was under a dictatorship until 1974, delaying the development of strategic thinking; and the Portuguese culture, which was perceived by some interviewees as not being particularly strategy-driven;

- **Operational** – given the perceived difficulties to mobilise people to work on a strategic plan and to create consensus on the goals, as argued by Mintzberg (1979) and Clark (1983);

- **Political** – since, according to some interviewees, the Rectory could have developed a strategic plan, if it really wanted to.

In terms of reporting, and even though some areas' performance data was formally reported at UA, most interviewees argued that was not done systematically. The exceptions were teaching and learning, where the development of the 'Bologna Reports' was mandatory, and finance, since the Annual Report and Accounts had to be produced and presented to the Ministry of Finance every year. All other reports were essentially
produced on demand, being normally requested by the Rectory. Moreover, the information collected during the measurement process was hardly published. Apart from the results of the assessment performed by FCT, the 'Bologna Reports', general student survey results, and online statistics on students and academics published by the Planning, Strategy, Evaluation and International Relations Office – GPEARI, performance information was usually only accessible to a small number of people, namely the Rectory and heads of department. Even if some interviewees believed the lack of disclosure of information empowered the individuals who held that information, it arguably endangered the building of trust between those in management positions and the rest of the university community, namely academics and non-academics in non-management roles. As Pollitt (1987) argued, performance measurement should be used not as an end in itself, but to provide staff with feedback designed to enable them to develop and improve their practice. Bouckaert and Halligan (2008b) considered this 'break of trust' extremely harmful for the implementation and functioning of a PMS (see Figure 10 – Section 3.7).

In UW there was, according to the interviewees, a more systematic reporting of performance, especially after the publication of the Freedom of Information Act in 2000 (see Annex 2). The exceptions were, as expected, two of the areas where there was less measurement: third mission and alumni. The full QAA report was published on the university website; RAE results were accessible online; HEFCE published Unistats on its website, including the results of the National Student Survey (NSS); the results of the Destination of Leavers in Higher Education Survey (DLHE) were published nationally by HESA; a summary of the results of the Pulse Survey was published on the university website; a summary of the International Student Barometer™ (ISB) results was available on the International Office website; the Academic Office published the Academic Statistics every year; and the Finance Office published the annual Statement of Accounts on its webpage. Additionally, some internal reports were produced and circulated between committees.

In relation to the use of performance information, there were several reports of performance information being utilised for improvement purposes, as desired. For example, several interviewees at Warwick mentioned that RAE results were extremely positive, being used to improve the research conducted and "(…) to build a reputation" (NA34). Others mentioned positive rewards being attributed to good performers (both academic and non-academic). Also, in the Portuguese case, some interviewees argued
that the Quality Assurance System (SGQ) results promoted the quality of teaching. Others mentioned improvements in research due to the assessment conducted by FCT.

Despite the reports on the positive use of performance information, there seemed to be a lack of action regarding the performance data collected in some areas in both universities. This issue was particularly raised regarding individual performance, of both academic and non-academic staff. In the British case, this happened in relation to poor performances and appeared to be mainly due to the fear of getting 'bad publicity' (especially given the role of the media in the UK) or having to compensate those people by paying them 'large sums of money', as described by an interviewee. Moreover, according to a number of interviewees, the vagueness of many job descriptions also did not help heads of department to distribute responsibilities inside departments. In the Portuguese case, the actions that could be taken towards both academic and non-academic staff were very dependent on the legal framework, which was, to most interviewees, extremely protective. Being the majority of the employees of the university public servants, it was considered difficult to penalise poor performers, especially if they had tenure. That could be done through the enforcement of disciplinary procedures, but it could be rather complicated and produce no results. Moreover, rewarding good performers was also difficult, given the extreme difficulties to progress in the academic career in Portugal. In reality, and despite the fact that sometimes academics have all the conditions to get promoted, there might not be a place for them. Plus, many interviewees argued that the quota system, introduced by SIADAP, made it very difficult for non-academics to progress in their careers as well, in spite of the quality of their work.

There were also reports of some performance information being misused. For example, interviewees from both universities stated that some data was 'manipulated' in order to make the university look better. Others argued that performance information was, for example, "(...) used to bully people (…)" (AH18).

Given the reported use of performance information in both cases, it was decided to propose a typology of performance data use. The use of performance information was divided into three categories:
• 'Positive use' – happens when universities strive to maximise their results by improving the aspects that were signaled during the evaluation process. Rebora and Turri (2011) call it 'positive learning';

• 'Misuse' – occurs when the effects of assessment contradict the objectives for which performance measurement, reporting and management practices were introduced. Meyer and Gupta (1994) call it 'wrong lessons' and van Thiel and Leeuw (2002) 'perverse learning';

• 'Non-use' – happens when nothing is done with the performance information that is gathered.

Table 41 presents some examples of 'positive use', 'misuse' and 'non-use' of performance data in both universities.

Practices of 'positive use' were reported in both universities, and practically in the same areas. The main difference resided in the non-existence of instruments to reward the good performance of academics in the Portuguese case, mainly due to the lack of policy autonomy (CHEPS Consortium 2008) referred to above. In truth, Portuguese public universities were unable to negotiate salaries with academic staff. In addition, as stated before, even if academics performed well, they had to wait for the opening of a post, which could take a long time.

Practices of non-use were mainly reported in the areas where performance was less measured in both universities – third mission, employers and alumni – and in relation to academic and non-academic staff’s performance (both positive and negative performance in the Portuguese case, and negative performance in the British case).

The examples of 'misuse' given by the interviewees could arguably be grouped according to the list of unintended consequences of publishing performance data defined by Smith (1995) (see Section 3.3.3). The unintended consequences most reported by the interviewees were measure fixation, gaming, misrepresentation and myopia.
Table 41 – Examples of 'positive use', 'misuse' and 'non-use' of performance information at UW and UA

<table>
<thead>
<tr>
<th>Positive use</th>
<th>UW</th>
<th>UA</th>
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<tr>
<td>• Some data on the performance of teaching and learning was used for improvement purposes, even if not systematically (e.g. the data that resulted from the QAA assessment exercise).</td>
<td>• Some data collected through SGQ was reportedly used to improve the performance of teaching and learning. Nevertheless, many interviewees argued that this was not done in every department or systematically.</td>
<td></td>
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<tr>
<td>• The results of the RAE were closely looked at and used to improve research performance.</td>
<td>• Data collected by FCT on research was used for improvement purposes, especially since it was linked to competitive research funding.</td>
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<td>• Good performance of academic staff was rewarded through merit pays, promotions or reduction of teaching loads.</td>
<td>• Very Good and Excellent performances of non-academic staff contributed to their direct promotion (3 consecutive Very Good and 2 consecutive Excellent).</td>
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<tr>
<td>• If non-academic staff performed well, they could be promoted and rewarded.</td>
<td>• Students were monitored and action was taken when considered necessary (e.g. improving facilities; actions to promote the university's image).</td>
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<tr>
<td>• Students were highly monitored and action was taken when considered necessary (e.g. through the tutoring system).</td>
<td>• The performance of support services was looked at and acted upon by the Administrator.</td>
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</tr>
<tr>
<td>• Support services' performance was looked at and acted upon by the Registrar.</td>
<td>• Data on finance was well acted upon.</td>
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<tr>
<td>• Data on finance was well acted upon.</td>
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<th>Misuse</th>
<th>UW</th>
<th>UA</th>
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<tr>
<td>• Some people reported using performance data to focus their attention on what gave them better results (normally research), leaving the rest aside.</td>
<td>• Some interviewees argued that the excessive focus on measurement led some people to gather around things that added no value.</td>
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<td>• There were reports on performance data being used to put pressure on people and even to 'bully' them.</td>
<td>• A number of heads of department reported that some of the departmental groups that were created to decide on the attribution of grades to non-academic staff (namely Excellent and Very Good), used to determine internally who got certain grades one year and who would get those grades the following year.</td>
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<td>• Some cases were reported where performance data became an end in itself, with an excessive focus being given to metrics.</td>
<td>• A few interviewees stated that they used the performance data collected in a certain year to learn how to get around some indicators and to distinguish worthy indicators from other indicators.</td>
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<tr>
<th>Non-use</th>
<th>UW</th>
<th>UA</th>
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<tr>
<td>• Data on third mission was not used, unless the university developed a negative reputation.</td>
<td>• Data on third mission was not acted upon.</td>
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<tr>
<td>• Bad performance of academic staff and non-academic staff were seldom acted upon.</td>
<td>• Good and bad performances of academic staff were seldom acted upon.</td>
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<tr>
<td>• Links to employers were not acted upon.</td>
<td>• Bad performances of non-academic staff were seldom acted upon, other than some infrequent reengineering (e.g. moving employees to other services).</td>
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<tr>
<td>To an interviewee, they would, if students were not getting jobs.</td>
<td>• Links to employers were not acted upon.</td>
<td></td>
</tr>
<tr>
<td>• Links to alumni were not acted upon.</td>
<td>• Links to alumni were not acted upon.</td>
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Interviewees from both universities reported cases of measure fixation. To them, by focusing on what was measurable, these institutions sometimes neglected wider organisational goals, particularly those goals that were more difficult to quantify. In UW, for
example, an interviewee argued that there was a real danger of performance management becoming "(...) a number of tick boxes or scoring mechanisms" (AH24). In UA, a number of people complained about the fixation on certain measures, namely quantitative, often forgetting other important aspects. For example, some interviewees mentioned the lack of instruments to assess the quality of teaching, and third mission, links to alumni and links to employers, considered important, but particularly difficult to measure. Thomas (2004) recognises the need to tell the performance story and not become mesmerised by the numbers themselves.

Several examples of gaming were also reported in both institutions. Because targets typically demanded year on year improvements in performance, a few interviewees in UA stated that, in relation to the evaluation of non-academic staff (done through SIADAP), the trick was to establish less demanding targets, so that everyone accomplished them. Also, in relation to the performance of non-academic staff, a number of heads of department reported that some of the departmental groups that were created to decide on the attribution of grades to non-academics determined internally who got certain grades one year and who would get those grades the following year. At UW, some interviewees, namely heads of department, argued that it was hard to manage the administrative load of academics, since most of them were smart enough to focus their attention on what gave them the best results (namely research). Some academics confirmed doing that.

Interviewees from both universities also gave examples of misrepresentation. In UA, some interviewees stated that they deliberately created indexes that improved their status, arguing that it was not something hard to do. In UW, a number of interviewees also confessed sometimes manipulating the performance measures that were used in order to create a good impression.

Finally, myopia, that is the excessive focus on short-term targets at the expense of long-term objectives, was particularly reported in UA, where there was not a formal strategic plan from which measures and targets should derive.

Going back to the list of perceived uses of performance information developed by Behn (2003), it could be stated that, in UW, performance information was used to evaluate, control, budget, promote, celebrate, motivate, learn and improve, even though data on third mission, alumni and employers was not used for any of those purposes and
performance data on individual staff was poorly used for improvement purposes (at least the data related to bad performances). At UW, performance data was also used to be accountable (Chelimsky 1997) and to communicate and implement the strategy (Johnston and Clark 2008). In UA, performance information was mainly used to evaluate, to budget, to promote, to celebrate, to learn, to be accountable, and to improve certain areas (namely research and finance), with the exclusion of third mission, alumni and employers. The lack of established rewards and punishments linked to the measurement of individual performance, and the reported lack of a strategic plan and of organisational and departmental goals, made it difficult for the university to use performance data to control, to communicate or to improve in most areas.

The analysis of performance measurement, reporting and management practices at UW and UA supports the inexistence of a fully developed PMS at both institutions, even though, as expected, since it started the process a long time before, UW was closer to accomplishing it than UA. In UW, despite the existence of a clearer link between strategic goals and the measurement process, as expected from a PMS (see Figure 10), and the measurement and reporting of most areas' performance (with the exception of third mission, alumni, employers), there was still a lack of management practices in some areas, namely individual performance. In the Portuguese case, despite the existence of measurement initiatives in almost every area (similarly to UW, the worst measured areas were third mission, employers and alumni), there was still little reporting and a lack of management practices in some areas. Moreover, the instruments and measures used to assess performance did not derive from the university's formal long-run strategic plan, as one would expect, given the absence of one. These findings were consistent with some literature on the public sector (see Radnor and McGuire 2004; Hood 2006; van de Walle and van Dooren 2008; van Dooren et al. 2010), which suggests that the focus for many public service organisations is on measurement, leading sometimes to an excessive amount of data collected with little action. The reasons that may explain this behaviour will be presented in the next section.
7.3. Factors influencing the introduction and functioning of PMS in universities

Having analysed the way UW and UA measured, reported and managed their performance, our interest lied in understanding the factors that could be influencing such practices. Data analysis showed there were, in fact, some factors that inhibited the introduction and functioning of PMS and others that supported that introduction and functioning. For the purpose of this research these were labelled 'inhibitors' and 'determinants', and their identification resulted from the analysis of the factors that interviewees perceived to be influential to the implementation and functioning of PMS and of the strengths and weaknesses mentioned by these interviewees in relation to performance measurement, reporting and management practices.

According to the Oxford Advanced Learner's Dictionary, an 'inhibitor' is, in Chemistry, "a substance which delays or prevents a chemical reaction" and, in Biology, "a gene which prevents another gene from being effective". In this research, an 'inhibitor' is defined as something or someone which delays or prevents something from happening (in this case, a PMS from being implemented and/or from functioning). The definition of 'determinant' used in this research will be the one presented in the Oxford Advanced Learner's Dictionary, which defines it as "a thing that decides whether or how something happens" (in this case, something or someone that will decide whether or not a PMS is implemented and functions). Data analysis enabled the grouping of inhibitors and determinants into six categories: contextual, cultural, organisational, structural and technical, resource-related, and individual.

**Contextual** factors are those related to the external environment. These comprise: socio-economic and socio-demographic trends, such as the economic and social conjuncture and the population growth rate; the legislative framework, which can be more or less protective of the employees' rights, for example; the level of institutional autonomy (policy, organisational, interventional and financial); and the level of political and public scrutiny (e.g. pressures to measure; media coverage).

**Cultural** factors comprise the cultural influences, in the form of national and organisational cultures, more or less supportive of the implementation of performance measurement, reporting and management practices. The cultural approach to organisational learning suggests the importance of taking organisational culture into account when considering
the use of performance information for decision-making (Moynihan 2005). Organisational culture determines not just an institution's strategy and goals, but also its modes of operation, including that of performance measurement (Henri 2006).

*Organisational* factors are those linked to the way an organisation is divided, in governance and management terms; to the level of communication; to the distribution of responsibilities inside institutions; and to the type of leadership. In a study on quality assurance processes in Finish universities, Haapakorpi (2011), for example, found out that outcomes of quality assurance seemed to occur less in large and hierarchical universities.

*Structural and technical* factors are those related to the way an organisation builds a PMS. Bouckaert (1993), for example, argues PMS that serve the purpose of contemporary management should not only be technically valid, but also legitimate and functional. Structural and technical factors comprise: the link between PIs and organisational or programme goals; selection of PIs; the level of involvement of people in the development of the system; the type of analysis techniques employed; the type of IT system used; and the existence of a system of rewards and punishments linked to the measures.

*Resource-related* factors have to do with resource availability, these being financial, human and/or physical. In terms of human resources, these factors include not only the availability of employees, but also their professional competency, which can be provided to them through training, for example.

Finally, *individual* factors are associated with the more or less favourable position of individuals towards PMS.

Each group of factors may act as an inhibitor or a determinant in the implementation and functioning of PMS. Table 42 shows examples of that.
### Table 42 – Inhibitors and determinants per group of factors

<table>
<thead>
<tr>
<th>Groups of factors</th>
<th>Factors</th>
<th>Inhibitors</th>
<th>Determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic trends</td>
<td>An unfavourable economic context, such as the current one, generally characterised by low growth rates and high levels of unemployment, is likely to have a negative impact not only on the financing of universities, but also on the number of students that drop out of universities.</td>
<td>A favourable economic context is likely to have a positive impact on the financing of universities.</td>
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<tr>
<td>Socio-demographic trends</td>
<td>Diminishing birth rates are likely to contribute to a decrease in the number of students enrolled in higher education.</td>
<td>Increasing birth rates are likely to contribute to the rise of the number of students enrolled in higher education.</td>
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<tr>
<td>Legislative framework</td>
<td>Protective legislative frameworks may difficult the implementation of PMS (e.g. the Portuguese legislation is very protective of employees, making it more difficult to implement sanctions for poor performers)</td>
<td>Less protective legislative frameworks may facilitate the implementation of PMS.</td>
<td></td>
</tr>
<tr>
<td>Level of institutional autonomy</td>
<td>Less autonomous institutions, namely in financial and regulatory terms, as in the Portuguese case, may inhibit the introduction of PMS.</td>
<td>Higher levels of institutional autonomy, such as British universities have, are likely to facilitate the introduction of PMS.</td>
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<tr>
<td>Pressures to measure</td>
<td>The lack of external pressures to introduce PMS may discourage the implementation of PMS.</td>
<td>The existence of external pressures is likely to force organisations to adopt efficiency-oriented approaches (Roy and Seguin 2000). Interviewees from both universities mentioned the need for an ‘external push’ to introduce performance related practices. In Portugal, this external kick was essentially brought by European policies (Europe – the external coordination mechanism of Figure 6) and national legislation (the State); in the UK, the ‘push’ was brought by the increased competition between universities (the Market) and by national legislation (the State).</td>
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<tr>
<td>Public scrutiny</td>
<td>Low public scrutiny is more likely to discourage the implementation of PMS.</td>
<td>The fact that media coverage is perceived to shape public opinion suggests that universities would, as far as possible, endeavour to avoid negative publicity (Taylor 2011). UK is a good example of a country where media is very intrusive.</td>
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<tr>
<td>Groups of factors</td>
<td>Factors</td>
<td>Inhibitors</td>
<td>Determinants</td>
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<tr>
<td>Cultural</td>
<td>National culture</td>
<td>The absence of an evaluation culture in a country is likely to discourage the implementation of PMS. For example, as some interviewees pointed out, the absence of an evaluation and planning culture in Portugal made it difficult for institutions and people to understand the importance of introducing a PMS.</td>
<td>The existence of an evaluative national culture is more likely to foster the implementation of PMS. The evaluative culture is particularly developed in Anglo-Saxon countries, being almost inexistent in Southern-European Countries, and namely in Portugal (Rhodes et al. 2012). This probably constitutes the most challenging task, since it cannot be built overnight or by decree, requiring time to consolidate.</td>
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<td></td>
<td>Organisational culture</td>
<td>The existence of an organisational culture that is not motivated to measure is more likely to negatively influence the implementation of PMS. The development of an evaluative culture within the institution is arguably important for the successful implementation and function of PMS. Interviewees of both countries reported the existence of evaluative cultures in both universities.</td>
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<td></td>
<td>Type of structure</td>
<td>Complex governance structures are more likely to delay decision-making, thus making it more difficult for a PMS to function properly. Interviewees at UW reported that the existence of too many committees delayed decision-making, thus making it more difficult for a PMS to function properly.</td>
<td>A more centralised, flatter structure, with less hierarchical levels, arguably enables faster decision-making (Haapakorpi 2011), which is essential for the functioning of a PMS. The existence of such structure was also considered as a strength in many EUA reports (Rosa et al. 2011). This type of structure existed in both universities, at least at the management level, and was regarded as an advantage by all interviewees.</td>
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<td></td>
<td>Distribution of responsibilities</td>
<td>The lack of a clear responsibility structure is likely to endanger the issue of accountability, which is of extreme importance when implementing a PMS. At UA, some interviewees mentioned difficulties to understand who to be accountable to, for example.</td>
<td>Clearly defined roles and responsibilities facilitate accountability issues, thus enabling an easier functioning of PMS.</td>
</tr>
<tr>
<td>Organisational</td>
<td>Type of leadership</td>
<td>Weak leaders, whose managerial and leadership skills are not recognised and respected by everyone, endanger the functioning of PMS. Some Portuguese heads of department complained about the lack of managerial legitimacy of Assistant or Associate Professors to act upon Full Professors. The lack of support from the centre to act upon individuals was also reported by heads of department at UW.</td>
<td>The existence of strong leadership may be a sign of institutional commitment towards the introduction of PMS, thus arguably contributing to build an evaluative culture and contribute to trust building. To Larsen and Gornitzka (1995: 356), &quot;resilience to organisational change in general is to be expected within universities where the management potential is low&quot;. In its reports, EUA recognises leadership as a strong point in the promotion of institutional governance and management (Rosa et al. 2011).</td>
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<td></td>
<td>Level of communication</td>
<td>Communicational problems (both horizontal and vertical) arguably constrain measurement, reporting and management practices. Interviewees at both universities reported the existence of poor communication at several levels. Moreover, the results of the Pulse Survey showed that at UW.</td>
<td>A system that is well communicated to the entire university community is considered important to build trust and for the effective implementation and functioning of a PMS.</td>
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<tr>
<td><strong>Groups of factors</strong></td>
<td><strong>Factors</strong></td>
<td><strong>Inhibitors</strong></td>
<td><strong>Determinants</strong></td>
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<tr>
<td><strong>Structural and technical</strong></td>
<td>Link between PIs and goals</td>
<td>The absence of a formal strategic plan from where measures and targets are derived is likely to constrain the successful implementation of a PMS. In the Portuguese case, the majority of the interviewees reported the absence of a formal strategic plan, making it difficult to determine indicators and targets.</td>
<td>The existence a formal strategic plan, which incorporates an integrated vision for the university, from where measures and targets are derived, arguably fosters the development of a well-built PMS. In fact, some of the strengths identified by EUA in their evaluation reports usually covered the existence of a mission, vision and strategic plan, which included institutional objectives, priorities and strategies, and its implementation (Rosa et al. 2011). For example, according to most interviewees, the existence of a clear Vision at UW, with clear and focused goals, facilitated the development of PIs.</td>
</tr>
<tr>
<td></td>
<td>Selection of PIs</td>
<td>The use of an excessive number of instruments and measures to assess performance may lead to measure fixation (Smith 1995) and to excessive bureaucracy, thus making it difficult to focus on what really matters – positive learning. On the other hand, the use of few PIs makes it more difficult to obtain an accurate report of performance (Meyer and Gupta 1994). To van Thiel and Leeuw (2002: 276), &quot;few indicators for a limited part of total performance facilitate the occurrence of a performance paradox&quot;, talking about the discrepancy between policy objectives and operational goals.</td>
<td>The careful selection of PIS is likely to lead to a well-built PMS, arguably facilitating its functioning. Not only the number of PIs, but also their quality and adequacy are important for the successful implementation of a PMS.</td>
</tr>
<tr>
<td></td>
<td>Level of involvement</td>
<td>The excessive centralisation of the design of PMS may lead to the break of trust in those systems. Most of the Portuguese interviewees mentioned that the Rectory defined the majority of the instruments and measures used to assess performance.</td>
<td>Trust building can be accomplished by developing a clear and simple-cut PMS, step-by-step, which is participated since the beginning. To de Lancer Julnes (2001), participation in PIs development may increase the perception of usefulness.</td>
</tr>
<tr>
<td></td>
<td>Analysis techniques employed</td>
<td>Traditional, simpler analysis techniques, even though useful, tend to give a more incomplete picture of performance data.</td>
<td>The use of more sophisticated analysis techniques, which combine several elements, is more likely to lead to the successful functioning of PMS. Some authors (e.g. Sarrico et al. 1997; Nyhan and Martin 1999) used, for example, Data Envelopment Analysis to analyse performance data. In UW, there was a group of non-academics (some with doctorate degrees) who analysed performance data by using sophisticated techniques.</td>
</tr>
<tr>
<td></td>
<td>IT system used</td>
<td>Technical problems may jeopardize the successful implementation of a PMS. For example, the inexistence of a single IT system that aggregates performance data from different areas arguably disperses performance information across the institution and duplicates administrative work.</td>
<td>The existence of a single IT system that incorporates all the performance information is likely to provide a clearly overall picture of the way an institution is performing. Some interviewees at UW argued that the university was developing one.</td>
</tr>
<tr>
<td></td>
<td>System of rewards and punishments</td>
<td>The absence of a system of incentives is more likely to lead people not to perform as expected. At UW, the interviewees reported the existence of such a system.</td>
<td>The development of targets clearly linked to a system of incentives was considered important for the implementation of a PMS.</td>
</tr>
</tbody>
</table>
Financial constraints create serious problems both to the implementation and functioning of a PMS, since the cost of getting data is high. Additionally, the shortage of human and physical resources means that performance-related issues will take longer to operationalise. Interviewees reported financial constraints in both universities. In UA, most interviewees argued that the number of non-academics should increase. Moreover, some Portuguese interviewees also complained about the lack of training programmes for some employees, namely those involved in performance measurement and management processes.

Hiring high quality people (both academic and non-academic) and training them, when needed, is one of the focal points of a well-built PMS. Interviewees from both universities mentioned this fact, even though UW was more thorough in the selection of its staff than UA, where there was an endogamous tendency in academic staff recruitment (reported in EUA’s 2007 report).

A less positive perception of PMS may lead to resistances to the implementation of such systems. The existence of internal interest groups, for example, which are less favourable to the introduction of measurement, reporting and management practices, may endanger the implementation and function of PMS. Behn (2002) identified a number of psychological barriers to the successful implementation of performance management and proposed a mental reorientation, which requires a new way of thinking for the many actors involved in PMS. Interviewees at both universities mentioned the least positive attitude of academics towards PMS, since they feared losing their autonomy to external members (in UA) and to non-academics (in UW). Lockwood (1985) argued that the rise of ideals such as ‘academic freedom’ seemed to create in-built resistance to management control.

Positive perceptions on the importance of PMS are likely to lead to fewer resistances to the implementation of such systems. Interviewees of both universities mentioned the positive attitude of external members towards the introduction of PMS, mainly due to their experiences in the private sector.
Table 43 identifies the 'inhibitors' and the 'determinants' at UW and UA, according to the interviewees' perceptions. The 'inhibitors' are represented by a (-), and the 'determinants' by a (+). (0) means that the factor is neither an 'inhibitor' nor a 'determinant' for that institution.

<table>
<thead>
<tr>
<th>Groups of factors</th>
<th>Factors</th>
<th>UW</th>
<th>UA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contextual</strong></td>
<td>Socio-economic trends</td>
<td>(-)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Socio-demographic trends</td>
<td>(0)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Legislative framework</td>
<td>(-)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Level of institutional autonomy</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Pressures to measure</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td></td>
<td>Public scrutiny</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td><strong>Cultural</strong></td>
<td>National culture</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Organisational culture</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td><strong>Organisational</strong></td>
<td>Type of structure</td>
<td>Committee structure (-)</td>
<td>Management structure (+)</td>
</tr>
<tr>
<td></td>
<td>Distribution of responsibilities</td>
<td>(-)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Type of leadership</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td></td>
<td>Level of communication</td>
<td>(-)</td>
<td>(-)</td>
</tr>
<tr>
<td><strong>Structural and technical</strong></td>
<td>Link between PIs and goals</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Selection of PIs</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Level of involvement</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>Analysis techniques employed</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>IT system used</td>
<td>(-)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>System of rewards and punishments</td>
<td>Rewards (+)</td>
<td>Punishments (-)</td>
</tr>
<tr>
<td><strong>Resource-related</strong></td>
<td>Resource availability (human, financial and physical)</td>
<td>Human (+)</td>
<td>Financial (-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical (+)</td>
<td>Financial (-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Academics (-)</td>
<td>Physical (+)</td>
</tr>
<tr>
<td><strong>Individual</strong></td>
<td>Position of individuals towards PMS</td>
<td>Academics (-)</td>
<td>Non-academics (-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>External members (+)</td>
<td>External members (+)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students (+)</td>
<td>Students (+)</td>
</tr>
</tbody>
</table>

Table 43 shows that, according to the interviewees' perceptions, there are more 'inhibitors' to the implementation and functioning of PMS at UA than at UW, and more 'determinants' at UW. These findings are not particularly surprising, given the fact that UA has just recently started to worry about performance measurement and management issues. Structural and technical factors and cultural factors seem to be the main handicaps to the successful implementation of performance measurement, reporting and management practices at UA. Even though the lack of an evaluative culture in Portugal is probably the hardest thing to change, since it takes time, the structural and technical issues can be improved if acknowledged.
The study of the 'inhibitors' and 'determinants' of PMS is arguably important to comprehend all the factors that can prevent or foster the development of a PMS. Their acknowledgement may help to build a good system. This analysis is thus regarded as important to help HEIs to properly design PMS and to successfully implement performance measurement, reporting and management practices.

Having explored the main factors influencing PMS, either negatively or positively, the next section will explore the relationship between governance structures and PMS.

7.4. Links between governance structures and performance management systems

As documentary analysis and the analysis of the data collected through the interviews conducted both at the University of Warwick and at the University of Aveiro showed, several pressures are forcing universities to renew and reshape their governance structures and management practices, often requiring the adoption of methodologies and techniques once only used in the private sector. Among these practices, a special attention was given to the introduction of performance control mechanisms, with the intent of stimulating continuous quality improvement within universities and providing higher levels of efficiency and efficacy of academic activities. Therefore, in order to better understand the relationship between governance structures and PMS, it was deemed necessary to further analyse the pressures felt by the interviewees to introduce control mechanisms aimed at measuring, reporting and managing performance at both universities. From all the pressures felt, the interviewees reported that external pressures were the most influential ones and that internal pressures usually only emerged to help deal with the former.

In the British case, external pressures came mainly from the state and from the market. Actually, the state implemented a lot of policies since the 1980s (see Figure 13 in Section 5.1.1 and Annex 2), destined to promote the efficiency, effectiveness and accountability of the public sector, and from which universities, even though quite autonomous, were still financially dependent (34 per cent from funding bodies and 16 per cent from research bodies in 2009/2010 – see Figure 14 in Section 5.1.4). As for the market, actually, in the last years, the competition between universities became tougher, and universities started competing for students, for staff and for funding, as argued by many interviewees.
In the Portuguese case, external pressures came essentially from European policies and from the state. In relation to the former, after the signing of the Bologna Declaration in 1999, a lot of policies were agreed upon by several nation states, with many of them committing towards the establishment of common higher education policies (see Annex 2). The majority of these policies aimed at improving quality within the European Higher Education Area (EHEA). In fact, since 1999, the Standards and Guidelines for Quality Assurance in the EHEA were established; the European Quality Assurance Register for Higher Education (EQAR) was launched; and the European Commission funded two projects (van Vught 2009): one to study the possibility of establishing a classification of European universities (U-Map), and the other to analyse the implementation of a multidimensional ranking system (U-Multirank). These recent developments will most likely lead to a ranking of European universities and to the implementation of a stratified EHEA.

In relation to the state, indeed the Portuguese government published a lot of legislation very recently, which fostered the introduction of control mechanisms (see Figure 22 in Section 6.1.1 and Annex 2).

This analysis showed that all the external pressures identified in both universities are included in the 'outer ring' of our governance framework (see Figure 6 in Section 2.4.4.2) – the state, the market, and Europe – and relate to each other. First, European policies drove national governments to promote quality and assess that quality in order to assure it, and also made the different stakeholders more aware of quality issues in higher education, as explained above. The exceptions to this trend were Anglo-Saxon countries, which started to employ control mechanisms in the public sector, in general, and in HEIs, in particular, before the implementation of these policies, often serving as a benchmark to them. Moreover, European policies seemed to be sometimes used as justifications for carrying out certain national policies that would otherwise be more contested. Second, the market also influenced European and national policies, since different stakeholders (e.g. students, parents, employers and alumni) started to demand more quality from HEIs (e.g. in UW, several interviewees reported that parents started to worry more with their children's education and that students became more preoccupied with what the university is offering them and with their future). As a result, HEIs started to realise that only by offering quality they would be able to survive (e.g. both British and Portuguese interviewees reported being increasingly worried with the university image). Third, the way governments forced universities to implement control mechanisms, using some of those
mechanisms to develop PIs and to create rankings, enabled comparisons between HEIs, thus increasing competitiveness between these institutions (e.g. in the UK, university rankings are frequently used by students to select universities).

But how have governance structures been influenced by the urge to introduce control mechanisms? The pressures to reform mentioned above led to some changes in the governance of both universities. In Portugal, the government demanded a restructuring of public HEIs' governance structures, making them flatter and leaner, with a shrinking in the number of decision-making levels and in the membership of governing and coordination bodies. According to most Portuguese interviewees, even though the new structure could endanger democracy and the quality of decision-making, it was considered more efficient and effective, and more appropriate for the implementation of performance measurement, reporting and management practices. As an interviewee argued: "You have to let go of the little things, otherwise you will never choose the big things" (NA14). Moreover, new offices aimed at promoting strategic planning and implementing PMS, such as the Strategic Planning Office (GPE) at UA, were created. In the British case, not so many changes occurred in terms of the existing governance structure, even though the number of Council members decreased to 33 and the Senior Management Team became more active in the management of the university.

In spite of the differences between UW and UA, the changes in the institution-level governance structures of both institutions followed the general trend towards the centralisation of authority referred to in Section 7.1 (e.g. in the Portuguese case, the Rector became more powerful and, in the British case, the Senior Management Team became more preeminent in institutional management). While some interviewees from both universities showed some concerns about this excessive centralisation of decision-making, others recognised that it would also speed decision-making and facilitate the introduction of PMS. As stated in Section 7.2, a high degree of centralisation was an issue praised by EUA in the evaluation reports (Rosa et al. 2011). Clark (1983) agreed with this line of reasoning, arguing that, in the 'collegial model' of governance, meetings often took too long, delaying the decision-making process and not leaving enough room for strategic decisions to be made. Moreover, being a foundation, UA became more autonomous from the state, even though it also became more accountable, having now to accomplish the objectives established in the Contract-Programme signed with MCTES. This widening of institutional autonomy has been a trend in many European higher education systems.
(Eurydice 2008; OECD 2008), as explained in Section 7.1. Similarly to other British universities, UW was already quite independent from the state, even though it was closely supervised by it.

Apart from structural changes, there was also a change in the roles and influences played by each one of the groups that constituted the governing and management bodies of both universities (our four Estates – Academic Estate, Administrative Estate, Student Estate and External Representatives Estate), even though not in a similar way.

Concerning the Student Estate, and although they were one of the less represented Estates in the governing bodies of both universities, their voices were increasingly heard in these bodies, as keeping them satisfied became a priority. This was more visible in UW, where high tuition fees were charged, thus raising quality expectations. However, when compared to other Estates, they were not very powerful in terms of strategic thinking and decision-making.

In relation to the External Representatives Estate, external members always played an important role in UW, being the majority in the Council, the ultimate decision-making body. Nevertheless, there was a general feeling among the interviewees (including external members) they could participate more actively in decision-making, namely regarding strategic options. In UA, their presence increased considerably. In fact, in the previous governance structure there were only two external representatives in the Senate, and, as they stated, there was no strategic decision-making there. The new structure contemplates five external members in the General Council, the most important decision-making body of the university, and they chair this body. The increased presence of external members in governing bodies has also been a common trend in many European universities (Rhoades 1992), as explained in Section 7.1, following the path of Anglo-Saxon HEIs. The opening of universities to new non-governmental stakeholders, such as firms and civil society, and the sharing of decision-making with them, is a good example of the move towards a 'Network Governance' model (Rhodes 1996; Jones et al. 1997; Goldsmith and Eggers 2004; Klijn 2005; Provan and Kenis 2008) or a 'New Public Governance' model (Osborne 2006). The bigger participation of external members in university decision-making shows the preoccupation of universities with the increasingly complex, plural and fragmented nature of public policy implementation (Osborne 2006), being considered the best way to achieve the desired outcomes. Moreover, most
interviewees regarded the inclusion of external members in governing bodies as a way to foster the development of PMS in universities, given the fact that most of them come from the private sector, where these mechanisms are widely used.

Regarding the Administrative Estate, even if they were never very influential in terms of decision-making in UA, their participation in governing bodies decreased substantially. In the British case, the opposite happened. Although UW was always known for having a strong administrative core, which was very important in the transformations that took place in the institution (e.g. participating actively in the definition of the 'Earning Income Policy'), pressures to become more efficient, effective and accountable led to an increased influence of non-academics in decision-making. This change raised concerns among the academic community, with some academics fearing that administrators would 'step too far over the line', endangering the 'collegiality' element and the 'academic freedom' they always had. Nevertheless, data analysis showed that academics were not excluded from decision-making at UW. Au contraire, the Academic Estate and the Administrative Estate shared responsibilities for the governance and management of the institution. Shattock (2006) believed in a 'shared governance' in universities, arguing: "Responsibilities need to be shared with the academic community (...). Unless they are fully engaged in critical discussion of changes in academic organization, important issues are likely to be overlooked" (ibid: 130).

As a matter of fact, it was noted that the Academic Estate still had the most active voice in both universities, especially in strategic decision-making, given that they were the majority in all the governing and management bodies in UA, and they were strongly represented in the most important governing bodies in UW, being the majority in the Steering Committee and the Senior Management Team, the most important management bodies. The importance of academics in decision-making was even clearer in the Portuguese case, where decision-making was not shared with non-academic staff as in the British university. Thus, the fear of losing autonomy, which then translates into tensions between managerial and professional norms (e.g. several interviewees reported these pressures when asked about the relationship between academics and non-academics), seemed to be somewhat of a paradox. Indeed, although academics had a lot of power inside both universities, deciding on most of the performance instruments and measures used (see Annexes 4 and 9) and on what happened to poor- and good-performing fellow academics, they still felt they were losing their autonomy. Moreover, data showed that the level of
accountability they were subjected to at both institutions was low, being 'soft' accountability measures favoured over 'hard' measures that would involve rewards and sanctions. Huisman and Currie (2004) reached similar conclusions on a study conducted in four universities from different countries (France, the Netherlands, Norway and the US), arguing that despite the strong cries for more accountability from higher education's stakeholders in various countries, there was no severe impact on day-to-day practices of academics (Huisman and Currie 2004). Why then did academics feel more controlled? Kekäle (2005) argued that sometimes academics who reject a managerial label take too narrow a definition of the term, since they already carry out a number of managerial roles when, for example, they are responsible for resources, curricula or supervision of students. Melo et al. (2010) argued that it could be a 'big brother effect', in the sense that, although there were little consequences for their poor performance (as discussed in Section 7.2), academics still felt they had to perform well because everyone was watching them, both internally and externally, especially in the British university. And it seemed to work.

To Huisman and Currie (2004), the reasons for the subversion of accountability mechanisms in HEIs could be due to: academic resistance to the implementation of such mechanisms, sometimes even subverting them (as seen in Section 7.2, where clear examples of unintended effects were presented); the failure of government policies to implement more severe control mechanisms; or the fact that university managers willingly prefer softer accountability mechanisms over stronger ones, believed to be most suited for universities.

Although the accountability mechanisms imposed on academics were considered soft, the bureaucratic work demanded from them increased in both universities. They were gradually expected to perform 'new' roles (e.g. management roles and fundraising), which, according to them, left them less time to teach and research. So, and even though they still had to be professionally accountable, in the sense they had to respond to their peers rather than to superiors (Mattei 2009), their degree of 'managerial accountability' also raised (they were now more accountable to managers, academic or not). While 'professional accountability' is based on expertise, to Day and Klein (1987: 27) "managerial accountability is about making those with delegated authority answerable for carrying out agreed tasks according to agreed criteria of performance". Nevertheless, data analysis showed that 'managerial accountability' did not increase at the expense of
'professional accountability'. As a matter of fact, academics were still assessed by their peers mainly in terms of research and scholarship and teaching (e.g. FCT evaluations and the QAA assessment for teaching and the RAE for research are peer review processes). Thus, it could be argued that 'professional' and 'managerial' accountability can co-exist, not being necessarily incompatible.

Having analysed the external coordination mechanisms and the role and influence of the four Estates in decision-making and in the implementation of performance measurement, reporting and management practices, it is possible to place both universities in our governance framework (see Figure 33).

![Figure 33 – Governance structures in higher education: UW and UA](image)

The 'outer ring' represents the role of the state, the market and Europe as the main external coordination mechanisms, even though, it should be stressed that the role of European policy in UW was practically inexistent, with no interviewee referring to it in the interviews, and the role of the market was barely noticeable in the Portuguese case, although some interviewees believed it was slowly increasing.

The 'inner ring' represents the internal coordination exerted by the four Estates – Academic, Administrative, Student and External Representatives. UW could be placed between the Academic Estate and the Administrative Estate, since decision-making was mainly in the hands of academics and non-academic staff. External members also exerted
some influence in institutional governance, even though some interviewees argued that they could and should have a more active role in strategic decision-making. The decision-making structure at UW left students with the least decisive role, even though their voices were heard at the university (it should be reminded that UW was the only British university where a student sat in the Steering Committee). The analysis of the data showed that UA could be placed very close to the Academic Estate, which was still clearly the dominant one in institutional decision-making, even though the number of external members in The Council arose.

It is believed that this governance framework could be used for any HEI, and even for higher education systems, enabling researchers and practitioners to comprehend which are the most influential external and internal coordination mechanisms, thus arguably helping governments to implement policies regarding higher education and university managers to better implement strategic planning and performance measurement, reporting and management practices.

Having understood the main external and internal coordination mechanisms in both universities, it should be recalled that, in Section 7.2, it was stated that none of the universities had a fully developed PMS yet, even though UW was closer to having one than UA. It was also argued that the inexistence of such a system was largely due to the 'misuse' or 'non-use' of performance data, mainly relating individual performance. What would be interesting to understand now is how do governance structures and the four Estates influence PMS, namely how do they contribute to the 'positive use' of some performance data and how do they contribute to the 'misuse' or the 'non-use' of other data.

Essentially forced by external pressures to adopt strategic management and implement performance measurement, reporting and management practices, institutions in general tend to conform to prevailing societal beliefs and values and to establish and institutionalise homogeneous structures and processes, in the pursuit of legitimacy. The organisational tendency to conform and homogenise has been described in the literature as 'isomorphism' (Hawley 1968; Meyer and Rowan 1977; DiMaggio and Powell 1983).

A combination of these isomorphic patterns can happen (Modell 2001) and has been spotted in universities. When looking at the external coordination mechanisms (see Figures 21 and 32), the main pressures to introduce PMS were external and came mainly
from European policy and from the state, in the Portuguese case, and from the state and the market in the British case. This shows the existence of 'coercive isomorphism' (DiMaggio and Powell 1983) in both cases, since both universities were financially dependent from the state, and thus had to conform to externally dictated processes and structures. This was particularly visible in the Portuguese case, where, for example, universities were forced by law to change their governance structures and had to adopt external instruments to measure, for example, the performance of non-academic staff or support services (SIADAP and QUAR, respectively). With the reduction of governmental financial support to universities, direct government provision and control decreased and some responsibilities started to be devolved to the market. This trend that started in the Anglo-Saxon world is now showing in many other European countries, including Portugal, where universities were given the opportunity to become public foundations subject to private law (even though only three institutions decided to became a foundation). This decrease in governmental support led universities to try to follow 'market leaders', that is the best national and international universities, which were disclosed in the 'league tables', 'for better and for worst', as an interviewee stated. These practices can be called 'mimetic isomorphism' (DiMaggio and Powell 1983), where 'market followers' copy 'market leaders', in an attempt to improve. For example, in UW some interviewees mentioned the benchmarking by other universities of the way they measured, reported and managed their finances. Moreover, the reported proximity between the visions of many British universities, where many set similar goals, is a good example of that type of behaviour. Finally, 'normative isomorphism' (DiMaggio and Powell 1983) can be found both in universities managed by professional managers, who brought their values from the private sector, thus arguably influencing internal processes (e.g. pushing towards the introduction of control mechanisms), and in the universities managed by academics, where academic values, namely the concept of 'academic freedom', highly influence the existing structures and processes (Mintzberg 1979) mentioned it when he considered HEIs as 'professional bureaucracies').

With the combination of the different isomorphic behaviour patterns, it would be expected that organisations would become shaped and institutionalised by their environment (DiMaggio and Powell 1983; Scott and Meyer 1991; Scott 1995), but that is not always the case, especially in institutions that present such particular features. In fact, organisational studies have always considered universities as symbols of complexity with specific
characteristics. Cohen, March and Olsen (1972) defined them as 'garbage cans' and Cohen and March (1974) as 'organised anarchies', with ambiguous and problematic objectives. In this type of organisation, thoughts about strategic planning and PMS present a challenge, since the preparation of strategic plans and the definition of measures and targets will arguably result in increased coordination, which may take place at the cost of individual autonomy.

In these particularly complex organisations, which, on the one hand, must adapt themselves to the various strains of public authority, and where, by contrast, the norms of academic freedom and autonomy dominate internally, the introduction of PMS can often lead to unintended behaviours, such as the 'misuse' or to the 'non-use' of performance information. All these unintended effects can be caused by factors like the absence of a strategy with well-defined goals (reported in UA); or the existence of ambiguous strategic goals, which makes it more difficult to translate them into operational goals (Clark 1983). However, the particular organisational characteristics of universities makes it appropriate to consider the 'positive use', 'misuse' or 'non-use' from two different interpretative viewpoints: related to the structure and to the actors' expectations.

According to the 'rational system perspective', structural arrangements within organisations are designed for the efficient realisation of ends (Scott 1987). The premise upon which this approach is based is that the formal structure guides and influences decision-making behaviour. This means that the formal structure can have an instrumental value in achieving specific goals and in contributing to the 'positive use' of performance information. Nevertheless, our research showed that, even though, for example, in the British case, the Council pushed towards the development of KPIs, the main governing bodies of both universities were regarded as inefficient, time-consuming, and non-strategic, being defined by interviewees from both universities as 'rubberstamping bodies'. This deprived these bodies from their 'instrumental value', attributing them a 'symbolic value'. Larsen and Gornitzka (1995) call it 'window dressing', Meyer and Rowan's (1977) 'decoupling strategies', and Larsen (2001) describes boards 'as rituals'. Having to adapt themselves to the various strains of public authority, with the norms of academic freedom and autonomy dominating internally, universities sometimes opt for 'ceremonial management' (Meyer and Rowan 1977) or 'ritual' acts, the so-called 'rubberstamping' role of many of the governing bodies, and 'misuse' or 'non-use' performance information. Most of the times, data gets collected, sometimes it gets reported (more in the British case than
in the Portuguese case), but then it is sometimes 'misused' or 'non-used', as explained in Section 7.2.

How can then universities function and be successful, as our cases are? It seems that both universities have managed to get around the committee hierarchy, through centralisation, operating on a day-to-day basis through more agile bodies: the Steering Committee and the Senior Management Team, in the British case; and the Rectory, the Senate Management and Planning Committee and the Scientific Council Coordinating Committee (within the old structure), in the Portuguese case. These bodies seem to belong to a 'parallel structure', composed of senior academics and administrators, in UW, and senior academics, in UA, which is more operational and effective, and thus more favourable to the introduction of control mechanisms. This structure co-exists with the 'formal structure', more inclusive (with academics, non-academic staff, students and external members), but also heavier and more time consuming. In the 'formal structure', decisions take a long time to make and are reviewed over and over by different committees, arguably improving the quality of decision-making, but also promoting duplication and ossification. In this 'game', the 'parallel structure' seems to manage the university, being the reported challenge to find ways to get around the 'formal structure'. Even though the general community acknowledges the existence of the 'parallel structure', most of its members still believe in the importance of the 'formal structure', which occasionally blocks decisions from going further (mainly the Senate, in the British case, and the Scientific Council, in the Portuguese case). But, in reality, more important than to make important decisions, the 'formal structure' seems to have two important roles: to legitimise decision-making to the exterior; and to build trust inside the institution. Indeed, by believing they are actively contributing to decision-making within the university, the wider community will trust the organisation and the decisions made by that organisation and will more easily 'get on board'. Klijn et al. (2010) argues that trust is important for achieving better (perceived) outcomes. The only time the two structures seem to collide is when the type of decisions to be made conflicts with prevailing values. For example, issues related to academic freedom and loyalty to the discipline may be more difficult to control. That is why the assessment of academic staff is so controversial. In fact, students' opinions are gathered, through surveys, but then not much action is taken towards poor performers. This is less problematic in the British case, where, at least, positive incentives can be given to overachievers.
The second viewpoint for discussing the 'positive use', 'misuse' or 'non-use' of performance information is related to the key actors' strategies, actions and reactions in relation to measurement, reporting and management activities. There is more than one type of organisational reaction to evaluation, since the behaviour of the various actors is differentiated due to their different views on the aspects to accept and those to reject (Rebora and Turri 2011). For example, the External Representatives Estate will most likely encourage the introduction of control mechanisms and the 'positive use' of performance information, since external members come from the private sector, being thus used to dealing with PMS. The Student Estate may also favour the measurement and reporting of performance and the 'positive use' of performance information, since students are interested in studying at the best university possible. The Academic Estate and the Administrative Estate were reportedly the two Estates that would 'resist' change more. By being 'employees' of the university they are most likely the ones more directly affected by evaluation practices. If positive incentives are involved (which was not the case in the Portuguese university), internationally renowned scholars and brilliant young academics will be certainly favourable to the 'positive use' of performance data and will get involved in the process because they are aware of the opportunity for their research results to be recognised in accordance with criteria that are valid in their particular disciplinary area. Therefore, the biggest challenge for the good functioning of a PMS seems to reside in how to have all the Estates – the 'inner ring' of the governance framework – accept PMS as something important and positive for organisational development, therefore avoiding the tendency for the 'non-use' or the 'misuse' of performance data.

Resistance to changes are arguably potentiated by the lack of participation of some actors in the development of PMS. According to Stensaker (2008), studies dealing with the organisational aspects of quality issues have been narrow and hierarchically minded, considering HEIs to function only in the top-down direction and assuming university personnel to be only passive receivers of policy and procedure instructions. He argued that a bottom-up approach is needed and, in addition, a new way to view the personnel as active contributors. Actually, the interviewees reported feeling more at ease when they participated in the preparation process (e.g. most of the interviewees at UW felt as being part of the strategy of the university given the wide consultation process conducted by the Vice-Chancellor). Also, the lack of disclosure of measures, targets and time frames to the general community in the Portuguese case, and the reported poor communication at
different levels at Warwick, arguably enhanced resistance to changes. Additionally, the inexistence of incentives linked to performance measurement in the Portuguese university also tended to induce antagonist behaviours. According to Haapakorpi (2011), personnel in universities take advantage of assessments when they are meaningful and they can use them for their own purposes.

Some strategies could be used to try and overcome the 'misuse' or 'non-use' of performance information. These strategies mainly involve the determinants of PMS identified in Section 7.3 (contextual, cultural, organisational, structural and technical, resource-related, and individual). Indeed, it could be argued that even though structures are important for the successful implementation of PMS they do not seem to be enough. Although it is acknowledged that the governance reforms that took place in many higher education systems – more institutional autonomy from the state, increased centralisation of decision-making inside the institutions, stronger leadership at the top, increased accountability and wider participation of external members – are enablers for the implementation and good functioning of PMS, there are still other variables to take into consideration. Although there are some that are hard to control, such as contextual factors or cultural factors, others are that can be acted upon, being one the level of communication, pointed out as a weakness in both universities, and the level of stakeholder involvement. These two variables would arguably help to overcome the resistances previously mentioned, by generating ownership and building trust, considered essential for a well-succeeded PMS (Bouckaert and Halligan 2008b), as devised in Figure 10. This means that it would be desirable, at various moments, to arrange for interaction between academics and managers (De Bruijn 2007). Moreover, there should be a clear identification of the functions of performance measurement and forums for dealing with performance results. This way, the manager and professional could trust that any deviation from it would demand consultation. As Thomas (2004) argued, an ideal PMS should be embedded in the organisation, stable and widely understood and supported.

Even though several steps have been given in the direction of a new public governance, with higher education systems displaying evidence of network development between HEIs and HEIs and other organisations; increased self-steering; and increased participation of new actors in university governance, there is still much to do to reach the ideal type of managing performance foreseen by Bouckaert and Halligan (2008b): performance governance. The next chapter will present the main conclusions of this research.
8

Conclusion
"He liked to organize, to contend, to administer; he could make people work his will, believe in him, march before him and justify him. This was the art, as they said, of managing."
Henry James

"The value of achievement lies in the achieving."
Albert Einstein

This chapter presents the main conclusions of this research project. It is organised in the following way: first, a brief summary of the reasons that led to the decision to conduct this research and of the methodological approach chosen to explore how universities are measuring, reporting and managing performance and how governance structures relate to it will be presented; secondly, a summary of the answers to the research questions posed at the beginning of the research and the way the objectives delineated have been accomplished will be displayed; thirdly, the overall contribution to knowledge made by the research will be made clear; fourthly, a summary of the limitations of the study will be provided; and finally, recommendations for further research will be presented.

8.1. Summary of the research

Public service organisations in many developed countries have been urged to reinvent themselves in the form of what has been termed 'managerialism' (Aucoin 1990; Pollitt 1990), 'NPM' (Hood 1991), 'market-based public administration' (Lan and Rosenbloom 1992), the 'post-bureaucratic paradigm' (Barzelay 1992) or 'entrepreneurial government' (Osborne and Gaebler 1992). The underlying agenda was a pursuit of greater efficiency and effectiveness of service delivery, particularly seeking greater outcomes for less input cost. That agenda reflects an evident belief amongst politicians and bureaucrats alike in the efficacy and applicability of the business model of organisational structure, planning, control and performance measurement (Chow et al. 2005; English et al. 2005). Direct government provision and control of many services has been replaced by the devolution of responsibility for their provision to the market, with government control being retained through market incentives, indirect performance indicators and accountability systems (Parker 2011).
Emerging from a period of relatively secluded existence, serving predominantly elite and stable national markets, often supported to a large extent by government funding, universities have been launched into a global market (Parker 2011), being encouraged to become increasingly responsible for their activities, for finance and for coping with the changing environment. Although varying between countries, the reforms that universities across the world are undergoing have in common the adoption of managerial methodologies and approaches once exclusively adopted by the private sector, following a trend to reorganise and restructure HEIs increasingly as entrepreneurial universities (Meek 2000; Etzkowitz 2003). Within this new model of governance, strategic management has been enforced in universities, and the introduction of performance measurement, reporting and management practices, needed for strategic management (Thomas 2004), became increasingly important. In fact, the growing interest for the topic of performance in the public sector, in general, and in higher education, in particular, led to some research, mainly linked to the measurement of performance, essentially related to the selection and use of PIs (e.g. Goedegebuure et al. 1990; Johnes and Taylor 1991; Cave and Hanney 1992; Tam 2001), or focused on the development, implementation and/or analysis of quality assurance mechanisms (e.g. Brennan and Shah 1997; Brown 2004; Filippakou and Tapper 2010; Langfeldt et al. 2010; Shah et al. 2011; Stensaker et al. 2011).

However, after the literature review conducted in the first three chapters, dedicated to the changes that occurred in the nature of public services and of higher education (Chapter 1), to the governance and management in higher education (Chapter 2), and to performance management in higher education (Chapter 3), some gaps were found, namely concerning what was being done with the performance data collected during the measurement process, and what and who could be influencing measurement, reporting and management practices in universities. Moreover, there were very few studies that looked at governance and performance (Knott et al. 2004; Aghion et al. 2009), relating the two concepts, in spite of some scholars (e.g. Bouckaert and Halligan 2008b) speaking of a move from 'performance management' to 'performance governance'.

Thus, this research proposed to explore the following: how are universities measuring, reporting and managing performance and how do governance structures relate to it?
Performance management was presented through a systems view, using three main dimensions – measurement, reporting and management; and performance measures were defined within the input-process-output model (Dochy et al. 1990; Cave and Hanney 1992). Governance structures were analysed by using the analytical framework proposed in Section 2.4.4.2 (Figure 6), which presents the external coordination mechanisms in higher education (the 'outer ring') – the state, the market and Europe –, and the internal coordination mechanisms (the 'inner ring') – the four Estates (Academic, Administrative, Student and External Representatives).

The use of a qualitative research design employing interpretative means enabled an exploratory approach to be taken. This research sought to explore the phenomenon that occurred rather than to test and replicate it, being depth preferred over broadness, with the intent of providing a more profound and richer analysis. The investigation was carried out by examining two case studies in-depth: the University of Warwick, in the UK, and the University of Aveiro, in Portugal. Documentary analysis and interviews were used to collect data. The documents analysed included policy and strategic documents, minutes of meetings, the results of internal surveys, and statistical data collected from secondary sources (the list of documents consulted is available in Annex 2). In each location, in-depth semi-structured interviews were conducted (37 in UW and 39 in UA) to members of the four Estates, being the common feature their participation in governing and management bodies and/or their close link to the management of the university. Both universities were considered innovative and successful, thus being expected that they would have implemented adequate systems to measure, report and manage performance. The findings from each case study, presented in Chapters 5 and 6, as well as the cross-analysis of both cases (Chapter 7), contributed to the understanding of how universities are measuring, reporting and managing performance and how governance structures relate to it, thus accomplishing the research aim and contributing to an enhanced understanding for future theory development. A summary of the answers to the research questions posed and the way the objectives outlined have been accomplished will be presented in the next section.
8.2. Research questions and objectives

To accomplish the research aim, four questions were posed and seven specific objectives delineated. Table 44 summarises them.

**Table 44 – Research questions and objectives**

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Research objectives</th>
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<tbody>
<tr>
<td>How have the changes in different higher education systems impacted on the governance of universities?</td>
<td>Analyse how the British and the Portuguese higher education systems have evolved over time and how the changes that occurred in those systems might have impacted on the way universities are governed and managed.</td>
</tr>
<tr>
<td>How are performance management systems functioning in universities?</td>
<td>Identify performance measurement and reporting practices and the way performance information is being used to inform decision-making in universities, and discuss the existence of fully accomplished PMS in these institutions.</td>
</tr>
<tr>
<td>What factors are influencing the implementation and functioning of performance management systems in universities?</td>
<td>Identify and categorise the factors that affect the implementation and functioning of PMS in universities.</td>
</tr>
<tr>
<td>How do governance structures influence and are influenced by the implementation and functioning of performance management systems in universities?</td>
<td>Analyse the influence of the introduction of performance measurement, reporting and management practices on the existing governance structure.</td>
</tr>
<tr>
<td></td>
<td>Discuss the influence of performance measurement, reporting and management practices on the roles and influences of the four Estates (Academic Estate, Administrative Estate, Student Estate and External Representatives Estate) and the influence of the Estates on decision-making.</td>
</tr>
<tr>
<td></td>
<td>Analyse the influence of the existing governance structure and Estates on the implementation and functioning of PMS.</td>
</tr>
</tbody>
</table>

In the following sub-sections, a summary of the answers to the research questions will be presented, and the way the objectives proposed were achieved discussed.

8.2.1. How have the changes in different higher education systems impacted on the governance of universities?

The documentary analysis conducted in this research enabled an understanding of all the changes that occurred at the European level, in terms of higher education policy, and in the British and Portuguese higher education systems, and how these changes have
impacted on the governance of universities, thus achieving the first objective delineated for the research (see end of Section 3.7.2): *analyse how the British and the Portuguese higher education systems have evolved over time and how the changes that occurred in those systems might have impacted on the way universities are governed and managed*.

All the reforms implemented in higher education over the years led to changes in the governance of universities. The role of the state was redefined in the provision of higher education. Nation states lost some functions, legitimacy and authority to new intermediary bodies, such as research councils, funding councils and accreditation agencies and to the supra-national level, namely the European level, where policy agendas and strategic choices concerning higher education are increasingly defined (e.g. the Bologna Declaration).

Even though there are some common trends, the reforms did not occur at the same time in every country. In the UK, where NPM reforms emerged in the 1980s, several changes happened. With the budgetary constraints of 1981, universities started to look for new sources of funding. As a result, in terms of governance, UK universities became relatively autonomous and independent from the state and the governance structure of most UK universities was altered, with many of the existing university governing bodies changing and some new bodies being established (De Boer et al. 2010). Following the recommendations of the Jarratt Report (1985), the Dearing Report (1997) and the Lambert Review (2003), there was a strengthening of institutional leadership and the role of external members in the governance of HEIs increased. Moreover, the size of university councils was reviewed in an attempt to reduce it and specific committees that met on a regular basis were created in order to facilitate the functioning of universities (e.g. the Steering Committee).

In Portugal, most of the changes were mandated by decree. These changes occurred mainly after the signing of the Bologna Declaration in 1999. Since then, a lot of legislation came out (especially after 2007), changing the Portuguese higher education system considerably. In terms of institutional autonomy, even though Portuguese universities are still dependent on the state, particularly in terms of funding, the state reduced its level of intrusive regulation, moving to a more supervisory role (Teixeira et al. 2004). Moreover, governance structures also changed. The new structure established by law is flatter and more centralised, with the Rector becoming more powerful. Moreover, there is a clearer
leadership structure and the participation of external members increased, being the Council chaired by one. Looking at the changes that occurred, it could be argued that the governance structure of Portuguese universities became closer to the British one, following the trend of most European universities (Rhoades 1992; Amaral et al. 2002; Amaral and Magalhães 2002): increased centralisation; stronger institutional leadership; appointment of Rectors and heads of department, instead of election; increased accountability; and increased participation of the outside world in the governance of the university. Some of these changes are important steps towards a new mode of governance, which some called 'Network Governance' (e.g. Rhodes 1996; Goldsmith and Eggers 2004) and others 'New Public Governance' (e.g. Osborne 2006). This new type of governance, regarded as fundamental to deal with an increasingly complex, plural and fragmented environment (Osborne 2010), is based, among others, on networks, collaboration, diversity, inclusion and devolution (Ferlie et al. 2008). Although, according to Ferlie et al. (2008), no country appears to be an index case for the Network Governance narrative, most countries display evidence of the development of larger networks and of the introduction of new actors in institutional life.

8.2.2. How are performance management systems functioning in universities?

In relation to the implementation of PMS, findings offered an insightful understanding of how universities define their strategy and measure, report and manage their performance, thus achieving the second objective delineated for the research (see end of Section 3.7.2): identify performance measurement and reporting practices and the way performance is being used to inform decision-making in universities, and discuss the existence of a fully accomplished PMS in these institutions.

Data analysis showed there has been a considerable increase in the measurement of performance in both universities, similarly to what happened in other public services. This confirms the reports of some authors that claim that a new emphasis has been put on the implementation of effective co-ordination and control systems (e.g. Brennan and Shah 2000; Vilalta 2001). Furthermore, findings revealed that the areas that were more carefully measured were finance and research and scholarship (strongly related to the amount of funding to be received), being the less assessed areas third mission, employers and
alumni, considered particularly difficult to measure. Data analysis also demonstrated that even though some instruments were internally designed to measure performance (e.g. SGQ in the Portuguese case; or ASDAR in the British case), most instruments and measures were externally imposed (e.g. SIADAP and QUAR, in the Portuguese case) or, even if not mandatory, 'quasi-imposed' (e.g. the RAE in the British case). The degree of imposition of instruments and measures appears to have a direct and inverse relationship with the nature of higher education systems, namely concerning the four dimensions of institutional autonomy: organisational, policy, interventional and financial. Indeed, less organisational, policy, interventional and financial autonomy seems to potentiate the existence of more externally imposed instruments and measures. Data analysis also showed an excessive focus on output measures in both countries, even though the British university also paid attention to inputs, namely students and staff, and processes, with some of UW's committees keeping close attention to the organisational and administrative aspects related to some areas of the university, especially teaching and learning and research and scholarship. Additionally, the analysis confirmed the position of Portugal and the UK in the triangle of performance measures, proposed by Barnett (1992) and adapted by Rosa (2003), presented in Section 3.7.1, by showing that the instruments and measures used in the Portuguese case are mainly based on peer-review judgement, whilst in the British case, even though peer-review assessment is also used, PIs have been developed, being widely utilised to inform policy-making and institutional planning and strategy.

Regarding reporting practices, these were not very developed in the Portuguese case, being more systematically done in the British university. This could be expected, given that the most profound reforms in higher education took place in countries associated with the Anglo-Saxon model of system level governance (Amaral et al. 2002).

The most interesting result was however, the lack of action regarding some of the performance data collected in both universities, especially in relation to individual performance, and the occasional reported misuse of the performance information collected, despite some reports on the positive use of that information in both cases. Even though these findings are consistent with some public sector literature (e.g. Radnor and McGuire 2004; Hood 2006; van de Walle and van Dooren 2008; van Dooren et al. 2010), which suggests that the focus for many public organisations is on measurement, data being little used, it was interesting to observe this trend in innovative and more
entrepreneurial universities. Actually, if some performance information, namely related to individuals, was not often used in universities that could be considered ‘extreme or unique cases’ (Yin 2003) in their countries, within the group of state funded universities, then one could expect that performance data would be used even less in universities that are less entrepreneurial. This means that these results could arguably be expected in other universities.

These findings made us question the utility of performance information, since a PMS assumes a direct link between performance measurement and strategic and operational planning (Thomas 2004), meaning that its purpose is to create a mechanism for intervention and learning (Haas and Kleingeld 1998; Neely 1998). That was not happening in some of the areas that were assessed, namely in the Portuguese case, where the absence of a formal strategic plan was considered a drawback for the implementation of a PMS.

In order to analyse the use of performance information in universities, a typology of performance data use was created for the purpose of this research. The use of performance information was divided into three categories: positive use; misuse; and non-use. Positive use, which happens when universities improve the aspects that have been identified during the measurement process, happened namely in relation to financial issues, regarded as fundamental by interviewees from both institutions; misuse, which occurs when the assessment leads to unintended consequences, such as measure fixation, gaming, misrepresentation and myopia (Smith 1995), was reported in both cases; finally, non-use, which happens when nothing is done with the performance information that is gathered, was particularly reported in relation to the measurement of the three areas perceived to be less measured – third mission, alumni and employers – and of individual performance.

The analysis of the way both universities measured, reported and managed their performance supports the inexistence of a fully developed PMS at these institutions, even though UW was closer to accomplishing one. This result did not come as a surprise, given that UW started the process much earlier than UA.
8.2.3. What factors are influencing the implementation and functioning of performance management systems in universities?

The next step in the research was to identify and categorise the factors that affect the implementation and functioning of PMS in universities (the third objective of the research – see end of Section 3.7.2). Data analysis showed that there were some factors that inhibited the introduction and functioning of PMS and others that supported that introduction and functioning. These factors were thus divided into 'inhibitors' and 'determinants' and grouped into six categories: contextual, cultural, organisational, structural and technical, resource-related and individual.

Data showed that contextual factors, related to the external environment, had a great impact on both universities, being however practically impossible to control. Cultural influences were something that clearly differentiated both higher education systems. In the Portuguese case, they functioned as an 'inhibitor' for the implementation of PMS, given the perceived absence of an evaluative culture at a national level. On the contrary, in the British case, they worked as a 'determinant', thus contributing to the implementation of performance measurement, reporting and management practices. Although, culture was regarded as difficult to change, since, as an interviewee stated, 'it cannot be changed by decree', it is believed it should be taken into consideration when devising a PMS. Organisational factors (e.g. the way an organisation is divided, the level of communication, the type of leadership, and the distribution of responsibilities) were considered very important for the successful functioning of PMS. The level of communication and the distribution of responsibilities were seen as particularly weak by interviewees from both universities, with reports of communicational problems being conveyed at several levels. Nevertheless, these are two important factors that could arguably be corrected if acknowledged. Structural and technical factors impacted both universities differently. In UW, they functioned more as 'determinants', given the high level of sophistication they reached over the years. In UA, they were clearly 'inhibitors', namely the link between PIs and organisational goals. Being in an early stage in the development of a PMS, it is believed UA should take these factors into consideration for future improvements. Resource-related factors were perceived as harder to overcome, given their strong dependency on the financial viability of universities, which is closely linked to state funding, especially in UA's case. Nevertheless, some better management of human resources was regarded as needed in some departments and support services,
particularly in UA, being easier to implement (e.g. there were departments where academics taught few hours, while, in other departments, academics were overloaded with teaching hours; some interviewees reported the lack of training for some middle and top managers and for academics). Finally, in relation to individual factors, which comprise the position of individuals towards PMS, a lot of similarities were found in both cases, being the Academic Estate considered the most resistant to the introduction of PMS by all interviewees. Although individual attitudes were perceived as difficult to control, these could arguably be lessened, for example, by involving different actors in the evaluation process (Stensaker 2008), by improving communication, and by linking incentives to the measurement process.

8.2.4. How do governance structures influence and are influenced by the implementation and functioning of performance management systems in universities?

The final and most important phase of the research consisted in establishing the link between PMS and governance structures.

The first step was to identify and analyse the pressures that exist to introduce performance measurement, reporting and management practices (the fourth objective of the research – see Section 3.7.2). Findings showed that external pressures were the most influential ones and that internal pressures usually only emerged to help deal with the former. In the British case, external pressures came mainly from the state and the market, and in the Portuguese case from Europe and from the state.

The second step consisted in analysing the influence of the introduction of performance measurement, reporting and management practices on the existing governance structure (the fifth objective of the research – see end of Section 3.7.2). Data analysis showed that pressures to introduce measurement, reporting and management practices led to some changes in the governance of both universities, as discussed in Section 8.2.1, following a general trend towards the institutionalisation of homogeneous structures and processes, characterised by the centralisation of authority, stronger leadership, and increased participation of external members in institutional governance. In UW this process started many years ago. In UA, the change was more recent.
The third step consisted in discussing the influence of performance measurement, reporting and management practices on the roles and influences of the four Estates (Academic Estate, Administrative Estate, Student Estate and External Representatives Estate) and the influence of the Estates on decision-making (the sixth objective of the research – see end of Section 3.7.2). Findings revealed that the role of being an academic changed considerably, mainly due to the managerial roles and fundraising activities more and more demanded from them, thus increasing their bureaucratic work and, according to them, deviating their attention from teaching and research. Nevertheless, data also showed that even though 'managerial accountability' increased, that did not happen at the expense of 'professional accountability', with both types of accountability co-existing and not being incompatible. It was also noted that, even though academics had to be accountable, the control mechanisms imposed on them were quite 'soft', being data on poor performers hardly used in both universities, as discussed in Section 8.2.2.

Data analysis also showed that the Academic Estate still had the most active voice in both universities. In fact, this Estate was the most influential in terms of strategic decision-making, deciding on most of the performance instruments and measures used (see Annexes 4 and 9), and on what happened to poor- and good-performing fellow academics. Although academics manifested some fear of losing their autonomy, to external members in the Portuguese case and to non-academics in the British case, findings revealed that was somewhat of a paradox, given the 'soft measurement' imposed on them and their great influence on decision-making.

In relation to the Administrative Estate, non-academics shared decision-making with academics in the British case, being almost not represented in the governance of UA.

Although the External Representatives Estate became increasingly participative in the governance of UA, it was still not very influential in terms of decision-making at the time the interviews were conducted. In UW, external members participated in many important governing bodies (e.g. the Council, the Financial and General Purposes Committee, the Audit Committee), even though many interviewees, including external members, believed they could be better used in relation to strategic decision-making.

Compared to the other three Estates, the Student Estate was not very powerful in terms of strategic thinking and decision-making in either case, albeit student voices being heard in both institutions.
The study of both the external coordination mechanisms and the roles and influences of the four Estates in decision-making, allowed the placing of UW and UA in the governance framework devised in Section 2.4.4.2. In the 'outer ring', the market, the state and Europe appear as the most influential external coordination mechanisms, although their weight varies between institutions. In UW, Europe's influence was not felt by any of the interviewees, and in UA, the market was starting to show its influence. In terms of the 'inner ring', UW would be placed between the Academic Estate and the Administrative Estate, given the way these Estates 'shared governance' at Warwick, with some participation of the External Representatives Estate as well, even if not as strong as the other two. UA's position would be very close to the Academic Estate corner, considering academics' strong dominance over decision-making.

The fourth step consisted in analysing the influence of the existing governance structure and Estates on the implementation and functioning of PMS (the seventh and last objective of the research – see end of Section 3.7.2).

Essentially forced by external pressures to adopt strategic management and implement performance measurement, reporting and management practices, institutions in general tend to conform to prevailing societal beliefs and values and to establish and institutionalise homogeneous structures and processes, in the pursuit of legitimacy. This tendency to conform was defined in the literature as 'isomorphism' (Hawley 1968; Meyer and Rowan 1977), having practices of 'coercive isomorphism', 'mimetic isomorphism' and 'normative isomorphism' (DiMaggio and Powell 1983) been identified in both cases. With the combination of the different isomorphic behaviour patterns, it would be expected that organisations would become shaped and institutionalised by their environment (DiMaggio and Powell 1983; Scott and Meyer 1991; Scott 1995). However, that is not always the case.

In fact, in these particularly complex organisations, which, on the one hand, must adapt themselves to the various strains of public authority, and where, by contrast, the norms of academic freedom and autonomy dominate internally, the introduction of PMS can often lead to unintended behaviours, such as the 'misuse' or to the 'non-use' of performance information. The particular organisational characteristics of universities makes it appropriate to consider the 'positive use', 'misuse' or 'non-use' from two different interpretative viewpoints: related to the structure and to the Estates' expectations.
Data analysis showed that although, from the 'rational system perspective', formal structural arrangements should have an 'instrumental value', thus guiding decision-making and contributing to the 'positive use' of performance data, that did not always happen. Albeit many interviewees reported practices of 'positive use' of performance information (e.g. to improve the quality of research, the quality of teaching and the image of the university), supporting Talbot's (2010) argument that, in spite of the unintended effects, there are gains, interviewees from both universities mentioned that many times governing bodies had a 'rubberstamping' character. This deprived these bodies from their 'instrumental value', attributing them a 'symbolic value'. Having to adapt themselves to public authority, and with the norms of academic freedom and autonomy dominating internally, universities sometimes opted for a 'ceremonial management' (Meyer and Rowan 1977) and 'misused' or 'non-used' performance data. Nonetheless, both universities seemed to have found a way to operate through more agile bodies on a daily basis, such as the Senior Management Team in UW. These bodies arguably form a 'parallel structure', composed of senior academics and administrators in UW, and senior academics in UA, which co-exists with a more inclusive 'formal structure' that seems to serve two main purposes: to legitimise decision-making to the exterior; and to build trust inside these institutions, considered extremely important for the building of a PMS (Bouckaert and Halligan 2008b).

The Estates' strategies, actions and reactions in relation to PMS differed, being closely linked to their expectations concerning those systems. External members and students, for example, were considered more likely to induce the 'positive use' of PMS. The former, because they usually come from the private sector, being used to measuring, reporting and managing performance. The latter, since they pay increasingly higher tuition fees (especially in the UK), thus demanding more quality from the universities they choose to study in. On the other hand, the Academic and the Administrative Estates were perceived as the ones more averse to performance measurement and to the use of performance information, especially academics, given their fear of losing autonomy and academic freedom.

Getting all the Estates to truly accept PMS as something important and positive for organisational development (and not just rhetorically) is thus regarded as the biggest challenge for both institutions, being seen as something important to foster the 'positive use' of performance information. Strategies to avoid the 'non-use' and the 'misuse' of
performance data would arguably involve looking at the 'determinants' of PMS identified in Section 7.3 (contextual, cultural, organisational, structural and technical, resources-related, and individual). The analysis of these 'determinants' showed that, although considered important, structures are not enough to the successful implementation of PMS, having other variables to be taken into consideration, namely the level of communication and the level of stakeholder involvement. A good level of communication between bodies, between units and between individuals, and the involvement of different actors in the development of PMS will arguably overcome resistances and build trust, the most difficult piece of the performance management framework devised by Bouckaert and Halligan (2008b), but arguably a crucial one.

Given the increased complexity of the environment, with a greater range of actors and interactions emerging, and the state increasingly playing a steering role instead of a controlling one, organisations, universities included, had to start thinking about their future, in order to better cope with high levels of social complexity and uncertainty. The researcher agrees with several authors (e.g. Osborne 2006; e.g. Bouckaert and Halligan 2008b; Sarrico 2010; Halligan et al. 2012) that argue that a new mode of public governance is needed, implying a move from 'performance management' to 'performance governance' (Bouckaert and Halligan 2008b). This move would involve: a greater number of relationships and collaborations with other HEIs and other organisations, through the establishment of networks, partnerships and coordination mechanisms, built on trust; knowledge and best practice spread across the network; devolution of power from the state to the institutions and to the European level; greater involvement of different actors in institutional life, not only through their involvement in institutional decision-making, but also through community feedback, for example; integration of performance across several organisational levels; and demonstration of the impact of performance management on society (Bouckaert and Halligan 2008b).

Although several important steps were given in this direction, namely the increased institutional autonomy; the establishment of joint policies and projects; the increased participation of external members in institutional life; there is still a long way to go, starting with the integration of performance across several organisational levels. As discussed before, even though structures are important for a successful implementation and functioning of PMS, there are other factors that should be taken into consideration (the 'determinants' displayed in Section 8.2.4). Although they are all important, two were
considered fundamental: the establishment of a good level of communication and the involvement of different actors in the development of the system. These were considered central to overcome an important obstacle found in most universities, given its particular characteristics: resistance to the implementation of PMS, especially from academics. By being involved in the process, which should be transparent, trust is more likely to be built. And that is regarded as a fundamental piece for the existence of an integrated PMS and a necessary step to a shift from performance management to performance governance, that is, from governing performance to governing for performance.

The contribution of this research to knowledge and to practice will be described in the next sections.

8.3. Contribution to knowledge

The aim of this thesis was to explore how universities were measuring, reporting and managing performance and how governance structures related to it. As seen in Chapter 4 (the research design chapter), this investigation was carried out by examining two case studies in-depth. The findings from each case study, as well as the cross-case analysis, contributed to: comprehend how changes in different higher education systems impacted on the way universities are governed; understand the way PMS are functioning in universities; identify the factors that interfere with the implementation and functioning of those systems; and comprehend the relationship between governance structures and PMS. With varying degrees of novelty to the existing body of academic theory, the case studies, both individually and together, contributed to the theory of practice and scholarly literature.

In terms of the functioning of PMS, this research contributed to the creation of a typology of 'use' of performance information, dividing use into 'positive use', 'misuse' and 'non-use'. This typology is considered particularly relevant to dissect the way performance data is dealt with in the different areas of the university, and can arguably be applied to other institutions. It is thus considered a contribution to the literature on performance management.
In relation to the factors that influence the implementation and functioning of PMS, the identification of the 'inhibitors' and 'determinants' of PMS and their grouping into six categories – contextual, cultural, organisational, structural and technical, resource-related, and individual – are considered important to comprehend the factors that can prevent or foster the development of a PMS, being also considered a contribution to the performance management literature.

As far as governance is concerned, this research enabled a better understanding of the way universities are structured. In fact, the governance framework devised for this research, comprising the external coordination mechanisms of higher education (the state, the market and Europe), which relate to each other through dynamic relationships, and the internal coordination mechanisms (the four Estates – Academic, Administrative, Student and External Representatives) is regarded as a contribution to the literature on governance. By enabling the positioning of different HEIs inside the diamond, this framework facilitates an understanding of the differences between HEIs in terms of governance, and even the differences between higher education systems, since it is believed this framework could also be used to place these systems.

Regarding the relationship between governance structures and PMS, the analysis of this relationship through two interpretative viewpoints – one related to the structure (recognising the existence of two governance structures in universities – a 'formal structure' and a 'parallel structure') and the other to the Estate's expectations – is also regarded as innovative, arguably contributing to the literature on performance management.

Also important is the recognition that even though structures are important for the implementation and functioning of PMS (namely centralised ones, with clearly defined responsibilities and strong leaderships), there are other factors that need to be taken into consideration when building a PMS: the 'determinants'. Among these, the level of communication and the level of involvement of different actors are regarded as particularly relevant for the building of trust, needed to overcome some resistances towards the introduction of control mechanisms and for the successful integration of performance across several organisational levels, that is for the integration of measurement, reporting and management practices. This integration of practices, together with other changes that started to occur (e.g. increased autonomy, participation of more actors in institutional life
and establishment and partnerships and networks), will foster the desired move from performance management to performance governance. Above all, it is believed that this research contributes to the literature on public management, applied to the context of higher education.

### 8.4. Implications to practice

This research could arguably provide some points of advice for university managers who seek to improve the performance of their institutions. In addition, some of the findings could also benefit policy makers responsible for devising higher education policies, both in the UK and Portugal.

For example, the analysis of 'inhibitors' and 'determinants' is considered important for university managers (both academic and non-academic), since it enables a better comprehension of the factors that are impeding the successful implementation and functioning of PMS in their institution. By doing this analysis, they can correct some of the problems found. Moreover, it also enables policy makers to understand which areas are the most problematic for the successful implementation of control mechanisms in HEIs, providing them with an increased knowledge on what factors to take into account when devising higher education policies.

Moreover, the governance framework devised (see Figure 6) is believed to allow practitioners to comprehend which are the most influential external and internal coordination mechanisms, thus arguably helping policy makers to devise policies regarding higher education and university managers to better implement strategic planning and performance measurement, reporting and management practices.

Additionally, by recognising the existence of two governance structures in universities – a 'formal structure' and a 'parallel structure' –, and by acknowledging the expectations of the four Estates concerning PMS, those building and implementing PMS (being these policy makers or university managers) will arguably find it easier to have well-designed and well-functioning PMS, namely in relation to the 'use' of performance data (the most complex of the three stages of a PMS).
Overall, it is expected that this research's contribution to knowledge will promote learning, foster benchmarking practice exercises between universities and other institutions, and inform new policy developments that are taking place.

8.5. Limitations of the research

Up until this research there had been very few studies relating PMS to governance structures. Whilst it is recognised that the research findings are informative and interesting in their own right, it is also acknowledged that the study could have been improved.

Arguably, the choice of a qualitative methodology made it more difficult to ensure the reliability and validity of the data and increased subjectivity, since the characteristics of the researcher could have influenced data collection, being impossible for its outcomes to be viewed as facts or objective truths (Silverman 2006). Thus, the value of the findings, in terms of their reliability and validity, resulted mainly from their evaluation and validation by the universities that were involved in the research: the University of Warwick and the University of Aveiro. As stated in the research design chapter (Chapter 4), after the completion of the study, a detailed report, containing the findings relative to each case study, was delivered to UW and UA. Positive feedback was received from both universities, thus validating the findings. However, it is recognised that the use of both qualitative and quantitative methods would have improved the reliability and validity of the data. In fact, the initial idea was to complement the documentary analysis and the semi-structured interviews with a survey to all the members of the governing and management bodies of each university, thus enabling crossing information from different sources. Even though this was not possible due to time constraints, the researcher tried to compensate that by performing a thorough documentary analysis, and a deep analysis of the data collected through the interviews. The latter was enriched by the use of NVivo, which also enabled some quantitative reflections.

Additionally, being an exploratory research, this study encompassed only two cases, which limited the generalisability of the findings. However, a doctoral project is a limited piece of research, and every doctoral student has to make a decision regarding the breadth and depth of the study. In this case, due to the exploratory nature the study, the study was limited to two rich, detailed cases. More case studies, namely covering other
types of universities (e.g. less entrepreneurial), could have been incorporated to understand the phenomenon being studied, but there is an argument that the resulting data would have been less detailed.

These limitations also led to the urge to do further research in the future.

8.6. Further work

After having conducted this research, several ideas emerged concerning the possibility of developing new studies.

The first idea is to do a wider study on the same topic within the Portuguese higher education system. This could be operationalised by integrating other types of HEIs in the study, comparing traditional vs. innovative, public vs. private, and universities vs. polytechnics. This analysis could be done by conducting a survey to all the members of each university's governing and management bodies and then by conducting a small number of interviews to members of the four Estates within each institution. This study would also enable a comparison between the data obtained for UA and other Portuguese HEIs. The same type of study could be conducted in the UK.

The second idea is to do a longitudinal study, following the universities that took part in the study to understand how things changed over time. This would be particularly interesting to do in UA, where a new governance structure was implemented and new control mechanisms were being introduced.

The third idea is more ambitious and involves a wider cross-country analysis. Data would be collected by using both quantitative and qualitative methods, comprising documentary analysis, a survey to all the members of each university's governing bodies, and elite interviews to key players in each higher education system. The idea would be to analyse the relationship between performance measurement, reporting and management practices and organisational success.
Bibliography


Gallagher, M. "Modern University Governance: A National Perspective". Presented at The Idea of a University: Enterprise or Academy?, Canberra.


Annexes
1. General information

This section focuses on the characteristics of the interviewee: role, participation in committees, years at the university, and academic and professional background.

Q. What is your role in the university?
Q. In which bodies or committees do you participate?
Q. How long have you been here?
Q. Could you tell me a little bit more about your background?

2. Vision and strategic plan

This section focuses on the interviewee's understanding of the university's strategy/vision and strategic plan and on the way those were developed.

Q. What are your views on the strategy/vision of the university and on the strategic plan?
Q. From your understanding how were the strategy/vision and the strategic plan developed?
Q. Who was consulted on the definition of the strategy/vision and of the strategic plan?

3. Performance measurement, reporting and management practices

This section focuses on performance measurement, reporting and management practices. The main objective is to understand: (1) the importance attributed by the interviewees to performance measurement, reporting and management practices; (2) what areas are measured in the university and who/which body(ies) conduct the measurement; (2) what measures (quantitative and/or qualitative) are used and who decides on the measures; (3) in which areas is performance data reported, to whom and by whom; and (4) in which areas is performance information used, and by whom.

Q. How important would you say performance measurement, reporting and management activities are? Why?
Q. In your view, is performance measured at the university?
Q. (Show him/her the prompt card) Could you have a look at this prompt card? Which of these areas are measured? Could you give examples of the measures used (either quantitative or qualitative)?
Q. Who decides on which measures should be used?
Q. Which of these areas do you see reports on?
Q. In which committees or bodies do you see reports on performance?
Q. Which of these items are acted upon in the university? Could you give examples?
Q. Which committees are you on that use the information about these topics?

4. Integration of practices and context of influence

This section focuses on: (1) the positive and negative aspects concerning the integration of measurement, reporting and management practices; (2) the factors that may influence the implementation and functioning of performance management systems; (3) the pressures felt by the interviewees to measure, report and manage performance, both externally and internally.

Q. If you have talked about performance measurement, reporting and management practices, what do you think of them? What would you say the main strengths and weaknesses of these practices are?
Q. What factors do you think may influence the functioning of performance management systems?
Q. Are there pressures to measure, report and use performance information?
Q. In your opinion, what are those pressures and who exerts them (both internally and externally)?
Q. How would you describe the influence of the government or of government agencies in the introduction of performance management systems?
Q. How would you describe the influence of the market in the introduction of performance management systems?

5. Governance structures and performance management systems

This section focuses on the relationship between governance structures and performance management systems. In order to explore this relationship, the questions are centred on: (1) the perceptions of the interviewees on the existing governance structure, namely the type and composition of the governing and management bodies and their strengths and weaknesses; (2) the relationship between academics and non-academics; (3) the influence on decision-making exerted by each one of the groups responsible for the governance and management of the university (academics, non-academics, students and external members); (4) the position of these groups concerning performance management systems; and (5) the impact the introduction of performance measurement, reporting and management practices might have had on the groups responsible for the governance and management of the university.

Q. What do you think about the existing governing bodies (if needed, compare them with the upcoming ones)?
Q. What about the composition of the existing governing bodies?
Q. What are the strengths and weaknesses of the existing governing bodies?
Q. What do you think about the existing management bodies?
Q. What are the strengths and weaknesses of the existing management bodies?
Q. How do you see the relationship between academics and non-academics?

Q. Do you think that the introduction of performance management systems may have had an influence on the different groups that compose the existing governing bodies (students, academics, non-academic staff and external members)?

Q. From the four groups that compose the existing governing and management bodies (students, academics, non-academic staff and external members), which ones would you say influence the decision-making process more?

Q. What is the position of four groups that compose the existing governing and management bodies (students, academics, non-academic staff and external members) in relation to the measurement, reporting and management of performance?

### Prompt Card

<table>
<thead>
<tr>
<th>Finance</th>
<th>Students</th>
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<th>Employers</th>
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<td>Non-academic staff</td>
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<td>Research and scholarship</td>
</tr>
<tr>
<td>Third mission (e.g. service to the community)</td>
<td>Support services</td>
<td>Other</td>
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</tr>
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</table>
Annex 2 – Documents consulted

Europe

Joint Declaration on the Harmonization of the Architecture of the European Higher Education Systems by the four Ministers responsible for higher education in France, Germany, Italy and the UK (1998) – Sorbonne Declaration, 25 May.


European Council (2000) – Lisbon Strategy – intended to develop Europe into one of the strongholds of the new knowledge economy.


UK

Committee on Higher Education (1963) – Higher Education, Lord Robbins (Chairman) – recommended immediate expansion of universities.

Green Paper (1985) – The Development of Higher Education into the 1990s – stressed the need for positive attitudes to business, entrepreneurialism and vocationalism in higher education and the need for a more general focus on students’ acquisition of competencies, skills and applicable and relevant knowledge. It also advocated the development of PIs.


Act (1988) – Education Reform Act – established the UFC and the PCFC.


Act (1992) – Further and Higher Education Act – created a unitary system of provision. It also abolished CNAA and established HEQC. In addition, UGC was replaced by three higher education funding councils.
National Committee of Inquiry into Higher Education (1997) – Higher Education in the Learning Society, Sir Ron Dearing (Chairman) – tried to change some aspects concerning teaching and student intake, and proposed the creation of the QAA. It also argued that governance structures needed to be updated, emphasising the need for a greater control of governing bodies, stronger roles for external members, and smaller councils.

Act (2000) – Freedom of Information Act (FoIA) – created a general right of access to all types of recorded information held by English, Welsh and Northern Irish public authorities that are not otherwise covered by the provisions of the Environmental Information Regulations 2004 and the provisions of the Data Protection Act 1998.


HM Treasury (2003) – Lambert Review of Business-University Collaboration – addressed university-business cooperation, reinforced the debate on governance and argued for more corporate-type structures, including a more profound role for governing boards (instead of senates) and more lay involvement in these boards.


Portugal

Decree-Law 781/76, of 28 October – established the democratic management of higher education institutions.

Decree-Law 448/79, of 13 November – University Teaching Staff Statute – established the University Teaching Staff Statute.

Law 108/88, of 24 September – University Autonomy Act – reinforced collegiality as the norm for governing and managing higher education institutions.

Law 38/94, of 21 November – Higher Education Evaluation Act – established the rules for the Portuguese quality assessment system for both public and private institutions.


Decree-Law 125/99, of 20 April – defined the legal regime for research institutions, including the basis for the evaluation of research units.

Law 1/2003, of 6 January – Development and Quality in Higher Education – established the consequences of the results of the evaluation process and determined the rating of the evaluated programmes. It also introduced the concept of academic accreditation.

Law 37/2003, of 22 August – Funding of Higher Education – established the foundations for the financing of higher education.

Decree-Law 42/2005, of 22 February – Regulatory Instruments for the Creation of the European Higher Education Area – established the principles that regulated the development of the instruments that would contribute to the creation of the EHEA.

Dispatch 484/2006, of 9 January – officialised the evaluations commissioned to the OECD and ENQA.


Law 62/2007, of 10 September – Legal Regime of Higher Education Institutions (RJIES) – approved the new legal framework of higher educations institutions.


Decree-Law 97/2009, of 27 April – approved the transition of three institutions to the foundational regime: University of Aveiro, University of Porto and ISCTE.

Decree-Law 205/2009, of 31 August – University Teaching Staff Statute – reviewed the University Teaching Staff Statute.

Decree-Law 207/2009, of 31 August – Polytechnic Teaching Staff Statute – reviewed the Polytechnic Teaching Staff Statute.

January 2010 – Contract of Confidence for Higher Education – aimed at increasing the levels of qualification in Portugal until 2014.


University of Warwick

Academic Statistics Yearbook (all years from 2002 to 2010) – produced on an annual basis, the Academic Statistics give an in-depth report on the students and staff of UW, alongside data on the destinations of leavers, research grants and contracts, league tables and other comparative information.

Code of Practice for Corporate Governance – summarises the decisions taken by the Council relating to corporate governance.
Ordinance 11: Appointment of Heads of Department – explains the procedure that has to be followed to appoint heads of department.

Results of the Pulse Survey 2008 – provided by the University of Warwick.


Statement of Primary Responsibilities of the Council – outlines the powers and responsibilities of the Council derived from the University Statutes.

University Calendar 2011-2012 – represents a snapshot of the structure and regulatory framework of UW, including committee membership and a calendar of the meetings for the academic year 2011/2012.

University Statutes – Statutes of UW.


University of Aveiro


Normative Dispatch 10/95, of 24 February – altered UA Statutes.

Normative Dispatch 51/97, of 21 August – altered UA Statutes.


UA (2008) – Development Project for the University of Aveiro – development plan for the University of Aveiro.


MCTES (2009) – Contract-Programme with the University of Aveiro – established the objectives that have to be met for funding purposes.

UA (2010) – Development Programme of the University of Aveiro – delivered to the Ministry, following the signing of the Contract of Confidence.


Regulation 489/2011 – established the evaluation parameters for the academic staff of the University of Aveiro.
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<th>Faculties</th>
<th>Departments</th>
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### Annex 4 – Summary of results at the University of Warwick

<table>
<thead>
<tr>
<th>Area</th>
<th>Degree of measurement</th>
<th>Examples of measures/instruments used</th>
<th>Level</th>
<th>Who measures</th>
<th>Who chooses</th>
<th>Main actors/bodies involved</th>
</tr>
</thead>
</table>
| Teaching and learning | High                  | • Student surveys  
• Internal database (e.g. retention rates, dropout rates)  
• Curricular review  
• Evaluation of new courses and modules  
• External audit by the QAA  
• NSS  
• Accreditation by PSRBs                                                                 | External:  
• QAA  
• HEFCE  
• PSRBs  

Internal:  
• Departmental  
• Individual                                                                 | Departments, usually based on QAA and PSRBs guidelines  
• Central Administration (to prepare for the QAA) | Committees:  
• AQSC  
• Senate  

Other:  
• 1 Pro-Vice-Chancellor for Student Experience  
• Faculty Boards  
• Board of Undergraduate Studies  
• Board of Graduate Studies |
| Research and scholarship | Very high             | • Internal databases (e.g. costs, outputs, grants, income generated)  
• RAE  
• International citation databases                                                                 | External:  
• Higher education funding councils                                                                 | Departments, usually based on the parameters used in the RAE  
• Central Administration (to prepare for the RAE) | Committees:  
• Research Committee  
• Steering Committee  
• Senate  

Other:  
• 2 Pro-Vice-Chancellors: Arts and Social Studies; Science and Medicine  
• Faculty Boards |
| Third mission         | Very low              | • Data on volunteer work  
• Income generated  
• List of contacts  
• HE-BCI Survey                                                                                           | Variable                                                                            | Departments  
• Warwick Volunteers  
• HEFCE                                                                                                    | Steering Committee                                                                 |
| Academic staff        | High (Professors are more scrutinised) | • Student surveys  
• Appraisal system  
• Pulse Survey  
• Internal database (e.g. number, gender, research data, number of PhD students)  
• Recruitment process  
• International citation databases                                                                 | External:  
• Head of department  
• Central Administration (through the Academic Office)  
• Students                                                                                               | Departments                                                                                |
|                       |                       |                                                                                                         | Internal:  
• Individual                                                                                               | Committees:  
• Academic Staff Committee  
• Remuneration Committee (for senior members)  
• Senate                                                                                                    | Other:  
• 1 Pro-Vice-Chancellor for Academic Resourcing  
• Deputy Vice-Chancellor                                                                                   |
<table>
<thead>
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<th>Area</th>
<th>Degree of measurement</th>
<th>Examples of measures/instruments used</th>
<th>Level</th>
<th>Who measures</th>
<th>Who chooses</th>
<th>Main actors/bodies involved</th>
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<tr>
<td>Non-academic staff</td>
<td>High (at central level)</td>
<td>- Pulse Survey&lt;br&gt;- Appraisal system&lt;br&gt;- Internal database (e.g. number, gender)</td>
<td>Individual&lt;br&gt;(within Central Administration and departments)</td>
<td>Registrar&lt;br&gt;Service Directors&lt;br&gt;Head of department&lt;br&gt;Academic Office</td>
<td>Service Directors&lt;br&gt;Head of department</td>
<td>Committees:&lt;br&gt;- Finance and General Purposes Committee&lt;br&gt;- Council&lt;br&gt;Other:&lt;br&gt;- Vice-Chancellor&lt;br&gt;- Registrar&lt;br&gt;- Deputy Vice-Chancellor</td>
</tr>
<tr>
<td>Students</td>
<td>High</td>
<td>- Internal database (e.g. number, attendance rates)&lt;br&gt;- Measures of educational success (e.g. degree results, completion rates, retention rates)&lt;br&gt;- Recruitment process&lt;br&gt;- Student tutoring system</td>
<td>Individual&lt;br&gt;(mainly through the Student Recruitment and Admissions Office)&lt;br&gt;Head of department</td>
<td>Central Administration (through the Academic Registrar's Office)&lt;br&gt;Head of department</td>
<td>Central Administration (through the Academic Registrar's Office)&lt;br&gt;Head of department</td>
<td>Committees:&lt;br&gt;- Campus Life Committee&lt;br&gt;- Graduate Studies Committee&lt;br&gt;- AQSC&lt;br&gt;- Senate&lt;br&gt;Other:&lt;br&gt;- Academic Registrar's Office&lt;br&gt;- Board of Undergraduate Studies&lt;br&gt;- Board of Graduate Studies&lt;br&gt;- Faculty Boards</td>
</tr>
<tr>
<td>Support services</td>
<td>High</td>
<td>- ASDAR&lt;br&gt;- Complaints&lt;br&gt;- ISB</td>
<td>Central&lt;br&gt;(through the Registrar's Office)&lt;br&gt;Independent business (ISB)</td>
<td>Central Administration (through the Registrar's Office and the Senior Management Team)</td>
<td>Central Administration (through the Registrar's Office and the Senior Management Team)</td>
<td>Committees:&lt;br&gt;- Finance and General Purposes Committee&lt;br&gt;- Steering Committee&lt;br&gt;Other:&lt;br&gt;- Service Directors&lt;br&gt;- Registrar&lt;br&gt;- Pro-Vice-Chancellors&lt;br&gt;- Vice-Chancellor</td>
</tr>
<tr>
<td>Employers (links to)</td>
<td>Very Low</td>
<td>- Internal database (e.g. employment information)&lt;br&gt;- Employment rate&lt;br&gt;- DLHE</td>
<td>n.a</td>
<td>n.a</td>
<td>Careers Centre&lt;br&gt;HESA</td>
<td>Committees:&lt;br&gt;- Steering Committee&lt;br&gt;- Senate&lt;br&gt;Other:&lt;br&gt;- Careers Centre</td>
</tr>
</tbody>
</table>

Area of measurement: 
- Non-academic staff: High (at central level) 
- Students: High 
- Support services: High 
- Employers (links to): Very Low
<table>
<thead>
<tr>
<th>Area</th>
<th>Degree of measurement</th>
<th>Examples of measures/instruments used</th>
<th>Level</th>
<th>Who measures</th>
<th>Who chooses</th>
<th>Main actors/bodies involved</th>
</tr>
</thead>
</table>
| Alumni       | Very Low              | • Fundraising activities  
               • Internal database (e.g. contacts)                                                                         | • n.a | • n.a                                             | • DARO               | Committees:  
               • Steering Committee  
               • Senate  
 Other:  
               • DARO                                                                                                      |
| Finance      | Very high             | • KPIs (e.g. surplus as a percentage of income, staff cost as a percentage of income)                | • All | • Finance Office (through the Finance Director)  
               • Central Administration (mainly through the Senior Management Team)                                             | • Measures developed by the Finance Office or by the Finance Team (in departments with devolved budget and agreed by Council  
 Other:  
               • Senior Management Team                                             |
|              |                       |                                                                                                        |       |                                                   |                      | Committees:  
               • Finance and General Purposes Committee  
               • Academic Resourcing Committee  
               • Steering Committee  
               • Senate  
               • Council                                                                                                    |
### Annex 5 – Departments, autonomous section and polytechnic schools at the University of Aveiro

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<tr>
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<tr>
<td>Civil Engineering</td>
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<tr>
<td>Communication and Art</td>
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<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Economics, Management and Industrial Engineering</td>
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<tr>
<td>Electronics, Telecommunications and Informatics</td>
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<tr>
<td>Environment and Planning</td>
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<tr>
<td>Geosciences</td>
<td></td>
</tr>
<tr>
<td>Glass and Ceramics Engineering</td>
<td></td>
</tr>
<tr>
<td>Languages and Cultures</td>
<td></td>
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<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
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<tr>
<td>Physics</td>
<td></td>
</tr>
<tr>
<td>Social, Political and Territorial Sciences</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Autonomous Sections</th>
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<tr>
<td>Health Sciences</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Polytechnic Schools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aveiro-North School of Design, Management and Production Technologies (ESAN)</td>
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<tr>
<td>Institute of Accounting and Administration (ISCAA)</td>
<td></td>
</tr>
<tr>
<td>School of Health Sciences (ESSUA)</td>
<td></td>
</tr>
<tr>
<td>School of Technology and Management (ESTGA)</td>
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</table>

**Note:** The Departments of Didactics and Educational Technology and Education Sciences were merged into the Department of Education. This new department was created in May 2009, with the publication of the University Statutes (Decree-Law 97/2009 of 27 April, and Normative Dispatch 18-A/2009 of 14 May).
### Annex 6 – Revenue Structure at the University of Aveiro

<table>
<thead>
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<th>Description</th>
<th>1999 (b)</th>
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<th>2001 (b)</th>
<th>2002 (b)</th>
<th>2003 (b)</th>
<th>2004 (b)</th>
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<td>%</td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
<td>%</td>
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<td>Students - Other</td>
<td>216 006,11</td>
<td>0,5</td>
<td>257 768,72</td>
<td>0,5</td>
<td>384 397,55</td>
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<tr>
<td>Students - Tuition Fees</td>
<td>2 882 800,61</td>
<td>6,0</td>
<td>3 179 840,16</td>
<td>5,7</td>
<td>4 132 323,35</td>
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<tr>
<td>State - Investment Plan (PIDDAC)</td>
<td>2 251 097,35</td>
<td>4,7</td>
<td>6 936 582,83</td>
<td>12,4</td>
<td>4 743 817,39</td>
<td>7,1</td>
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<tr>
<td>State - Current Funding</td>
<td>32 888 039,83</td>
<td>68,7</td>
<td>36 341 521,94</td>
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<tr>
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<td>0,00</td>
<td>0,0</td>
<td>400 948,92</td>
<td>0,7</td>
<td>6 032 892,11</td>
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<tr>
<td>EU Financing - Other</td>
<td>1 070 191,68</td>
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<td>1 668 933,56</td>
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<td>1 472 962,95</td>
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<td>EU Financing - PRODEP</td>
<td>2 177 088,67</td>
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<td>802 339,47</td>
<td>1,4</td>
<td>874 195,79</td>
<td>1,3</td>
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<td>Private Institutions</td>
<td>664 547,83</td>
<td>1,4</td>
<td>658 354,26</td>
<td>1,2</td>
<td>644 718,02</td>
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<tr>
<td>Public Institutions</td>
<td>3 629 647,70</td>
<td>7,6</td>
<td>2 683 866,62</td>
<td>4,8</td>
<td>5 346 514,30</td>
<td>8,0</td>
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<tr>
<td>Other</td>
<td>2 075 454,69</td>
<td>4,3</td>
<td>2 973 631,95</td>
<td>5,3</td>
<td>3 627 354,42</td>
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<td><strong>Total</strong></td>
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<td><strong>55 903 788,43</strong></td>
<td><strong>100,0</strong></td>
<td><strong>66 964 426,19</strong></td>
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<table>
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<th>2006 (b)</th>
<th>2007 (b)</th>
<th>2008 (b)</th>
<th>2009 (b)</th>
<th>2010 (c)(d)</th>
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<td>%</td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
<td>%</td>
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<tr>
<td>Students - Other</td>
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<tr>
<td>Students - Tuition Fees</td>
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<td>9 884 551,65</td>
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<tr>
<td>State - Investment Plan (PIDDAC)</td>
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<td>610 335,50</td>
<td>0,8</td>
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<tr>
<td>State - Current Funding</td>
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<td>44 980 147,00</td>
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<td>41 523 982,00</td>
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<tr>
<td>EU Financing - ERDF</td>
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<td>718 649,49</td>
<td>0,9</td>
<td>550 005,85</td>
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<tr>
<td>EU Financing - Other</td>
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<td>3 169 675,09</td>
<td>4,0</td>
<td>2 659 508,37</td>
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<tr>
<td>EU Financing - PRODEP</td>
<td>1 321 598,29</td>
<td>1,8</td>
<td>1 351 233,50</td>
<td>1,7</td>
<td>1 519 879,73</td>
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<tr>
<td>Private Institutions</td>
<td>1 186 180,25</td>
<td>1,6</td>
<td>1 871 226,50</td>
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<td>1 429 345,29</td>
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<tr>
<td>Public Institutions</td>
<td>7 275 093,63</td>
<td>9,8</td>
<td>10 087 021,88</td>
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<td>15 167 293,69</td>
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<td>Other</td>
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<td>5 277 531,00</td>
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<td>6 561 793,35</td>
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<td><strong>Total</strong></td>
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</table>

(a) It only integrates the values from UA  
(b) Consolidated values UA + ISCA  
(c) ISCA was integrated into UA  
(d) Provisional figures
### Annex 7 – Expenditure Structure at the University of Aveiro

<table>
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<tr>
<th>Description</th>
<th>1999 (a)</th>
<th>2000 (a)</th>
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<th>2004 (c)</th>
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<td>Amount</td>
<td>%</td>
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<td>%</td>
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<td>39 165 158,40</td>
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<td>42 879 348,75</td>
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<tr>
<td>Research Project Additional Costs</td>
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<td>8,6</td>
<td>5 829 752,35</td>
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<td>4 945 323,10</td>
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<tr>
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<td>6 011 612,28</td>
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<tr>
<td></td>
<td>7 562 898,96</td>
<td>10,3</td>
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<tr>
<td>Other Current Expenses</td>
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<td>19,6</td>
<td>10 392 586,72</td>
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<td>12 102 913,58</td>
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<td>11 560 981,20</td>
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<td>16 239 165,87</td>
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<td>9 656 117,60</td>
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<td>7 589 955,60</td>
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<td>6 504 187,74</td>
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<td>Total</td>
<td>47 324 659,31</td>
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<td>65 209 674,10</td>
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<td>73 185 601,32</td>
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<td>55 581 822,15</td>
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<td>Research Project Additional Costs</td>
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<td>12 745 081,04</td>
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<td>3 569 869,05</td>
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</tbody>
</table>

(a) It only integrates the values from UA  
(b) Consolidated values UA + ISCA  
(c) ISCA was integrated into UA  
(d) Provisional figures
### For Study Programmes

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### For Research Units

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## Annex 9 – Summary of results at the University of Aveiro

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<th>Degree of measurement</th>
<th>Examples of instruments/measures used</th>
<th>Level</th>
<th>Who measures</th>
<th>Who chooses</th>
<th>Main elements/bodies in the governance structures involved</th>
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</table>
| Teaching and learning | Medium                | • SGO  
• Accreditation process conducted by A3ES                                                      | • Departmental  
• Individual                                                      | Externally:  
• A3ES  
Internally:  
• Students                         | • Rectory  
• A3ES                        | Bodies:  
• Rectory  
• Pedagogic Council  
Other:  
• 1 Vice-Rector for First Cycle and Second Cycle Studies and Lifelong Learning  
• 1 Pro-Rector for Study Cycles Accreditation |
| Research and scholarship | Very high             | • Evaluation performed by FCT  
• International citation databases  
• EU’s evaluation system                                                   | • Departmental/research units/associate labs  
• Individual                                                           | Externally:  
• FCT  
• EU  
Internally:  
• Head of department/director of research unit/director of associate lab  
• Financial Resources Office                                             | • Research units and associate labs, usually based on the parameters used in the evaluation performed by FCT and EU’s panels of international experts  
• Financial Resources Office  
• Administrator | Bodies:  
• Scientific Council  
Other:  
• 1 Vice-Rector for Research and Third Cycle Studies |
| Third mission     | Very low              | • Income generated by services provided to society  
• Number of patents registered  
• Number of protocols and contracts signed and fulfilled  
• Number of businesses on campus                                      | • Variable                                                        | Financial Resources Office  
Office for Technology Transfer                                             | Rectory  
Financial Resources Office  
Administrator  
Office for Technology Transfer | Bodies:  
• Rectory  
Other:  
• 1 Vice-Rector for Cooperation, Innovation, Technology Transfer and Post-Secondary Training  
• 1 Pro-Rector for Regional Cooperation |
<table>
<thead>
<tr>
<th>Area</th>
<th>Degree of measurement</th>
<th>Examples of instruments/measures used</th>
<th>Level</th>
<th>Who measures</th>
<th>Who chooses</th>
<th>Main elements/bodies in the governance structures involved</th>
</tr>
</thead>
</table>
| Academic staff              | Medium                | • SGQ  
• Evaluation criteria when applying for positions  
• Research CV when applying for grants                                                                 | Individual                    | • Students  
• Jury nominated to assess academics when they apply for academic positions  
• FCT/other grant providers                                                                 | • Departments (when opening positions)  
• Rectory  
• Scientific Council  
• Pedagogic Council  
• FCT/other grant providers                                                                 | Bodies:  
• Scientific Council  
• Pedagogic Council  
Other:  
• Human Resources Office |
| Non-academic staff          | Very high             | • Objectives and indicators integrated in SIADAP  
• Staff satisfaction surveys                                                                                                                   | Individual within Central Administration and departments | • Heads of department  
• Service directors  
• Administrator  
• Vice-Rector for Strategic Planning, Information Management and Quality Enhancement                                                                 | • Central Administration (the Director of each service)  
• Head of department (for departmental staff)                                                                 | • Administrator  
• CCADUA  
• Human Resources Office |
| Students                    | High                  | • Measures of educational success  
• RAIDES                                                                                                                                        | Individual                     | Externally:  
• MCTES  
Internally:  
• Systems and Information Management Office                                                                 | MCTES                                                                 | • Academic Records Office  
• Systems and Information Management Office |
| Support services            | Low                   | • QUAR  
• Satisfaction Surveys                                                                                                                        | Central  
Departmental | • Heads of department  
• Service directors  
• Vice-Rector for Strategic Planning, Information Management and Quality Enhancement                                                                 | • Heads of department  
• Service directors  
• Administrator  
• Vice-Rector for Strategic Planning, Information Management and Quality Enhancement                                                                 | • Administrator  
• 1 Vice-Rector for Strategic Planning, Information Management and Quality Enhancement |
| Employers (needs and satisfaction) | Very Low             | • Employers’ Survey  
• Measures defined by external assessors                                                                                                         | University  
Departmental | Externally:  
• External assessors  
Internally:  
• Rectory                                                                                                                                          | Rectory  
• Task Force  
• External assessors                                                                                                                                  | Rectory |
<table>
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<tbody>
<tr>
<td>Alumni</td>
<td>Very Low</td>
<td>• Alumni's Survey</td>
<td>• University</td>
<td>• Rectory</td>
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<td></td>
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<td>• Internal financial measures (e.g. surplus as a percentage of income, staff cost as a percentage of income)</td>
<td>• Departmental</td>
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<td>• Internships and Professional Opportunities Office</td>
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<tr>
<td>Finance</td>
<td>Very high</td>
<td>• Measures defined by external assessors</td>
<td>• All</td>
<td>• Financial Resources Office</td>
<td>• Financial Resources Office</td>
<td>• General Council</td>
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<td>• Ministry of Finance</td>
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<td>• Management Council</td>
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<td>• Court of Auditors</td>
<td>• Administrator</td>
<td>• External auditor</td>
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<td>• External assessors</td>
<td>• External assessors</td>
<td>• Council of Curators</td>
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<td>• Administrator</td>
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