



**Rosa Isabel de
Almeida Nogueira**

**INTERNACIONALIZAÇÃO E ENSINO SUPERIOR
O CASO DA UNIVERSIDADE DE AVEIRO**

**INTERNATIONALISATION AND HIGHER
EDUCATION
THE CASE STUDY OF THE UNIVERSITY OF AVEIRO**



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Dissertação apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Mestre em Gestão, realizada sob a orientação científica do Doutor António Carrizo Moreira, Professor Auxiliar do Departamento de Economia, Gestão e Engenharia Industrial da Universidade de Aveiro

Thesis presented to the University of Aveiro to fulfil the formalities essential to obtain the degree of Master in Management done under the scientific supervision of Dr. António Carrizo Moreira, Assistant Professor at the Economics, Management and Industrial Engineering Department of the University of Aveiro

o júri

presidente

Doutora Sandra Maria Correia Loureiro
Professora auxiliar da Universidade de Aveiro

Doutora Maria José Aguilár Madeira Silva
Professora auxiliar da Universidade da Beira Interior

Doutor António Carrizo Moreira
Professor auxiliar da Universidade de Aveiro

acknowledgements

To Professor Carrizo Moreira; To Professor Victor Gil, Professor Fernandes Thomaz, Professor Renato Araújo, Professor Júlio Pedrosa, Professor Isabel Alarcão, Professor Maria Helena Nazaré; To Niall Power, Ana Coimbra, Rui Patrício, Miguel Oliveira; To João and to my parents.

Thank you so much for the availability, knowledge, motivation, encouragement, company and care.

In the end, the most difficult academic work became the most rewarding and precious of all!

My deepest gratitude.

Palavras -Chave

Internacionalização, teorias de internacionalização, ensino superior, Instituições de Ensino Superior, Universidade de Aveiro.

Resumo

A educação é a estratégia mais bem-sucedida para o crescimento e desenvolvimento de um país. É o meio mais relevante que a sociedade possui para lidar com os desafios do futuro. Contudo, o ensino superior tem sido confrontado e necessita de redefinir o seu papel histórico enquanto centro de conhecimento e compreensão universal.

Esta dissertação de mestrado analisa a importância da internacionalização nas instituições de ensino superior e permite-nos compreender a sua influência nas alterações das instituições.

Usando o caso de estudo da Universidade de Aveiro, será analisado o conceito de internacionalização em contexto de ensino superior e os motivos, formas e actividades que estão associados ao processo de internacionalização de uma instituição.

Mais ainda, será questionada a adequabilidade das teorias de internacionalização especialmente desenvolvidas em ambientes industriais a contextos de ensino superior.

Keywords

Internationalisation, theories of internationalisation, higher education, Higher Education Institutions, University of Aveiro.

Abstract

Education is the most successful strategy for a country's growth and development. It is widely agreed that it is the most effective means that society possesses for dealing with the challenges of the future. Nevertheless, higher education has been confronted and needs, therefore, to redefine its historic role as the centre of universal knowledge and understanding.

This master thesis analyses the importance of internationalisation on higher education institutions and enable us to better understand how they are changing as a consequence of internationalisation.

Using the University of Aveiro as a case study, we will be studying what is internationalisation in a higher education context and which rationales, approaches and activities are associated with the internationalisation process of an institution.

Furthermore, the appropriateness of theories of internationalisation specifically developed for business contexts will be assayed in higher education contexts.

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List of Abbreviations

(ACUME): Interfacing Sciences, Literature and Humanities
(AISEC): International Students Association of Economic and Entrepreneurial Sciences Students
(BeFLEX): Benchmarking Flexibility in the Bologna Reforms
(CPLP): Portuguese Speaking Countries Community
(CPR): Constitution of the Portuguese Republic
(EC): European Community
(ECIU): European Consortium of Innovative Universities
(ECTN): European Chemistry Thematic Network Association
(ECTs): European Credits Transfer System
(EEC): European Economic Community
(EMMS): Joint European Masters Programme in Materials Science
(EU): European Union
(EUA): European University Association
(EUCEN): European University Continuing Education Network
(EUF): European University Foundation
(EuSTD): European Teachers Professional Development for Science Teaching
(FAME): Functionalised Advanced Materials and Engineering
(FCT): Science and Technology Foundation
(FDI): Foreign Direct Investment
(FSAs): Firm-specific Advantages
(GEP): Office for Strategic Planning
(GPEARI): Office for Planning, Strategy, Evaluation and International Relations
(HE): Higher Education
(HEEM): European Masters Degree in Higher Education
(HEI): Higher Education Institutions
(JEMES): Joint European Master Programme in Environmental Studies
(JMACS): International Master in Advanced Clay Science
(MNEs): Multinational Enterprises
(NETTLE): Network of European Tertiary Level Educators
(NGO): Non Governmental Organisation
(OECD): Organisation for Economic Co-Operation and Development
(OLD): Ownership, Location and Internalisation
(PALOP): Portuguese Speaking African Countries
(PLC): Product Life Cycle
(TREE): Teaching and Research in Engineering en Europe
(UA): University of Aveiro
(U-Model): Uppsala Theory
(UNESCO): United Nations Educational, Scientific and Cultural Organization
(USA): United States of America
(WebQDA): Qualitative Analysis Supporting Software

1. Introduction

Higher education (HE) is expected to play a leading role in attaining equity, development, justice and democracy, in fostering the values of democracy, creating critical citizens, as well as in shaping new generations of thinkers and actors.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO):

“the goal of (higher) education is to make people wiser, more knowledgeable, better informed, ethical, responsible, critical and capable of continuing to learn (...) Education, in short, is humanity’s best hope and most effective means in the quest to achieve sustainable development” (UNESCO, 1997: 40).

Higher Education Institutions (HEI) represent the most meaningful symbol of intellectual, economic, cultural and social life of the community in general (Machado & Taylor, 1995).

Pressured by demanding needs to endure and improve their competence, HEI have found in internationalisation strategies their way to progress and survive. Internationalisation is widely understood to be good and to improve higher education quality, competitiveness and development. However, internationalisation cannot be understood as an end in itself but rather as a means to develop and sustain higher education.

At the beginning of the 20th century, internationalisation became an interesting study phenomenon, and deeply developed in the 80s with European mobility programmes. However, the literature reviewed and the documentary data and reports analysed have shown that most of what is produced is related to information that explains the phenomena of internationalisation in higher education contexts. Most studies focused their conclusions in *why* and *how* internationalisation in higher education is conceived. An inner look at the Portuguese reality allows us to understand that there is not much study produced on this theme. Despite some researchers, such as Amaral, Veiga, Simões and Santiago, very few works are produced taking this theme as the centre of any research.

Using a case study as research method, our intention is to analyse in deep and with particular attention the example of the University of Aveiro (UA) in order to find out more about *what* internationalisation is to Portuguese Higher Education Institutions.

This dissertation has been written to comprehend the term internationalisation applied to the higher education context and to analyse the existing internationalisation activities in the University of Aveiro. Through the comprehension of their rationales, activities, extension and actors, we should be able to understand the evolution and the importance of internationalisation in HEI.

1.1. Background

This research proposal has arisen in the context of a dissertation for the Master's degree in Management given by the University of Aveiro. Given the practical, business views of internationalisation strategies discussed throughout the degree, we found it could be interesting to understand whether the same strategies and models could also be applied to services, namely in a Higher Education Institution. Despite extensive studies about higher education, it was interesting to discover that there are few evidences of interconnection of managerial ideas and models between private and public institutions.

Besides our own interest in this issue, the obvious stakeholders to this dissertation are the entities involved. On the one hand, it is important for managerial researchers to find out more and understand how public institutions, service providers such as universities, are reacting to new challenges and how their actions are reflected in their findings. On the other hand, it is important for institutions to comprehend new forms of potentiating their capabilities and to captivate any signal that might assist their development and resilience.

Taking into consideration the gap in deeper knowledge of the Portuguese reality, we found it interesting to analyse and develop this research topic.

1.2. Motivation and Rationales of the Study

In this particular case our main motivation is related to our own experience, be it in academic, cultural or professional background. As a postgraduate student, our academic years have ranged from intercultural languages and cultures to managerial subjects. The

motives and goals specially revealing to this theme were carefully joined and an important experience was taken into account. Having studied at the University of Nottingham for one year and lived in a university campus that was spread over 3 countries was an important point in our motives.

In this way, we consider that our main motivation rested on satisfying curiosity while, at the same time, giving a minute contribute to this knowledge area. These implied deepening our study, joining important data and understanding our position in comparison with other realities.

In addition to being such an interesting theme, there is personal motivation in the giving of our contribution to national research on the theme, contribution to the development of an institution where we have learned and lived most of our life and in the eventual achievement of credentials to pursue career goals.

1.3. Research Problem

The theme of this dissertation is quite abstract and very difficult to define. Considering that most of the literature produced is focused on the background of internationalisation, our purpose is to find out more about the importance of internationalisation in Higher Education Institutions, by getting to know their activities in this field better. In order to understand the importance given by institutions to internationalisation, a case study will be analysed so that the following question might be answered:

- What is internationalisation in Higher Education Institutions?

To understand and explore the research problem, as well as take into account our case study, we must define other succeeding questions in order to comprehend and give an oriented design to our work. Taking this into consideration, the following subsequent questions are also defined:

- How is internationalisation understood in the business and higher education contexts?
- How are internationalisation activities in HEI, particularly in UA characterised?
- What are the main rationales to the internationalisation of UA?
- What are the main strategies being adopted by UA in order to be internationalised?

- How has internationalisation activities in UA changed in recent years?
- How do UA evaluate the benefits of internationalisation?
- What is expected for UA's future strategy?

These dissertation research objectives are concerned with the knowledge that is needed to be produced in order to create an interesting work. The type of objectives for our research which is mainly an exploratory study was mainly to explore, to describe and to understand.

“To explore is to attempt to develop an initial, rough description or possibly an understanding of some social phenomenon. To describe is to provide a detailed account or the precise measurement and reporting of the characteristics of some population, group or phenomenon, including establishing regularities. To understand is to establish reason for particular social action, the occurrence of an event or the course of a social episode, these reasons being derived from the ones given by social actors” (Blaikie, 2000: 72).

1.4. Methodology

Aware of the social context we are referring to, we have identified two essential research strategies in order to answer our research question in this dissertation: the inductive and the abductive research strategies. As Blaikie (2000) defines it, the inductive strategy starts with the collection of data and then proceeds to derive generalizations using the so-called inductive logic.

“The aim is to determine the nature of the regularities, or networks of regularities, in social life. Once these are established, they can be used to explain the occurrence of specific events by locating them within the pattern of established regularities. This strategy is useful to answer what questions but rather limited in its capacity to answer why questions” (Blaikie, 2000: 25).

Abductive research is described as involving induction:

“The starting-point is the social world of the social actors being investigated their construction of reality, their way of conceptualizing and giving meaning to their social world, their tacit knowledge. (...) The task is then to redescribe these motives and actions, and the situations in which they occur, in the technical language of social scientific discourse” (Blaikie, 2000: 25).

The main sources of data collection were naturally contingent to our capacity to access them. In this dissertation, the data resources were basically a combination of interviews conducted in semi-natural settings and document and content analysis.

The data collected is in the three possible types in social research: primary (collected by the researcher), secondary (collected by others and used in raw form), and also tertiary data (secondary data analysed by other).

The forms in which data was collected and analysed were qualitative and quantitative.

1.4.1.Document analysis

Ample documentary analysis was an important form to collect information. To write the state of art, articles and books were consulted that allowed us to clarify the main concepts mentioned in this research, the theories associated with the theme and its contextualisation.

Minding the evolutionary perspective adopted in the case study analysis, document assessment was in fact one of the most important and relevant forms to collect information. Having been given permission to access the University of Aveiro archive, we were able to consult a group of selected documents which were very important to understand the characteristics of the university as well as its evolution.

1.4.2.Interviews

The conducting of interviews represents our fieldwork in this dissertation. Although many people have been very reticent to accept this methodology, we find it appropriate for

the type of social research our dissertation is classified as. In fact, if we did not consider interviews as valid as any other method in research, it would become impossible to capture human beings' views, assumptions and feelings towards the world that surround us. Taking into consideration that the theme is extremely wide-ranging, we designed semi-structured interviews that are neither open conversations nor highly strict questionnaires. In this type of theme-oriented inquiry, the important thing is to know all the themes we have to get an answer and a reaction to from the interviewee, in order to explore their issues. The order and the form of the questions are informal and not strict, and the main aim of these study interviews is to obtain a generalisation (Ghiglione and Matalon, 2005) that in this circumstance can only characterise this study case in particular.

The sample was intended to represent the whole of the management population and was chosen due to its representativeness and the importance of its roles in the structure of the university taken as a case study.

1.5. Organization of the study

The first chapter of this dissertation presents the background and the main rationales for the writing of this work. Besides the presentation of methodology, the theoretical framework needed to understand the importance of internationalisation in HEI is also proposed, so that research questions may achieve a conclusive answer.

The second chapter is divided into 4 main sections: the first is appropriate to clarify the usage of the main terms used in this work. In the second chapter some of the most important internationalisation theories are presented. An overview of higher education with an inner gaze into the Portuguese Higher Education system is taken in the third section. The fourth section presents the rationales for the internationalisation of HEI's and the internationalisation approaches and activities used in the business and higher education contexts.

The third chapter presents the research methodology: the reasons for selecting a case study, data collection methods and data analysis.

Results from our case study analysis are presented in chapter four. Evidences from interviews, official documents and statistics allow outlining important moments in UA's evolution and understanding internationalisation influence in the institution. Description

and categorisation of UA's internationalisation activities are provided and expected future developments and scenarios are also presented.

Final conclusions, limitations of the study and suggestions for future research projects are presented in the fifth chapter of this work.

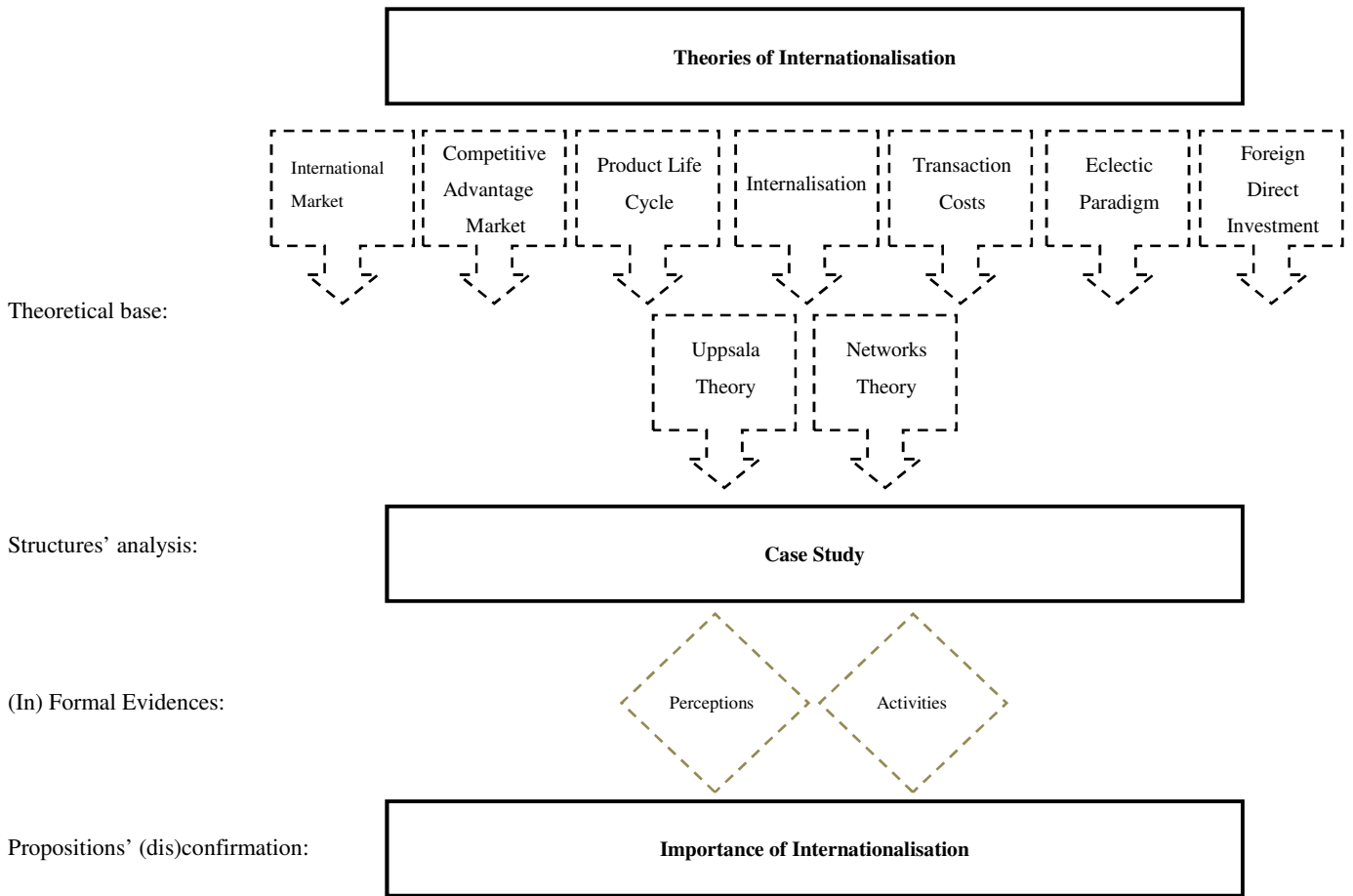
1.6. Theoretical Framework and Expectations of the Research

This dissertation aims to understand the importance of internationalisation in HEI. From an evolutionary perspective, we will take the analysis of a case study into consideration. It's theoretical framework is presented in Figure 1.

To understand the importance of the dimension of internationalisation in this particular example, we will evaluate the perceptions of all its main management actors as well as the main activities related to the internationalisation process throughout time.

By analysing these two dimensions, one expects that internationalisation theories are applied to this particular case in different contexts, and that internationalisation might be of survival importance to Higher Education Institutions.

Figure 1: Theoretical framework to understand the importance of internationalisation in HEI



Source: Self-elaborated.

2. Literature Review

The aim of the literature review, as Blaikie (2000) points out, is to link the proposed research with the current state of relevant knowledge and to find possible answers to our research questions.

2.1. The concept of internationalisation

Internationalisation, globalisation and Europeanisation are often discussed together. These are complex terms and difficult to define, even more when they are used by different players in diverse contexts. From our point of view, it is important to distinguish the use of these terms not only due to their need of definition, but especially because the context in which they are used is quite assorted.

Although related, the concepts internationalisation, globalisation and Europeanisation in a managerial context assume a rather diverse meaning when used in a higher education context. According to this perspective, internationalisation is a term frequently used by Higher Education Institutions when referring to their international activities. Despite being more focused on the international dimension of higher education, due to its influence and/or relations, the terms globalisation and Europeanisation are also used. However, although related, it is useful to distinguish the terms as they reflect phenomena with different rationales, objectives and effects (Yang, 2002).

Internationalisation is directly related to the spread of activities to countries other than the original one. Globalisation is more complex, as it needs a degree of functional integration between the receptor and the country of origin.

2.1.1. Internationalisation

There are an infinite number of interpretations and definitions on what internationalisation might be. No designation is unanimous and different definitions might in fact be complementary. In the 1980s, Welch and Luostarinen (1988) defined internationalisation as the process where enterprises increase their involvement in international operations. Calof and Beamish (1995) present internationalisation as the

process of adaptation to organizational processes such as resources, strategies or structures in international contexts. To Meyer (1996), internationalisation is the process whereby an enterprise increases its level of valuable activities out of its country of origin. Internationalisation may involve also other interpretations associated for example with stages such as disinvestment (Simões, 1996). In a certain way, this interpretation contrasts with the general concepts and understandings of what the internationalisation process pointed out by all the previous mentioned authors is.

Simões (1997) brings all the definitions down to two essential bases: internationalisation is either about a micro-macro opposition where the enterprise is confronted with a national economic view, or an inward-outward polarization that confronts the operations from inside to outside.

Viana and Hortinha (2002: 83) ¹define it thus:

“Internationalisation is a process made by stages that generally starts with exportation. The origin of the enterprise’s decision may rely on a rational search process, on a reaction to an opportunity or on an external approach. Today, due to the intensification of global competition, many enterprises that only performed in domestic markets and without any international tradition are looking for external markets.”

As internationalisation is conditioned and influenced by the opportunities that external markets present, many researchers consider internationalisation a response from a country or its institutions to external economic features.

On a diverse context such as HEI, internationalisation might be defined as:

“the process of integrating an international and intercultural dimension into the teaching, research and service functions of the university or institution of higher education” (Knight, 1993: 21).

Understanding the term internationalisation implies in this sense the consideration of a process that involves all the intervening parties, functions, resources, plans and willingness to achieve goals defined and clearly understood by all.

¹ A.T.

Internationalisation has also a dimension of cooperation and integration, meaning it is well comprised in the institution's mission, vision and strategic values. It includes both an intercultural and international dimension that underlines the diversity and similarities between nations and also includes and highlights the cultural and ethnic characteristics of all the members of a country. It is assumed that nations get together and share their cultural, political, economic and social characteristics but there is a strict line signaling nations' borders that is not trespassed. It foresees that nation-states continue to function within bounded economic, social and cultural systems. Finally, these considerations about internationalisation imply that this institutional goal exists to fulfil other basic functions of Higher Education Institutions, such as the teaching and learning process, research and service to society.

For a university, as Yang (2002) defines it, internationalisation means:

“The awareness and operation of interactions within and between cultures through its teaching, research and service functions, with the ultimate aim of achieving mutual understanding across cultural borders. For a national higher education system, internationalisation refers to dialogue with those in other countries” (Yang, 2002: 83).

2.1.2. Globalisation

Although the beginning of globalisation probably dates back to many centuries ago, it was only developed after the Industrial Revolution. Globalisation is a phenomenon internally related to the development of communications and railways that allowed and facilitated the circulation of goods, services, people and knowledge. As Viana and Hortinha (2002) stated, it was in 1860 and 1910 that gigantic companies who took advantage of the early communication and transport developments first appeared in the United States. Despite retractions with the big Depression and World War II, after 1950 exportations grew considerably and today, when referring to the economy, it is impossible not to be absorbed in the concept of global markets.

About the idea of global market, Viana and Hortinha (2002) stated:

“This homogenisation and uniformisation of consumption is supported by global communication systems that fuse cultures, attitudes and values and

consequently homogenise the tastes and preferences of global citizens. We are facing a global village where we all belong as a consequence of digital nets and global information, but in which not all participate due to unequal revenue distribution, and cultural, religious and educational differences” (Viana and Hortinha, 2002: 77)².

Teixeira and Diz (2005) describe the concept of globalisation with the idea that the world is becoming homogeneous, meaning that differences among national and regional markets are disappearing.

Simões (1996) defines the term as follows:

“We understand globalisation as the process of development of global inter-relationships, where each country is connected to others through a complex network of connections and happenings in a way that decisions and actions taken anywhere in the world may bring significant consequences to individuals and organisations located in remote areas” (Simões, 1996: 6).³

Being an entirely active and on the day theme, globalisation means that differences and borders are gradually disappearing and that we can take profit from scale economies and define strategies based on a global view. It emphasises the increasing convergence and interdependence of economies and societies. Simões (1996) identifies 6 types of globalisation processes:

- Financial and economic globalisation;
- Markets and production globalisation;
- Technological globalisation;
- Ruler organisations globalisation;
- Lifestyles and consumer habits globalisation;
- Perceptions and consciousness globalisation.

Globalisation is a very strong and all-encompassing concept which highly reflects the interdependency of economies and societies.

² A.T.

³ A.T.

Concerning its economic character, globalisation, which is in fact a process that transcends national borders, has facilitated and quickened the process of internationalisation of HEI. As Knight (2001) explains, globalisation effects are conditioned to each country due to its nation individual history, traditions, culture and priorities. In this way, globalisation means a flow of technology, economy, knowledge, people, values and ideas across borders.

When referring to Higher Education subjects it is very clear that we are also referring to standardized and global sciences and understandings. Despite some fundamentalisms of religion, politics or culture, knowledge is becoming uniform and generalized. HEI determine the educational level of a population and this is the most determinant factor for competitive enterprises and countries (Viana and Hortinha, 2002).

The main difference between internationalisation and globalisation lies precisely on the dissimilarity between the amalgam of unity, likeness and homogenization (globalisation) and the respect and preservation of each actor's individuality and unique characteristics (internationalisation). Globalisation challenges the power of the nation state; internationalisation assumes that states still play a crucial role. Globalisation is primarily associated with increased interdependence and convergence and an ethos of competition, while internationalisation tends to be mainly associated with an ethos of mutuality and practices geared at strengthening cooperation (Kreber, 2009).

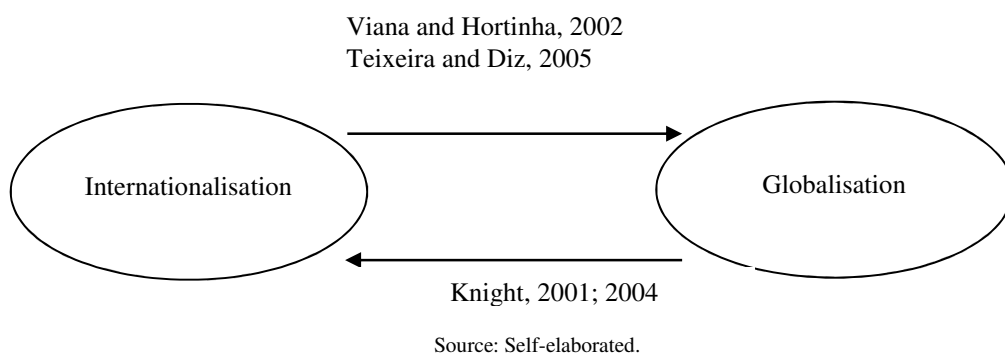
Contrary to a business approach defended by several authors (Viana and Hortinha, 2002; Teixeira and Diz, 2005) who clearly declare that globalisation is a result of an international process and can even be seen as a stage of the international process of an enterprise, to HE investigators globalisation is seen as the catalyst element, whereas internationalisation is the response – a proactive response to globalisation – distinct from the globalisation process itself. Internationalisation is faced as an adaptation process of universities to the globalisation process (Knight, 2001; Yang, 2002; Bartell, 2003).

Figure 2 reflects the dichotomy between internationalisation and globalisation. Whereas to business investigators globalisation is a result of internationalisation, to higher education investigators the globalisation is the impulse to internationalisation activities. Taking into consideration these two aspects and considering that our focus in this dissertation is on a higher education context, we tend to use this last interpretation. In fact, as explained ahead, HEI internationalisation activities are a response and a reaction to a

globalised world and must be all-compassing of institutional dimensions. This is a different approach from business as we are referring to a services context, particularly a public service in which internationalisation process is already late and cannot be in any other way rather than originally responding to already globalised markets, cultures and peoples.

Based on these appreciations, it seems reasonable to use the term internationalisation when referring to the international strategies of Portuguese universities.

Figure 2: Relation between internationalisation and globalisation



2.1.3. Europeanisation

Europeanisation is a term that often refers to internationalisation on a “regional” scale, where markets are actually seen as regions. This position is frequently associated to standardization within a geographical area that limits the institution’s role (Viana and Hortinha, 2002).

Regionalisation of Higher Education is the cross-border cooperation between two or more neighbouring countries, as it frequently happens with Iberian Peninsula countries, Nordic countries or colonial countries. Here, as van der Wende (1998) points out, the emphasis is not so much on exchange but on structural co-operation at the educational and administrative level, with the aim to make the systems on both sides of the border more responsive to the needs of the regional labour market and to enhance mutual access and complementarity.

At an Europeanisation extent, cooperation and joint agreements are seen as necessary actions to the empowerment of all nations involved. Also intending a cooperation to be competitive and endure a response to globalisation, Europeanisation is simultaneously a de-nationalisation in search of unification, and an integration of supra-national regulatory norms.

Whilst internationalisation is recognized as nation States' activities with an emphasis on cooperation and exchange, the role of nation States in globalisation has become blurred, with globalisation being associated more with economic-related activities, focusing on competition. Europeanisation is a phase of internationalisation, which contains common cultural values on a regional basis, and, in the process of internationalisation, nation States play an important part where cooperation is emphasized (Toyoshima, 2007).

2.2. Theories of internationalisation

There is not one better theory or model of internationalisation that we can apply to organizations. Each of the known theories has different approaches to explain internationalisation activities and is concentrated on diverse postulations. It is the combination of models that, complementing each other, help us understand the idea and the process of internationalisation itself. The opinions are diverse and not all can be applied to every example of internationalisation, but they complement each other and compose a support to our understanding of the process of internationalisation as it is known today.

Traditional theories on internationalisation activities are more focused on the internationalisation of production and in Foreign Direct Investment. On the other hand, recent theories have their focus on understanding internationalisation as a process that claims progressive involvement in international activities minding strategies, aims, knowledge and experiences. While the former are focused on and appropriate for multinational enterprises, the latter are centred on small and medium-sized firms.

Taking the perspectives, contents and multiple objectives of the internationalisation process into consideration, the theories of internationalisation represent the theoretical framework of all practical explanations.

Assuming it to be an unbearable task to present and deconstruct all theories of internationalisation, the following pages present the contributions of some important authors and a reference to some of the most significant theories of internationalisation.

We can summarize the presented theories into two main groups, known as economic theories and behavioural theories. In the chapters ahead we refer some of the most influential models.

2.2.1. Economic theories of internationalisation

The economic theories of internationalisation encompass the first studies about this phenomenon and integrate the following theories: classical theory of international market, theory of competitive advantage, product life cycle theory, internationalisation, foreign direct investment and eclectic paradigm.

- **International markets theories**

Deeply associated with classical economic thought, this is the ancient and best known theory of internationalisation. In 1776 Adam Smith gave his contribution with the revelation of the classical economic theory where he explained that the best possible profit should be taken from an absolute cost advantage. The profits and revenues come from the advantage of owning a particular set of goods or services to be produced that no other country possesses. From this perspective, as mentioned by Mitgwe (2006), the internationalisation process was initiated at the national level.

Later, in 1817, David Ricardo revealed the theory based on comparative cost advantages and on the perception of price as understood by market conditions. These theories are based on the international specialization of each country in their own best resources and on consequently getting their inevitable advantages. The more plentiful a country in relation to a certain factor, the shorter the cost related to it.

The theory of absolute advantage assumes that a country becomes specialised in the specific goods or services that are an absolute advantage to it. The theory of comparative advantage adds that even though less efficient than others, a country may become as good

as them according to what it would be of best interest to trade taking into account relative (dis)advantages.

The theory of absolute advantage and the theory of comparative advantage dominated the theoretical context about internationalisation for more than 40 years, being then demystified as the reality, reinforced by growing globalisation, demonstrates that resources flow all over the world and are easily transported and transferred from country to country.

- **Theory of competitive advantage**

Michael Porter (1985) identified two types of basic competitive advantage:

- Cost advantage;
- Differentiation advantage.

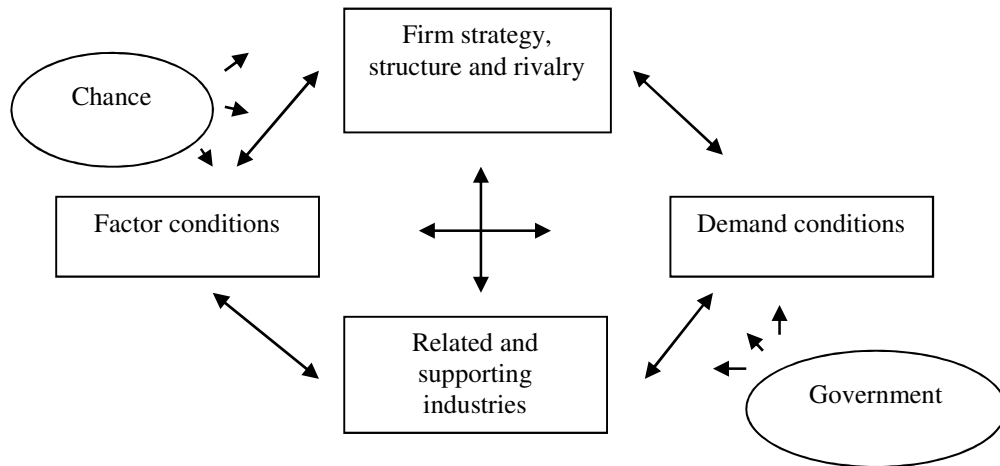
The cost advantage exists when a company can deliver the same benefits that its competition but with less costs. The differentiation advantage exists when a company delivers benefits that are better than those of their competition. This competitive advantage is then accomplished when resources and capabilities are used to obtain a structure of small costs or differentiated products (Porter, 1990).

In 1990, Porter explained how particular industries become competitive in particular locations through what was known as the Diamond model, shown in Figure 3. According to Porter (1990), one can analyse the competitive advantage of an organization considering not only the specialized productions of a country in what it does best, but also its relation with others: the way they organise and compete.

Porter's (1990) Diamond model is composed of the following main blocks:

- The factor conditions are the qualified human resources and the technical infrastructures, as well as other competitive production factors;
- The demand conditions represent the level of sophistication that each consumer demands;
- The related and supporting industries represent the existence of buyers, suppliers or others in the evolving context that help competitive advantage;
- Firm strategy, structure and rivalry are the rules that dictate the way enterprises might perform and rule over their competition;

Figure 3: National Competitive Model



Source: Porter (1990)

- **The Theory of Foreign Direct Investment**

Hymer (1976) was the first author to present the theory of Foreign Direct Investment (FDI) recognising the existence of market imperfections in several forms. It represents the most simple and direct form of a company's transition to a foreign country after direct comparison of the advantages held by host countries. Hymer developed the concept of firm-specific advantages (FSAs) and demonstrated that FDI only takes place when the benefits of exploiting FSAs across borders allow the overcoming of the additional costs of doing business abroad. Taking into consideration that countries are keen on specific resources, capital or labour strategies, this theory defends that the differences and revenues on production prices are the most significant factor to take into account in the localization of enterprises. Therefore, companies that have made these decisions gain advantages from market imperfections and become dominant over investments and competition.

Hymer (1976) recognized that FDI is a firm-level strategy decision rather than a capital-market financial decision. According to this author, the aim of internationalising production activities is essentially to reinforce networks where each participant is acute on certain resources and contributions. The FDI theory outlines the importance of environmental conditions and states that there is a need for some specific advantages that

must be exploited in advance and only when there is a clear advantage taken from international location, and through the market power exercised by an influence of international companies over local operators.

The deconstruction of this theory relies essentially on the same arguments applied to the obliteration of the classical theory of international market. Moreover, as Hymer (1976) assumes the predominance of the beneficial relation salary/productivity in specialized countries, is overwhelmed with examples of the multinational enterprise.

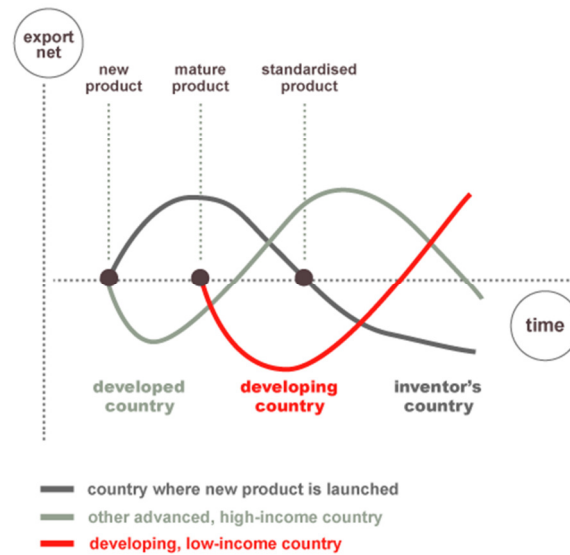
- **Theory of product life cycle**

The product life cycle (PLC) theory was developed by Vernon (1966) and later reinforced by Onkvisit and Shaw (1983). This theory introduces a time factor to the previous ones and explains how an enterprise becomes multinational through a product life cycle constituted by 4 stages: introduction, growth, maturity and decline. This theory defends that international trade patterns are similar to the PLC patterns in the domestic firm.

The basic concept of this theory is that an enterprise, after analysing its conditions (structure, demand, resources, etc), creates a product in its home market. This creation is frequently associated to developed countries due to the facility and conjunction of resources. In this way the products are created and sold at high prices. In order to respond, the product is standardised and exported to similar countries. After some time the production is dislocated to another country either to respond to the demand of other countries or to reduce costs. During this period, the original enterprise grows and expands its products to other countries. Due to the standardisation of the product, at this stage developed and importing countries might imitate and become exporters of the same product. Less developed countries which benefit from the production learning process, become also able to produce and export the same product with fewer costs. The comparative advantage of the original country is subsequently lost to others as the product becomes standardised. The benefit of producing the same product but with fewer costs contributes to the decline of the initial producing company that therefore deserts. The internationalisation model of a company based on the PLC theory proclaims that it

internationalises when it is expected to grow in sales. Figure 4 shows the evolution of the PLC theory.

Figure 4: Product Life Cycle



Source: ProvenModels.com

Teixeira and Diz (2005) point out that this theory does not take the different stages or levels of progress in developed and non-developed countries into consideration. This theory has been constantly improved, even by Vernon himself, who recognised the implications and failures in his own design.

- **Internalisation theory**

The internalisation theory was conceptualized by Buckley and Casson (1976) and focuses on an approach to minimize transferring costs and turning them into effective and proficient revenues. The choice of international market entries depends on the cost associated to that entry, given the volume of business that an enterprise plans to undertake in that market. The theory of internalisation (Buckley and Casson, 1976; Rugman 1980) defends that an enterprise internalises its operations out of the domestic market until it gets a benefit compensation for its costs. An enterprise decides to internationalise when the costs associated with international intermediate product markets can be reduced by

bringing these markets within the firm (Mitgwe, 2006). This theory assumes three essential suppositions (Buckley and Casson, 1976):

- Firms acting in imperfect markets may maximize their revenues;
- Imperfect markets allow and encourage internalisation actions;
- Internalisation of markets generates Multinational Enterprises (MNEs).

This theory is closely related to the idea of market imperfections and associated with transaction costs economics as it takes advantage of acknowledgements within the markets and maximizes revenues from emergent opportunities of imperfections and fragilities (laws, regulations, culture, and politic system, among others). Market imperfections are the incentive to internalize markets. This internalisation across national boundaries creates MNEs. To Buckley and Casson (1976), the only reasonable channel to the internationalisation of processes is through acknowledgement, innovation and the ability to engage corporate strategy with social and environmental externalities.

Companies have to eliminate and avoid transaction costs through the internalisation of intermediate product markets. An enterprise internationalises in order to appropriate the resources and knowledge that are produced in external markets through its exportation process. It guarantees that all income, knowledge and capabilities created to serve its interests are its own monopoly and exclusivity.

The decisive aim of this theory is to take advantage of the minimization of transaction costs and maximization of market imperfections. When the transaction costs of a cooperative exchange are lower than those of a market exchange, then the market must be internalised to increase the collective efficiency of the group.

They demonstrate that any kind of market imperfection can lead to pressure for internalisation by the MNEs. According to Buckley and Casson (1987), the advantages of internalisation stem from market imperfections, especially when:

- There are unquestionable markets and a chance to implement alternative production processes;
- Discriminatory pricing is needed to exploit market efficiently;
- Bilateral market power might be generated;
- There is a degree of uncertainty in the transfer of knowledge between parties;
- There are imperfections aroused by government intervention.

Despite the fact that this theory prevents government intervention, requires expensive and negotiation costs, or other advantages, its main critics rely on the argument that it ignores the cooperation between organisations, is a very static form of internationalisation, does not explore research and development and reduces market efficiency.

- **The transaction costs theory**

This theory explains that the internationalisation process must be described by taking the result of the analysis of all transaction costs into consideration. (Coase, 1937; Williamson, 1975). Transaction costs are all the expenses related to the exchange of property of economic goods, i.e. products, technologies, management, exclusive rights, and knowledge, among others.

When involved in an internationalisation process, enterprises analyse the decision to explore other markets by evaluating eventual costs from the search of information about new markets and the associated expenses related to the maintenance and monitoring of exportation contracts. Even in the most advanced scenarios, when the exportation of primary enterprises is related to enterprises of their own network, there are always new costs that may arise from the internalisation process. Williamson (1975) clearly states that the decision of an enterprise to internationalise depends on the relation between the transaction costs and the internalisation costs.

The transaction costs theory was further complemented and integrated into other theories of internationalisation, as one will state further.

- **The Eclectic paradigm**

The Eclectic paradigm or Ownership, Location and Internalisation (OLI) Paradigm developed by Dunning (1976; 1998; 2000) congregates the best of all previous theories and tends to complement their faults. It is essentially a synthesis of other main theories of international activities. To Dunning, preceding theories such as FDI, the Internalisation Theory, the PLC Theory or the Transaction Costs theory were only an important part of significant channels of the internationalisation process.

The range of action of Dunning's theory is in either internal or external investments. On the one hand, Dunning (1998) considers the investment that takes place in national and familiar markets and boundaries but that is connected to the exportation of goods and services to external markets. On the other hand, there are national economic agents that use external incomes to serve foreign markets.

Dunning's (2000) theory explains the extension, shape and standard of the investment in another country to develop its own production, profits and success through three essential conditions, known as OLI paradigm:

- Ownership (**O**) advantages are specific advantages that arise from the ownership position (knowledge, resources, relations, etc) in opposition to their competitors. It may be of a structural or transactional nature and guarantees dominance over all the resources used in foreign countries and thus over competition.
- Location (**L**) advantages are benefits resulting from the exploration of enterprise superiority abroad. The enterprise acts in the best-offered-condition markets. These advantages are related to cheaper labour, less bureaucracy, bigger integration, assimilation and adaptation to foreign market, reduced psycho distance, reduced transport and communications costs, among others.
- Internalisation (**I**) advantages are those taken from the internalisation of market conditions through acquisitions, cooperation, alliances, etc, mindful of four essential criteria to the process of decision taking: risk, control, pay off and resources.

The Eclectic paradigm developed by Dunning integrates the motivations to internationalisation into four categories: market demand, resources demand, efficiency demand and strategic resources demand. The advantages of the internalisation and transaction costs theories, which are reflected on exchange reduced costs, ownership of information, reduction of uncertainty, higher control over markets and the search for strategic incomes and efficiency (Dunning, 2000). It clarifies that owning a particular advantage will allow an enterprise to succeed over its competition.

2.2.1. Behavioural theories of internationalisation

The behavioural theories of internationalisation are more recent than the economic theories and are known for their stage process approaches. The biggest difference lies on the transference from an economic to an organizational behaviour perspective. In the following text we present two of the most relevant theories: the Uppsala and the network theories.

- **Uppsala theory (U-Model)**

Penrose (1963) laid the foundations of the development of the Uppsala theory. She defended that the economic performance of an enterprise depended on the way it manages its resources and knowledge in order to become more proficient. In this way, economic growth depended on its ability to acquire knowledge from an evolutionary process.

The internationalisation of enterprises faced as a stage or procedural process began in 1970, at the Uppsala University, in Sweden. Up until this time, every theory had been based on economic features, and the organisation itself was not looked upon with interest. From a study applied to four Swedish enterprises, Johanson and Wiedersheim-Paul (1975) identified the evolution of internationalisation as a process called establishment chain. This process includes four different and incremental stages known as the Uppsala model:

- No regular exportation activities;
- Exportation through independent agents;
- Direct exportation through subsidiaries;
- Direct investment through the establishment of productive units in foreign markets.

With the investment in a given market, the enterprise collects and takes knowledge and experience to use in a more strategic way and over physiologically distant markets. According to the Uppsala model, the internationalisation process is characterised by constant, continuous and gradual apprenticeship. As Mitgwe (2006) classifies it, it is a gradual unidirectional learning process along a continuum. Consistent knowledge and

prudent experience allow wise decisions concerning future participations in internationalisation activities.

The process of internationalisation is in this way a gradual stage process that evolves according to the knowledge, experience and trust gathered in new markets. As described in the Uppsala stages model, commitment decisions and activities influence and determine the market knowledge and commitment. The risk perceived and the lack of resources is at the origin of an initial exportation to familiar and physiologically (though not necessarily geographically) closer markets and then, gradually, to others. In this sense, familiar and physiologically closer markets may represent associations with language, culture, political systems, and history, among others.

This Nordic university assured that the international enterprise is explained as an organisation that is mainly characterised by processes focused on knowledge that will consequently create a complex network of resources, competences and influences. Knowledge acquired by these processes is perceived as an essential key to eventually leading the company to further commitment decisions concerning new endeavours or risks.

The Uppsala model is based on three assumptions:

- The biggest drawback to internationalisation is the absence of knowledge;
- Knowledge obtained from experience and learning is vital to the enterprise;
- Dissemination in new markets and resource derivation is gradual and continuum.

The biggest contributions to interpreting the internationalisation process as evolutionary stages come from authors such as Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977). These authors state that the internationalisation process begins with small intermittent exportations, which after a while become profound relationships of partnerships. Despite the focus on an evaluated and staged process of internationalisation, Johanson and Vahlne (1977) argue that, depending on the characteristics of each firm, there are steps that might be overlapped.

The Uppsala model represents a contradiction to static models, as it is a dynamic evolution that supports its theory. Even though the Uppsala model is one of the most influential theories on internationalisation processes, there are limits to this theory, mainly reflected in its non-submission and applicability to multinational enterprises, as well as its

inability to explain how firms implement its internationalisation strategy from a global perspective.

- **Networks theory**

The networks theory represents an evolution from the Uppsala model. According to Johanson and Mattson (1988), this theory assumes that relationship networks (internal and external) are created by external enterprises with the aim of economic collaboration. The external network is the result of the subsidiary’s relationship with buyers and suppliers, among others. The internal network is the result of the subsidiary’s relationship with other subsidiary enterprises.

With this network theory, it is believed that access to information and knowledge is faster, cheaper and easier. Johanson and Mattson (1988) argue that enterprises involved in networks are pathfinder in getting a strong, relevant and dominant position in external markets. Enterprises obtain knowledge, trust and reputation in the market environment and easily create bonds and competitive advantages. Working in networks might be a suitable and appropriate way to obtain knowledge and information when one does not hold a stable presence in foreign countries. It is through networks that decisive and essential information and relations significant to foreign markets are developed (Welch, 2004). Moreover, in our current globalised and competitive world, independent, isolated and closed organisations are left out of important outcomes. The relation between the level of internationalisation of the firm and the market is illustrated in Figure 5.

Figure 5: Levels of internationalisation

		Degree of Internationalisation of the Market	
		Low	High
Degree of Internationalisation of the Firm	Low	The Early Starter	The Late Starter
	High	The Lonely International	The International Among Others

Source: Johanson and Mattsson (1988)

The firms classified as *Early Starters* are those that do not have or have few international relationships and whose suppliers and competitors are on the same position. The opportunity to learn is minute as the bonds created with relations are not generated.

The interposition of an agent with connections and contacts would be an important channel to take into consideration.

The *Late Starter* is an enterprise with low degree of internationalisation and entrenched in a market with a strong amount of international relations, which compels the organisation to gradually internationalise its connections and operations.

The *Lonely International* corresponds to enterprises which are highly internationalised but acting in familiar and restrictive markets. With advanced perspectives, markets and experiences, this enterprise obviously possesses a clear advantage over all its competitors.

The *International Among Others* is the highest of all scenarios, corresponding to highly internationalised firms acting in highly internationalised markets that nourish important knowledge and relationships.

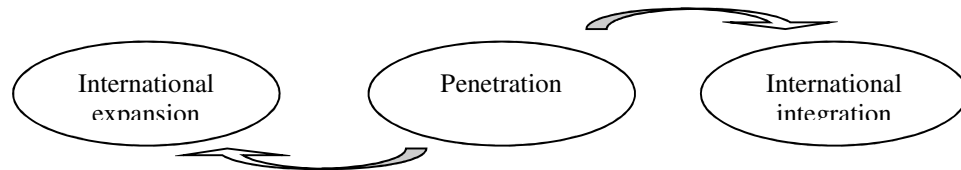
Johanson and Mattson (1988) identify four types of enterprises:

- Enterprises with little knowledge of the market that use the insipient awareness of some agents to initiate internationalisation process;
- Enterprises with some knowledge that focus their activity on local markets;
- Enterprises with little knowledge which integrate some networks and are responsible for their own internationalisation;
- Enterprises supported by other international enterprises that ease their penetration into external markets.

According to these authors, organisations that choose to develop their internationalisation process through networks might be translated as follows, which is shown in Figure 6:

- Through expansion to new markets encouraged by the relationship with other subsidiaries;
- Through penetration of resources that are affected to the markets in which the enterprise takes part;
- Through international integration reinforced with cooperation and coordination with other subsidiary and therefore other international activities.

Figure 6: Networks theory assumptions



Source: Adapted from Johanson and Mattson (1988)

Internationalisation is not only understood as a dislocation of production to external countries but above all as an exploration of resources and potential relationships.

The main criticism to this network theory is that it only applies to small or medium-sized enterprises, not taking into consideration factors such as cultural awareness.

Table 1 presents the main theories of internationalisation analysed in this work:

Table 1: International business theoretical values and strategy implications

Theoretical base	Core value	Strategy implication
International market theories	National advantage	Achieve sustainable
Theory of competitive advantage	Possession and seeking is the basis for trade	Competitive advantage through specialisation based on unique national advantages
Foreign direct investment theory Product life cycle theory	Firm advantage possession and seeking is the basis for trade	Information on global market imperfections is the key to effective international competition
Internalisation theory Eclectic paradigm Transaction costs theory	Firm-level risk minimization and advantage seeking is the basis for trade	Strategic offence through international business is the best form of self-defence
Uppsala theory Network theory	Understanding the firm-level process dynamics	Isolating variables that set internationalisation in motion key to getting the process in started

Source: Adapted from Mitgwe (2006: 18)

2.3. Internationalisation of Higher Education

The aim of this chapter is to present an overview of the evolutions in higher education. Notwithstanding the importance of a historical analysis of universities, our main focus remains in the requirement to understand their social and cultural evolutions. Therefore, we must understand and reflect over the conceptions of higher education and its development towards internationalisation.

2.3.1. Higher Education

The designation “University”⁴ was first applied to the idea of a community of masters and students that joined together to pass on knowledge. The basic concept was to help extend knowledge to all men who aspired to the universalism of Latin and Christian culture.

Higher Education Institutions are amongst the oldest organizations in the world and are certainly the biggest of all monuments left to us by the Medieval Age. In the Medieval Era, urban development demanded the creation and dissemination of knowledge. However, the medieval model of university defended that the ultimate aim of universities, which taught honourable people from the elites, was only to create opportunities for men, thus discriminating women, who were protected by those men and by the state (Magalhães, 2011).

The training given in the cathedral-schools of that time proved to be insufficient, so new solutions for the acquisition of knowledge were demanded. Paris (1160), Bologna (1150), Oxford (1160) and Salamanca (1218) were the first universities that, gathering all the four main studies (theology, civil rights, canonical and arts), joined students and lecturers from all over Europe.

As Serrão (1983) points out, in the last decade of the 15th century the growth of universities is a representation of the profound change in the ecumenical spirit of that time. On the other hand, with the Renaissance period and the egocentric spirit that characterised this era, national universities were reinforced and started gaining importance in contrast to foreign institutions. Besides clerical masters, we find evidence of the birth of other lecturers, coming from the nobility and the bourgeoisie (Serrão, 1983).

During the 17th and 18th centuries, the maritime expansion opened new dimensions of geography and astronomy, which led to new ideas and ambitions for men of all races and continents. With Classicism and the Enlightenment, human and natural subjects lead the new studies at universities.

Universities have always been the centre of discussion and innovation. In the 20th century, Newman and Humboldt were relevant university thinkers in the narration of

⁴ In order to respond to the increasing demand for higher education, new providers, delivery methods and new types of programs have appeared in recent years. Notwithstanding their importance, in this work the reference to higher education will have its higher and most considerable representation in the term “university”.

Modern University. Newman categorized universities as a place suitable for the transmission of knowledge, not for its creation or the development of human minds (Magalhães, 2001). To Humboldt, the mission of the university should lie on teaching, investigation and services, all advocating the status of liberty.

Besides being among the oldest institutions, Higher Education Institutions are organizations with endurance, as a result of their ability to constantly adapt to changing conditions (Kelo, 2006).

“In a knowledge-based society which depends crucially for its economic wealth and social well-being on science, technology and innovation (and also a society in which mass participation in higher education has become a civic, or even a democratic, right) the university clearly has a very big – and very bright – future” (Scott, 2006: 37).

**Table 2: Tertiary education graduation rates
(Percentage of graduates to the population at the typical age of graduation)**

Country	2000	2001	2002	2003	2004	2005	2006	2007
Australia	35.7	44.5	49.3	49.8	50.8	49.7	49.8	..
Austria	15.3	17.4	17.7	18.9	20.4	20.4	21.5	22.1
Belgium	..	..	..	..	..	..	..	..
Canada	27.2	26.9	27.4	28.2	29.2	34.7	30.6	..
Czech Republic	13.8	14.2	15.2	16.8	20.0	24.9	29.0	34.9
Denmark	37.3	39.3	41.3	42.7	44.5	45.5	44.6	47.3
Finland	40.8	45.5	48.7	47.7	47.3	48.1	47.5	48.5
France	..	..	..	..	..	..	..	..
Germany	18.4	18.1	18.1	18.3	19.2	19.9	21.2	23.4
Greece	14.5	15.7	18.4	20.3	24.4	24.9	20.4	17.7
Hungary	..	..	..	..	28.8	36.2	30.3	29.4
Iceland	33.2	38.4	41.2	45.2	51.1	56.3	62.8	63.1
Ireland	30.5	29.3	32.0	36.8	38.7	38.2	39.1	45.0
Italy	19.0	21.5	25.2	..	36.1	41.0	39.4	35.0
Japan	29.4	32.1	33.1	33.7	35.1	36.1	38.6	38.8
Korea	..	..	..	..	..	..	..	..
Luxembourg	..	..	..	..	..	..	..	..
Mexico	..	..	..	..	..	..	..	..
Netherlands	35.1	35.4	36.7	38.2	40.2	42.1	43.0	42.8
New Zealand	50.3	50.7	45.8	49.3	50.4	51.3	51.9	47.6
Norway	37.4	40.4	38.2	39.4	44.7	40.7	42.6	43.4
Poland	34.4	39.8	42.6	44.0	44.5	45.1	47.3	49.0
Portugal	23.2	27.6	30.1	32.6	32.1	32.3	32.9	42.6
Slovak Republic	..	..	22.8	25.2	27.7	30.1	34.6	38.9
Spain	30.4	31.5	32.3	32.3	32.9	32.7	32.9	32.4
Sweden	28.1	29.0	32.1	35.1	37.3	37.7	40.6	39.9
Switzerland	11.9	18.7	20.9	21.6	26.1	27.4	29.8	31.4
Turkey	8.8	9.4	10.3	10.5	10.8	11.2	15.2	..
United Kingdom	37.4	36.9	36.9	38.2	39.1	39.4	39.0	38.7
United States	34.4	32.7	32.4	31.9	33.2	34.2	35.5	36.5

Source: OECD (2010)

As shown in Table 2 the population at HEI have been gradually growing throughout time and the percentage of the population graduated increased everywhere in the world. Today higher education is understood as a normal right to be used by all the population and not only by a group of privileged people.

As Gornitzka et al. (2007) describe, Higher Education Institutions have been playing an increasing role in the socio-economic and technological development of our societies. That is an indication that the public interest in influencing higher education has yet many years to come and universities have yet many years to innovate and change.

Kelo (2006) identifies three main challenges which are deemed as central for today's higher education: funding, governance and global attractiveness.

Huisman and van der Wende (2004) have identified three other essential factors in the origin of HEI challenges:

- The development towards a knowledge of economy and society;
- The Europeanisation, internationalisation and globalisation of the economic, social, political and cultural setting in which Higher Education Institutions have to act;
- The development and impact of new information and communication technologies.

Larsen, Maassen and Stensaker (2006) identify the major dilemmas respecting institutional governance of Higher Education Institutions: democracy or effectiveness, external or internal orientation and representation, integration or separation and centralisation or decentralisation.

2.3.2. Internationalisation of Higher Education

Although our focus is on the institutional level, we still need to pay attention to national and international policy developments concerning internationalisation. As we may notice from Table 3 in 2009, almost 3,7 million tertiary students were enrolled outside their country of citizenship.

Table 3: Growth of internationalisation of tertiary education (1975-2009)

Year	International students (millions)
1975	0,8m
1980	1,1m
1985	1,1m
1990	1,3m
1995	1,7m
2000	2,1m
2005	3,0m
2009	3,7m

Source: OECD (2011)

Given the importance of internationalisation as a policy issue throughout the world, our work emphasis in this chapter will focus mainly on Europe. The concept of internationalisation goes back to the origin of universities in the Medieval Era, as people had to travel and move to urban centres known as the cities of knowledge. From the very beginning of the conceptualisation of HEI, learning has met no barriers or boundaries.

The consciousness of internationalisation movements encounters a rapidly growing demand for higher education, in the mid-1980s and 1990s (Knight, 2001) when a new reality emerged with countries exporting higher education and others importing educational programmes or services. During the last decades of the 20th century many experts observed a trend towards an increase in the international dimensions of Higher Education (Huisman and van der Wende, 2004).

The first heed about a higher education in Europe agenda was in the 1970s, when the emphasis was on the encouragement of cooperation, through the promotion of student mobility and academic recognition. The first meeting of European Union Education Ministers took place in 1971. In 1976 an information network was established, which was later formalized in 1980 through an Action Programme in the field of education.

In the period between mid-1980s and mid-1990s Europe lost its position to the United States of America (USA) as the world's number one destination for studying abroad.

“The strengthening of the European Community and the rise of Japan as an economic world power challenged not only the political and economic dominance of the USA, but also the USA's dominance in research and teaching” (Knight and de Witt, 1995: 9).

The awareness of increasing competition became one of the main arguments for the initiative of curricular changes towards compatibility with world-wide patterns of degree structures, presented in the Sorbonne and Bologna Declarations.

In 1987/88 the Erasmus programme, which remains the most popular, vivid and well-known of all mobility programmes, was formalized. In that year alone, the Erasmus programme was responsible for the exchange of over 3,200 students, which later launched the necessary promotion and support for the European Credits Transfer System (ECTs) (Huisman and van der Wende (2004).

In 1991 a Memorandum on higher education that emphasized the importance of mobility, cooperation, the role of languages and the recognition of qualifications was signed. With an increasing cooperation on educational interests, this took place in the context of EC policies towards the completion of the Single Market in 1992 and the development of “European citizenship” (Huisman and van der Wende, 2004).

In 1992, with the Maastricht Treaty, it was clearly stated that the EU would encourage cooperation between member states and support and complement policy actions on a national level. As stated by van der Wende (1998), this treaty provides the basis for community action in higher education and introduces the importance of improving the quality of education through cooperation between member states of the European Union. This was the time of the boom of several mobility programmes: Comett, Delta Petra, Lingua, among others.

In 1999, 29 European countries signed the Bologna Declaration in which they jointly expressed their aim to establish a European Higher Education Area by 2010. In the Bologna Declaration it is clearly stated that

“We must in particular look at the objective of increasing the international competitiveness of the European system of higher education. The vitality and efficiency of any civilization can be measured by the appeal that its culture has for other countries. We need to ensure that the European higher education system acquires a world-wide degree of attraction equal to our extraordinary cultural and scientific traditions” (Bologna Declaration, 1999: 1).

With the Lisbon agenda in 2000 it was agreed that to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable growth with more and better jobs and greater social cohesion, not only a radical transformation of the European economy, but also the modernization of social welfare and educational systems were necessary.

There is a clear need for Europe's higher education to make greater efforts to enhance its attractiveness in the world. Accordingly to Organisation for Economic Co-operation and Development (OECD, 2011) the United States receive the most (in absolute terms), with 18% of all foreign students worldwide, followed by the United Kingdom (10%), Australia (7%), Germany (7%) and France (7%). The largest numbers of international students are from China, India and Korea. Asian students represent 52% of foreign students enrolled worldwide.

Haug (2006) reports that despite enormous efforts on the enrolment of all higher education actors and intervenient parties, the truth, still, is that European universities are falling (too) far behind from American (and even Asian) universities. Some higher education institutions, and especially European institutions, are nowadays threatened as they have shown great difficulties to grow and innovate. Many universities are not prepared for the increasing challenges and this has resulted in significant performance gaps with respect to their foreign competitors.

As pointed out by Machado & Taylor (1995), the increasing volatility of the environment has forced institutions to adapt to ever changing external forces. To improve their international standing, there are some areas that HEI need to focus on so that they can enhance their attractiveness to international publics. Those would be areas related to the quality of education and research, quality assurance, services, employment and immigration, funding, marketing and internationalisation (Hoffmann, 2006).

Defended by many to be a response to economic considerations and perceptions of external pressure, HEI are undergoing substantial change of functions and organization. From an initial focus on mobility and networking of individuals, the next step is to enhance cooperation at curriculum level and policy-development at institutional level. HEI need to change and become more entrepreneurial and consequently leading institutions in extending the scope of their activities outside national borders (Horta, 2009). At the same time, HEI in Europe are also undergoing a process of organizational change towards

emphasis on individual profiles and policies, managerial capabilities, incentive steering, quality assurance and evaluation, accountability and organizational “learning” (Huisman and van der Wende, 2004).

The increasing significance of internationalisation relies on the importance of its activities, rationales and outcomes, but also very particularly on the increasing outcome of internationalisation in national and international policy making and institutional decisions. Van der Wende (1998) even mentions the term de-nationalisation in order to refer to the capacity of internationalisation activities which involve campuses abroad, franchising programmes, learning programmes, among others activities.

2.3.3.Higher Education in Portugal – Overview of its evolution

The origin of Portuguese universities dates back to the year 1288 with the expression of interest in the creation of the university of Lisboa-Coimbra (Serrão, 1983). This manifestation of interest was made by D. Dinis and confirmed by Pope Nicolau IV in 1290, and its aim was to educate the intellectual elite of the bourgeoisie and to consolidate the state.

The emergence of Portuguese university dates back to a period when the importance of educational institutions found a balance and relative stability. At this time, the main objectives of this institution were to educate society according to formally accepted social and mental standards (Mattoso, 1997).

There were a lot of changes in its first century of existence, mainly reflected in the transfer between Lisbon and Coimbra, which is why our university history relates with unstable characteristics unparalleled in Europe.

Despite its lower intellectual and disciplinary level, only in 1537, with its definitive transfer to Coimbra, did our knowledge and reputation start to increase. This reform was followed by the recruitment of national and international lecturers that helped reinstruct our university. The long route of reforms for the reinforcement of a higher education grounded in liberty and obligation of knowledge was not finished until the Pombal Reforms that lasted until 1772, or the Liberal revolution in 1836.

Higher education in Portugal is highly connected to its political history and social developments. Reporting back to 1910, when the Republic was proclaimed, higher

education still accentuated the social stratification as there was a lack of an adequate structure to promote social mobility (Arroteia, 1996). This condition was obviously intensified with the arriving of the Estado Novo in 1928, when universities became in a certain way an instrument for political and ideological control.

Generally speaking, the access to Higher Education Institutions was elitist and with a small participation rate of the total population (Veiga, Rosa and Amaral, 2004). Aware of the short revenue coming from these policies, in 1970 Education Minister Professor Veiga Simão approved the enlargement of higher education network institutions, and in 1973 the National Assembly approved the Reform Act 5/73 of 25th July that for the first time in Portugal created a binary system. Universities were in this case appropriate for the development of knowledge, whereas polytechnics were appropriate for the development of skills (saber-saber vs saber-fazer)⁵.

In 1973, with Law n° 402/73 of 11th August, new universities, such as the University of Aveiro, were authorised.

In 1974, the Revolution marks a turnaround in Portuguese life. Subsequently, the (Higher) Education system was also significantly changed due to a conjunction that implied the loss of all forms of authority faced by HEI, combined with a substantial increase in demand for access to higher education (Amaral and Magalhães, 2007).

At this time all the country was committed to values focused on development, freedom and democracy.

“Universities were asked to help in the search for answers to national problems while making their technical and scientific capacity available to other public services. On the one hand, higher education was supposed to expand and provide training or retraining courses, and to increase its offer of specialised services to the community. On the other hand, it was supposed to diversify either by creating new schools and new courses or by the differentiation of some already established courses” (Amaral and Magalhães, 2007: 119).

Taking advantage of the opened access system, mainly in the admission to medicine schools, the demand increased largely. Unable to expand the system due to financial

⁵ Author note.

constraints, the new government was forced to restrain free access through the Decree-Law 601/76 of 23rd July, which imposed a system of *numerus clausus* later expanded to all higher education study programmes. This action simultaneously boosted the creation of a parallel private system that would answer demands needs. In 1976, the new Constitution recognised the right of all Portuguese to education. But by sanctioning the freedom to learn and teach as a fundamental right, the Constitution opened the way for the development of private higher education (Amaral and Magalhães, 2007).

“Access to universities and to all Higher Education Institutions guarantees equal opportunities and the democratisation of education, minding the need for qualified labour and the educational, cultural and scientific elevation of the country” (C.P.R⁶. 1976, Art. 76°).

In this sense, the massification of higher education was democratised and the participation rate increased from 7% in 1974 to 40% in 1998 (Veiga, Rosa, and Amaral, 2004). The evolution of students enrolled and graduated from Portuguese HEI is shown in table 4 and 5.

Table 4: Students enrolled in higher education

Education subsystems	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Public Higher Education	198 774	212 726	226 642	238 857	255 008	273 530	284 789	290 532	288 309	282 273	275 521	275 321	284 333	282 438
University	139 101	147 349	153 951	158 850	164 722	171 735	176 303	178 000	176 827	173 897	171 575	169 449	175 998	175 465
Politechnic	59 673	65 377	72 691	80 007	90 286	101 795	108 486	112 532	111 482	108 376	103 946	105 872	108 335	106 973
Private Higher Education	114 641	121 399	120 831	117 933	118 737	114 173	111 812	110 299	106 754	98 664	91 791	91 408	92 584	90 564
University	91 540	96 163	93 914	89 361	88 190	82 979	79 908	77 109	73 708	67 157	61 740	60 659	61 221	60 755
Politechnic	23 101	25 236	26 917	28 572	30 547	31 194	31 904	33 190	33 046	31 507	30 051	30 749	31 363	29 809
TOTAL	313 415	334 125	347 473	356 790	373 745	387 703	396 601	400 831	395 063	380 937	367 312	366 729	376 917	373 002

Source: Adapted from Arroiteia (1996) and GPEARI (2011)

In 1989, Education Minister Roberto Carneiro determined that entrance examinations were only to be used for ranking students and not as a condition to access HEI, provided there were vacancies. As Amaral and Magalhães (2007) point out, without any minimum required marks allowing students with zero marks on the exams to access HEI, uncontrolled expansion took place. In 1993, Minister Marçal Grilo reversed the access rules and set minimum marks in the access examination to enter HEI.

⁶ Constitution of the Portuguese Republic.

Table 5: Students graduated in higher education

Education subsystems	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Public Higher Education	24 658	26 576	27 903	30 109	32 401	38 617	42 200	46 499	46 854	49 184	50 518	62 063	64 469
University	15 869	16 996	17 787	17 785	18 159	19 466	21 890	24 462	24 614	25 283	27 376	34 497	37 366
Politechnic	8 789	9 580	10 116	12 324	14 242	19 151	20 310	22 037	22 240	23 901	23 142	27 566	27 103
Private Higher Education	14 558	16 220	18 575	21 227	21 854	22 523	21 898	22 012	21 814	20 803	21 310	21 213	19 540
University	9 806	10 775	11 825	12 571	12 339	12 484	11 481	11 036	11 679	11 172	11 165	11 758	10 458
Politechnic	4 752	5 445	6 750	8 656	9 515	10 039	10 417	10 976	10 135	9 631	10 145	9 455	9 082
TOTAL	39 216	42 796	46 478	51 336	54 255	61 140	64 098	68 511	68 668	69 987	71 828	83 276	84 009

Source: Adapted from GPEARI (2011)

Different motivations have forced Higher Education Institutions and universities in particular to progress, innovate and transform. As presented ahead these motivations are related to political, cultural, economic and scientific contexts.

2.3.4. Internationalisation of Higher Education in Portuguese Universities

From a general review of the literature produced one might assume that the internationalisation process of HEI is not yet much studied in Portugal. Most of the produced documents are focused on the analysis of the evolution of Education in Portugal.

We might assume the beginning of the internationalisation process of Portuguese Higher Education Institutions to have been in 1960, when there were cultural, political and intellectual movements from the metropolis to its colonies and vice versa. There was the promotion of summer courses in the *Ultramar* with the aim:

“To bring higher education regularly and periodically to colonies in order that lecturers may contact directly with local realities so that the university knows and evaluates in a better way the Portuguese problems, wherever they are” (Caetano, 1960: 114).

In the final years of the Estado Novo, Portugal made some contacts with important European universities, since university excellence was seen as a symbol of the country’s prestige and modernity (Caetano, 1974). However, only the adhesion of Portugal to the European Economic Community (EEC) in 1986 truly marks the beginning of the internationalisation process of Portuguese universities.

Portuguese (like other European) universities today look across national borders for collaborative partnerships which will enable them to benefit from the knowledge and

experience of each other (Kerklann et al., 2008). However, Veiga, Rosa & Amaral (2006) conclude that the degree of internationalisation of the Portuguese higher education market is low or does not exist at all. They identify several factors to explain the lack of an internationalisation strategy in Portuguese HEI:

“lack of a coherent strategy for internationalisation of the higher education system (including an appropriate legal framework) and of financial support, given to the internationalisation of research and education, internationalisation is not seen as a development key factor by the organisations themselves; lack of central co-ordination of research activities; lack of incentives in the academic career; sustaining student mobility demands a coherent strategy and an attractive offer to foreign students; lack of proficiency in English of both academic staff and students” (Veiga, Rosa & Amaral, 2006: 121).

The approaches to internationalisation made by HEI have been mainly focused on the exchange of students/academics and the participation in networks and research programmes (at a European level) and in the enrolment of a significant number of students from Portuguese speaking countries: Angola, Cape Verde, Guinea-Bissau, Mozambique, São Tomé e Príncipe, East Timor, Macau and Brazil (Veiga, Rosa & Amaral, 2006). Accordingly to OECD (2011), around 72% of foreign students come from these countries where Portuguese is the official language, which can be consulted in Table 6.

Table 6: Evolution of Foreign Students Graduated, between 2000-01 and 2004-05, by origin country and gender

Continent	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	M	F	M	F	M	F	M	F	M	F	M	F
Africa	325	419	387	410	424	568	497	563	496	557	553	585
Central America and Caribbean	1	2	10	7	9	11	9	7	124	13	3	5
North America	35	41	29	37	28	49	17	36	24	29	19	27
South America	108	173	132	182	139	209	149	212	134	233	160	265
Asia	13	10	10	8	11	12	8	16	17	13	25	14
Europe	141	274	160	248	147	249	133	272	164	305	176	324
Oceania	2	3	0	2	0	3	0	4	2	2	1	0
Others	149	470	154	280	13	27	2	3	0	0	0	0
Total	774	1 392	882	1 174	771	1 128	815	1 113	961	1 152	937	1 220

Source: Adapted from GPEARI (2011)

Portugal is in fact the first choice for an international experience for students from those countries. However, the opposite situation is also legitimate, since Portugal is one of last choices for students of countries other than the ones mentioned above.

Cited by Veiga, Rosa and Amaral (2004), Graça Carvalho, as director of the International Office for Science and Higher Education, identifies 5 main barriers to the mobility and internationalisation of Portuguese higher education:

- Low internal mobility of Portuguese students due to the difficulty in establishing cooperation links among Portuguese institutions;
- Low mobility of international students due to the lack of attractiveness of Portugal in the European context;
- Administrative and legal instruments that hamper the free circulation of people (foreign services, social services);
- Need to reform the fiscal system in order to create incentives for investments in higher education and research;
- Insufficient funding of higher education and research.

Most of the above-identified restrictions are related to concrete actions that would make internationalisation activities in Portuguese HEI more trustfully understood. However, they also have much to do with a cultural consciousness that dominates the Portuguese main intervening parties which might still be a sign of old colonialism and expatriation. Notwithstanding the multiplicity of arguments, Portuguese actors have a conspicuous lack of confidence, a deficiency in communication and, most of all, an enormous complex of inferiority that frequently impedes more audacious actions outside national borders.

Despite national efforts mainly based on quality criteria to develop Portuguese higher education and overthrow these restrictions, Portuguese higher education policy is much defined by the guidelines defined at the European level. In this respect, European programmes and reforms are an opportunity to reform and improve a system that needs to be better formalized under the norms of growth and quality.

Veiga, Rosa and Amaral (2004) conclude that the process of internationalisation, globalisation and Europeanisation of Portuguese higher education is more one of reaction

than of anticipation. In Table 7 it is shown the Portuguese position in relation to other countries either as a country of origin or a receiving country.

Table 7: Distribution of international and foreign students in tertiary education, by country of origin (2009)

Notes	Countries of destination																														Total OECD destinations	
	OECD																															
	International students															Foreign students																
	Australia	Belgium	Canada	Chile	Denmark	Estonia	Germany	Hungary	Iceland	Ireland	Netherlands	New Zealand	Portugal	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	United Kingdom	United States	Austria	Czech Republic	Finland	France	Italy	Japan	Korea	Norway	Poland	Turkey		
Countries of origin	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	
OECD																																
Australia	a	0.1	0.3	n	0.2	n	0.2	0.1	0.6	0.6	0.1	7.7	0.2	n	n	n	0.3	0.3	0.5	0.5	0.2	n	0.4	0.1	0.1	0.2	0.1	0.3	0.1	0.2	0.4	
Austria	0.1	0.1	0.1	n	0.3	0.2	3.0	0.9	19	0.4	0.4	0.1	0.3	1.1	0.9	0.2	0.3	2.3	0.4	0.1	a	0.1	0.3	0.2	0.3	n	n	0.3	0.3	0.2	0.4	
Belgium	n	a	0.2	n	0.3	0.9	0.5	0.1	0.5	0.4	4.1	n	0.8	n	0.2	0.8	0.1	0.6	0.7	0.1	0.2	n	0.2	1.2	0.3	n	n	0.2	0.1	0.1	0.4	
Canada	1.7	0.2	a	0.3	0.4	0.2	0.3	10	2.4	4.7	0.2	13	0.3	0.1	n	0.2	0.7	10	15	4.4	0.2	0.2	0.7	0.6	0.2	0.2	0.5	0.6	2.4	0.1	1.8	
Chile	0.1	0.1	0.2	a	0.1	n	0.3	n	n	0.1	n	0.2	0.1	n	n	0.3	0.1	0.3	0.1	0.3	0.1	0.1	0.3	0.4	0.1	1.1	a	0.4	0.3	0.4	0.1	0.3
Czech Republic	n	0.1	n	n	0.7	n	0.8	0.4	2.2	0.3	0.2	n	0.3	52.0	0.2	0.1	0.2	0.3	0.4	0.1	1.1	a	0.4	0.3	0.3	n	n	0.3	5.5	n	0.2	
Denmark	0.1	n	0.1	n	a	0.6	0.2	0.1	6.1	0.3	0.2	0.3	0.1	n	0.2	0.1	0.8	0.2	0.4	0.1	0.2	n	0.4	0.1	0.1	n	n	0.4	0.2	0.1	0.2	
Estonia	n	n	n	n	12	a	0.3	n	0.6	0.1	0.1	n	n	n	n	0.1	0.4	0.1	0.2	n	0.1	5.4	n	0.1	n	n	n	0.4	0.1	n	0.1	
Finland	0.1	0.1	0.1	n	11	55.4	0.4	0.2	4.6	0.4	0.5	0.1	0.1	0.1	0.2	0.1	4.8	0.2	0.5	0.1	0.3	n	a	0.1	0.1	0.1	n	19	0.1	n	0.3	
France	0.5	6.6	6.4	0.9	12	10	2.9	0.6	7.4	4.1	16	10	3.1	0.1	0.2	2.8	15	5.5	3.6	1.1	0.9	0.3	1.3	a	1.7	0.4	0.1	12	0.7	0.3	2.1	
Germany	0.8	10	0.7	1.1	9.6	17	a	116	13.7	4.2	59.2	3.3	15	5.3	0.3	2.5	3.7	27.3	3.9	1.4	34.7	1.1	3.5	2.7	2.4	0.4	0.1	4.4	3.1	2.5	3.6	
Greece	n	0.2	0.1	n	0.7	0.1	12	13	0.3	0.5	0.5	n	0.1	8.7	0.3	0.5	0.8	0.9	3.3	0.3	0.5	0.7	0.5	0.7	6.5	n	n	0.2	0.2	3.9	1.0	
Hungary	n	0.1	n	n	15	0.1	10	a	0.6	0.3	0.6	n	0.1	13	0.6	0.1	0.2	0.5	0.3	0.1	2.6	0.3	0.9	0.2	0.3	0.1	n	0.2	0.4	0.1	0.3	
Iceland	n	n	n	n	8.0	0.1	n	0.6	a	n	0.1	n	n	n	n	n	0.6	n	0.1	0.1	0.1	n	0.1	n	n	n	n	16	n	n	0.1	
Ireland	0.1	n	0.1	n	0.1	0.1	0.2	1.1	0.3	a	0.2	0.1	n	0.5	n	0.2	0.1	0.1	4.2	0.2	0.1	0.2	0.2	0.2	0.1	n	n	0.1	0.1	n	0.7	
Israel	0.1	0.1	0.3	0.1	0.1	0.1	0.7	5.5	n	0.1	0.2	n	0.1	18	n	0.1	0.1	0.2	0.2	0.5	0.2	0.5	0.2	0.1	2.2	n	n	0.1	0.2	0.1	0.4	
Italy	0.1	0.5	0.2	0.3	16	13	19	0.4	3.8	2.3	0.8	0.1	17	0.3	6.1	4.8	1.1	7.3	1.7	0.6	11.4	0.1	13	2.1	a	0.1	n	0.7	0.4	0.1	1.4	
Japan	10	0.2	15	n	0.1	0.3	10	0.7	19	0.5	0.2	2.0	n	0.1	n	0.2	0.6	0.6	1.1	4.4	0.7	0.1	0.9	0.7	0.4	a	2.0	0.4	0.2	0.1	1.8	
Korea	2.6	0.1	0.1	0.3	0.1	n	2.2	0.3	0.5	n	0.4	2.0	n	0.1	n	0.2	0.3	0.4	12	11.2	0.7	0.1	0.4	10	0.7	0.9	a	0.3	0.2	0.1	4.8	
Luxembourg	n	14	n	n	n	n	14	n	n	0.1	0.1	n	0.3	n	n	0.1	n	10	0.2	n	10	n	0.6	0.1	n	n	n	n	n	n	0.3	
Mexico	0.2	0.1	12	2.6	0.4	0.1	0.8	0.1	0.4	0.2	0.2	0.2	0.2	0.1	n	5.9	0.6	0.6	0.4	2.2	0.2	n	0.7	0.7	0.5	0.1	n	0.3	0.1	n	1.0	
Netherlands	0.1	6.5	0.2	n	0.9	0.4	0.1	0.1	2.0	0.5	a	0.2	0.3	n	n	0.5	0.6	0.6	0.9	0.3	0.4	n	0.7	0.3	0.2	0.1	n	13	0.1	0.2	0.4	
New Zealand	0.9	n	0.1	n	n	n	n	n	n	0.1	n	a	n	n	n	n	n	0.1	0.1	0.2	n	0.1	n	0.1	n	0.1	n	0.1	0.1	n	0.2	
Norway	0.5	0.1	0.2	0.1	14.9	0.5	0.2	4.9	2.6	0.5	0.5	0.4	0.1	4.1	n	0.1	15	0.2	0.8	0.2	0.1	0.8	0.6	0.1	0.1	n	n	a	6.9	n	0.5	
Poland	0.1	0.5	0.2	0.1	4.9	0.3	5.0	0.3	4.5	1.9	1.8	n	14	13	0.6	10	0.9	12	2.5	0.4	2.8	12	1.7	12	2.2	0.1	n	15	a	n	1.3	
Portugal	n	0.2	0.1	n	0.3	0.2	0.2	0.3	0.3	0.4	a	n	a	0.2	0.1	5.3	0.3	0.4	0.8	0.1	0.2	13	0.3	0.1	0.1	0.1	0.1	0.3	0.3	n	0.5	
Slovak Republic	n	0.1	n	n	0.5	n	0.5	14.5	13	0.2	0.3	n	n	a	0.3	0.1	0.1	0.4	0.4	0.1	2.5	65.5	0.2	0.2	0.3	n	n	0.2	2.4	n	1.1	
Slovenia	n	n	n	n	0.3	n	0.2	0.1	0.3	0.1	0.1	n	0.2	n	a	0.1	n	0.1	0.1	n	13	0.1	0.1	n	0.5	n	n	n	0.1	n	0.1	
Spain	0.1	0.3	0.1	0.6	13	0.7	2.0	0.9	5.2	1.5	1.1	0.1	4.9	0.2	0.4	a	0.8	14	16	0.6	0.9	0.1	1.1	16	0.8	0.1	n	0.8	0.8	n	0.9	
Sweden	0.3	0.1	0.1	0.1	2.1	0.6	0.3	2.7	4.6	0.4	0.4	0.3	0.2	14	0.2	0.2	a	0.6	0.9	0.5	0.3	0.4	3.9	0.2	0.2	0.1	n	7.4	4.9	n	0.6	
Switzerland	0.1	0.3	0.3	n	0.3	0.1	10	0.1	0.8	0.2	0.3	0.1	0.7	0.2	n	0.7	0.2	a	0.6	0.2	13	n	0.3	0.7	1.6	0.1	n	0.3	0.1	0.1	0.4	
Turkey	0.2	0.4	0.6	n	0.8	0.5	3.4	12	0.4	0.3	0.8	0.1	0.4	0.1	0.4	0.1	13	16	0.7	2.0	4.4	0.2	0.9	0.9	0.1	0.1	0.5	0.8	a	1.2		
United Kingdom	0.6	0.3	0.9	0.1	0.9	10	0.6	0.9	4.0	16.9	0.9	13	13	0.8	0.1	13	0.5	0.8	a	13	0.4	13	15	10	0.4	0.3	n	18	0.6	0.4	0.9	
United States	12	0.5	9.1	0.8	12	17	18	18	3.8	19.7	0.6	6.2	1.1	0.3	0.2	15	16	19	3.9	a	0.9	0.6	1.7	1.4	0.6	1.6	1.5	2.1	5.9	0.3	1.8	
Total from OECD	11.8	30.1	23.8	7.6	66.0	67.9	35.1	52.7	77.5	62.2	77.0	29.6	20.0	80.3	12.0	33.0	25.2	69.0	38.0	33.7	70.9	75.4	31.2	20.8	24.8	23.4	4.9	34.8	37.1	8.8	31.6	
Other G20																																
Argentina	n	0.1	0.2	7.9	0.1	n	0.2	n	0.1	n	n	0.1	0.2	n	0.1	4.7	0.1	0.4	0.1	0.4	n	n	0.1	0.3	0.6	0.1	n	0.1	n	n	0.3	
Brazil	0.3	0.2	0.5	3.9	0.3	0.2	1.1	n	0.1	0.2	0.3	0.4	24.7	n	0.2	3.8	0.4	1.1	0.4	13	0.2	n	0.5	1.4	0.7	0.4	0.1	0.6	0.2	n	1.0	
China	27.3	13	214	0.6	7.0	4.8	11.8	14	2.4	8.7	7.3	23.5	0.4	0.3	0.3	12	114	2.1	12.9	19.8	2.3	0.5	15.8	9.5	6.6	60.3	78.6	4.7	19	0.8	18.2	
India	10.3	0.4	3.7	0.1	2.6	0.6	1.8	0.2	1.1	3.8	0.3	11.9	0.2	0.1	0.5	0.3	3.5	13	9.4	15.4	0.6	0.4	2.4	0.5	1.1	0.4	0.8	1.1	2.1	n	7.3	
Indonesia	4.0	0.1	0.8	n	0.1	0.2	0.8	n	0.6	0.1	14	0.8	0.1	n	n	0.1	0.3	0.1	0.3	1.1	0.1	0.1	0.2	0.1	0.2	14	0.6	0.5	0.2	0.2	1.0	
Russian Federation	0.3	0.4	0.6	0.2	0.6	5.2	5.2	10	2.4	0.6	0.8	0.7	0.5	0.6	14	10	14	19	0.8	0.7	13	5.8	10.9	14	1.7	0.3	0.5	5.4	2.9	2.2	1.3	
Saudi Arabia	14	n	14	n	n	n	0.1	0.3	n	0.5	n	0.9	n	13	n	n	0.1	14	19	0.1	n	14	19	0.1	n	0.1	0.1	n	0.4	0.1	1.0	
South Africa	0.3	0.1	0.1	n	0.1	0.1	0.1	n	12	0.2	0.3	0.5	n	n	n	0.1	0.2	0.4	0.3	0.1	0.1	0.1	n	n	n	n	0.2	0.1	n	0.2		
Total from other G20	44.0	2.6	28.6	12.6	10.7	11.0	21.0	3.1	6.9	15.2	10.3	41.6	26.6	2.5	2.6	11.1	17.3	7.2	25.7	39.8	4.7	6.8	30.0	13.4	12.0	62.9	80.7	12.6	7.7	3.4	30.2	
Main geographic regions																																
Total from Africa	3.0	4.5	6.2	0.2	2.8	1.7	9.2	2.6	2.2	5.7	2.4	10	46.7	13	0.5	10.3	6.0	6.1	9.7	5.5	15	16										

for internationalisation are related to the possible development provided by the access to new and more potential markets. The search and sharing of knowledge creates a competitive advantage truly wanted by all entities and closely related to external and internal factors.

Viana and Hortinha (2002) identify 6 reasons to internationalise an institution:

- 1) Increase sales and consequently increase profits;
- 2) Scale economies and better use of the production costs;
- 3) Risk sharing;
- 4) Cooperation between private and public institutions;
- 5) Lead markets and increase brand goodwill;
- 6) Monopolistic advantages taken from leading position.

From a general point of view, Viana and Hortinha (2002) group these reasons into three major rationales for internationalisation:

- Strategic opportunities that are related to the image of the enterprise's country of origin, the cultural and geographical access facilities, the opportunities of acquisition and development of new markets and governmental incentives;
- Willingness to develop that is related to the reputation of the brand, the services that cannot be replicated, the success of local partners or the diversification of risk;
- Business nature that is related to less demanding markets, client follow-up, distortion of competition and economy scales.

Teixeira and Diz (2005) identify another group of reasons for internationalisation that we might summarize as follows:

- Access to better resources;
- Increased revenue;
- Enlarged market share;
- Escape from importation restrictions;
- Strengthening of relations and networks;
- Answer to competition movements;
- Access to competences and knowledge.

Simões (1997) classifies the motives for internationalisation into endogenous rationales, markets characteristics, access to exterior resources and incentives, as shown in Table 8.

Table 8: Rationales to internationalisation

Rationales	Typology of internationalisation rationales
Endogenous (associated to the satisfaction of internal needs of the enterprise: mission, strategy, aims)	Necessity for development and growth
	Taking advantage of availabilities
	Scale economies
	Technological competences exploration
	Diversion of risks
Market characteristics (How enterprise apprehends market opportunities)	Domestic market limitations
	Perception of external markets dynamics
Relational motivations (How enterprise reacts to other enterprises' movements)	Competition actuation response
	Clients relation
	Approach by potential clients or foreigner agents
Access to exogenous resources (Obtain improved access to resources)	Offshore production costs advantages
	Access to technological knowledge
Governmental incentives (Government supports)	Incentives promoted by the government

Source: Adapted from Simões (1997:34)

Depending on mutual factors of the HEI such as their needs, characteristics or resources, rationales might be of several natures. However, it is important to know the motivations behind the internationalisation of the institution so that one can indirectly understand how dedicated the institution is to their internationalisation commitments.

To understand the rationales for the internationalisation of a HEI it is important to understand the context of the institution. There are many different rationales to consider and they might be opposite, complementary and of very different natures, ranging from educational, cultural, social, political, ethical and economic, among any others one might consider influent in the definition of a HEI strategy.

Knight and de Witt (1995) categorized the reasons to internationalisation into four major rationales, as presented in Table 9. While political and economic rationales usually demand an adaptation of the institutions to external forces, the academic and socio-cultural rationales are institution specific and internal in nature. In general, the former reasons are identified as “new” forms of internationalisation, while the latter are usually associated

with “old” forms of internationalisation (Stensaker et al, 2008). However, and understandably, old forms of internationalisation do not disappear as new forms emerge.

Table 9: Rationales to internationalisation (HEI context)

“Old” forms of internationalisation	“New” forms of internationalisation
Academic	Political
Socio-cultural	Economic

Source: Self-elaborated

During the cold war period, the political rationale was dominant. It frequently functioned as a reactive force for internationalisation at a national level, rather than at an institutional level. The exportation and importation of higher education normally works at the national level as a prestige reflection of a country’s policy of quality, hegemony and innovation. The political rationale was considered to be one of the most important in the internationalisation of HEI, since internationalizing higher education was seen as a beneficial tool in foreign policy and it was directly concerned to the country’s position and role as a nation in the world.

The academic rationale should in theory be the most relevant motivation for the internationalisation of higher education. This rationale is historically connected to the HEI’s history and cooperation. Rather more significant at an institutional level than at the national level, the academic rationale assimilates all the advantages from the teaching and learning process, the research and service functions of a HEI. The academic imperative is directly connected to the educational objectives, aims and functions of higher education. It rationalises internationalisation as a means of enhancing the quality of education and research.

There is a close relationship between internationalisation and the social-cultural rationale, since the promotion of one’s culture and the respect for its peculiarities differentiates internationalisation from the global act of homogenization. In fact, notwithstanding the impact of globalisation on social-cultural issues, the promotion of cultural values and their preservation is in fact what distinguishes internationalisation from globalisation. In the social-cultural rationale, one may find several acknowledgments in the same context related to the language and communication, to the citizenship setting, to

cultural identities and values, among others. It concentrates on the role and place of the country's own language and culture and on the importance of understanding foreign languages and cultures.

The social-cultural rationale is also considered by many to be one of the strongest rationales for internationalisation, since we are referring to developed and experienced individuals in a mutual awareness of intercultural relations and communications.

After the cold war, the emphasis has increasingly shifted from the political to the economic rationale. Two decades later, prompted by the global knowledge economy, the internationalisation of HEI is even more market oriented. As a result of the globalisation of economy, nations and their institutions are struggling to assert themselves in a world that is more competitive every day. Among the multiple causes for the commercialization of higher education, Bok (2003) identifies some of them: financial cutbacks, the spirit of private enterprise and entrepreneurship that became so prominent in the 80s, a lack of clarity about academic values, keener competition and most of all, the rapid growth of money-making opportunities provided by a more technologically sophisticated, knowledge-based economy.

In a wiser context, higher education stands as a country's proactive response to the domination of economy and technology. Xiang (2008) argues that today's internationalisation of higher education is shifted to narrower economic objectives.

“As the internationalisation of higher education is further increasingly characterized by the new dimension of commodification and marketisation, an economic rationale for pursuing higher education dominates over political, academic or cultural/social rationales” (Xiang, 2008: 352).

The rationale of economic constraints has both an immediate effect on the institutional and foreign students' income, and an indirect or long term effect on the qualification and education of international students who might later be important interlocutors in trade and economic relations.

Both on the national and institutional level, the economic rationales have been highly taken into consideration. Given that their funding is in the order of the day, HEI are forced to diversify their fund sources and decrease their financial dependence on the government.

Many are looking to the exportation of services and products as an important source of revenue and an emblematic struggle to survive.

One might be aware of whether this response to economic imperatives represents a danger to curricula development and to other substantial purposes of internationalisation, and whether this exportation of services and products might be beneficial to the institution itself or to national higher education. Bok (2003) explains that many are afraid that commercially oriented activities will come to overshadow other intellectual values and that university programmes will be judged primarily by the money they bring in and not by their intrinsic intellectual quality. This relation is often profitable to both institution and nation as long as there is a balance between the institution's economic needs and its mission and principles. As Kreber (2009) argues, if internationalising the curriculum is not understood to serve a more profound educational purpose, then an important opportunity for higher education to play a pivotal role in fostering intercultural understanding, greater empathy and action towards those most in need, and international cooperation on climate change is lost. Bok (2003) goes further in foreseeing that only those universities which uphold academic values and retain their profits will survive and be referenced in the long term.

As easily perceived, the rationales are not exclusive and, even less, static. Commonly, rationales are complementary, dynamic and adaptable to each country and institution, over time and in response to changing needs and priorities (Knight, 2001).

Despite the fact that the internationalisation of Portuguese HEI is based on different rationales, which are conditioned by the nature of the countries involved in international exchange activities, Veiga, Rosa & Amaral (2006) consider that, in the Portuguese case, the predominant rationales are basically the political, cultural and more recently the economic rationale. The relations with Portuguese speaking colonies obviously justify the political and cultural rationales that are reinforced by the usage of the Portuguese language.

2.4.1. Internationalisation approaches and activities in HEI

In industrial contexts, internationalisation approaches have different outlines: services and goods exportation or importation, buying of shares investment, productive operations

licences, marketing and sales, joint ventures, alliances and manufacturer networks, among others.

Teixeira and Diz (2005) summarize the forms of internationalisation as presented in Table 10.

Table 10: Forms of internationalisation (Business context)

Exportation	<ul style="list-style-type: none"> - Indirect - Cooperative or shared - Direct (with self distribution channels)
Contractual	<ul style="list-style-type: none"> - Licence - Franchising - Outsourcing - Joint-ventures - Alliances (consortiums, ...)
Direct Investment	<ul style="list-style-type: none"> - Acquisitions - Investment from the beginning

Source: Teixeira and Diz (2005:77)

HEI's approaches to internationalisation are also contingent, independent, not mutually exclusive and variable. Approaches are the postures adopted by leaderships towards promotion and implementation of programmes aimed at internationalisation.

“An approach is different from a definition. Even though different countries or even institutions within a country may hold a common interpretation or definition of internationalisation, the manner in which they address the implementation of internationalisation is very different because of priorities, culture, history, politics and resources. An approach to internationalisation reflects or characterises the values, priorities, and actions that are exhibited during the work toward implementing internationalisation. An approach is not fixed. Approaches change during different periods of development” (Knight, 2004:18).

According to van der Wende (2007), approaches to internationalisation are pressured by globalisation and internationalisation and can be differentiated between competition and cooperation. Competition is often associated with globalisation and involves the increasing integration of processes over and across borders, it is more economically driven and

market-oriented whereas cooperation is more associated with the proposal of internationalisation, is more academically and culturally driven.

Knight (2004) identifies different approaches to a national or education sector level (Table 11) that present general ways a country or the education sector decides to proceed with internationalisation.

Table 11: Approaches to internationalisation (national or sector level)

Approach	Description
Programmes	Internationalisation of higher education is seen in terms of providing funded programmes that facilitate institutions to have opportunities to engage in international activities such as mobility, research and linkages.
Rationales	Internationalisation of higher education is presented in terms of why it is important that a national higher education sector become more international. Rationales vary enormously and can handle human resources development, strategic alliances, commercial trade, nation building, and social/cultural development.
Ad hoc	Internationalisation of higher education is treated as an ad hoc or reactive response to the many new opportunities that are being presented for international delivery, mobility and cooperation in postsecondary education.
Policy	Internationalisation of higher education is described in terms of policies that address or emphasize the importance of the international or intercultural dimension in postsecondary education. Policies can be from a variety of sectors, for example, education, foreign affairs, science and technology, culture or trade.
Strategic	Internationalisation of higher education is considered to be a key element of a national strategy to achieve a country's goals and priorities both domestically and internationally.

Source: Knight (2004: 19).

Besides national or sector internationalisation approaches, Knight (2004) also defines specific approaches to internationalisation developed at the institutional level as presented in Table 12.

Table 12: Approaches to internationalisation (institutional level)

Approach	Description
Activity	Internationalisation is described in terms of activities such as study abroad, curriculum and academic programmes, institutional linkages and networks, development projects, and branch campuses.
Outcomes	Internationalisation is presented in the form of desired outcomes such as student competencies, increased profile, more international agreements, and partners or projects.
Rationales	Internationalisation is described with respect to the primary motivations or rationales driving it. This can include academic standards, income generation, cultural diversity, and student and staff development
Process	Internationalisation is considered to be a process where an international dimension is integrated into teaching, learning, and service functions of the institution.
At home	Internationalisation is interpreted to be the creation of a culture or climate on campus that promotes and supports international/intercultural understanding and focuses on campuses-based activities.
Abroad (cross-border)	Internationalisation is seen as the cross-border delivery of education to other countries through a variety of delivery models (face to face, distance, e-learning) and through different administrative arrangements (franchises, twinning, branch campuses...)

Source: Knight (2004: 20).

Knights and de Witt (1995) identified 4 approaches (activity, competency, ethos and process) which were lately reformulated to the approaches presented. As Knight (2004) highlights, the activity approach is probably the most common approach as it outlines the actual programme initiatives that form part of the internationalisation efforts. The approaches outcomes and rationales are related to the motivations and expected results of internationalisation rather than the activities or strategies themselves. The process and at-home approaches are focused in primary functions of a higher education institution such as curricular, extracurricular and organisational aspects. The abroad or cross-border approach relates to linkages with other countries and is focused on the mobility of education across borders.

This standardisation is useful not only to understand the features of current approaches and activities at different levels, but also to help institutions understand and reflect in the dominant features of current situation, whether is consistent and complementary to

rationales and values defined in the organisation and help to design which approach they would like to adopt in the future.

Knight (2007) used the term “internationalisation strategies” to go beyond the interpretation of internationalisation activities, as this expression represents a more planned, integrated and strategic approach. Knight (2007) lists an amount of information and examples of programme and organisational strategies at the institutional level as presented in Table 13 and Table 14.

Table 13: Institutional level programme strategies

Programme strategies	
Academic Programmes	Student exchange programs;
	Foreign language study;
	Internationalised curricula;
	Area or thematic studies;
	Work / study abroad;
	International students;
	Teaching/learning process;
	Joint/double degree programmes;
	Cross-cultural training;
	Faculty/staff mobility programmes;
	Visiting lecturers and scholars;
	Link between academic programmes and other strategies;
Research and scholarly collaboration	Area and theme centres;
	Joint research projects;
	International conferences and seminars;
	Published articles and papers;
	International research agreements;
	Research exchange programmes;
External relations: Domestic	International research partners in academic and other sectors;
	Community-based partnerships with Non Governmental Organisation (NGO) groups or public/private sector groups;
External relations: Cross-boarder	Community service and intercultural project-work;
	Customised education and training programmes for international partners and clients;
	International development assistance projects;
	Cross-boarder delivery education programmes (commercial and non-commercial);
	International linkages, partnerships and networks;
Extra-curricular	Contract based training and research programmes and services;
	Alumni abroad programmes;
	Student clubs and associations;
	International and intercultural campus events;
	Liaison with community based cultural and ethnic groups;
	Peer support groups and programmes

Source: Knight (2007: 221)

Table 14: Institutional level organisation strategies

Organisational Strategies	
Governance	Expressed commitment by senior leaders;
	Active involvement of faculty and staff;
	Articulated rationale and goals for internationalisation;
	Recognition of international dimension in institutional mission/mandate statements, and in planning, management and evaluation policy documents;
	Integrated into institution-wide and department/college level planning, management and evaluation policy documents;
Operations	Integrated into institution-wide and department/college level planning, budgeting and quality review systems;
	Appropriate organisational structures;
	Systems (formal and informal) for communication, liaison and co-ordination;
	Balance between centralised and decentralised promotion and management of internationalisation;
	Adequate financial support and resource allocation systems;
Services	Support from institution-wide services units – i.e. student housing, registrar, fundraising, alumni, information technology;
	Involvement of academic support units – i.e. library, teaching and learning, curriculum development, faculty and staff training, research services;
	Student support services for incoming and outgoing students – i.e. orientation programmes, counselling, cross-cultural training, visa advice;
Human resources	Recruitment and selection procedures which recognise international expertise;
	Reward and promotion policies to reinforce faculty and staff contributions;
	Faculty and staff professional development activities;
	Support for international assignments and sabbaticals;

Source: Knight (2007: 221)

3. Research Methodology

To develop this dissertation our attention was directed to the analysis of what is internationalisation in business and higher education contexts. Considering that most internationalisation theories were developed in business contexts our work is mainly to find out whether those theories might be used in services, mainly in public services such as HEI. To accomplish our intentions, questions such as *what* is internationalisation in HEI, *why* are internationalisation activities developed and *how* have internationalisation been developed in recent years, particularly in the University of Aveiro, must be answered.

To attain these answers a combination of qualitative research methods such as content analysis, interviews and a case study were used in this work. The reason to use qualitative methodology that combines document analysis, content analysis and semi-structured interviews, lays on the extensive assortment and the non-pragmatic nature of the theme. Interviews were found appropriate to understand opinions, preferences, attitudes and representations.

Taking as object of study HEI revealed to be an unattainable task due to time shortness and the amount of work we would be referring. A case study allows us to look into further detail an institution and its relationship to context, so that there might be better understanding of what hypothetically is happening in greater scale and augmented realities.

Quantitative data on issues related to internationalisation activities at the institutions were also used. The use of this type of information is particularly relevant to compare the content of interviews with reality.

3.1. Criteria for the selection of the case

Taking into consideration the pretentiousness of the theme it was necessary to delimitate the object. To explore, to describe and to comprehend the internationalisation dimension in HEI context are the main aims of our exploratory work. An exploratory study is not only about the description of a certain situation. It orders observation, discovery, analysis and evaluation. In this particular case, the main object of this exploratory work is a case study.

The selection of a case study is suggested by some writers to be only appropriate when we are referring to one researcher short on time and budget. This definition could not be more appropriate to this research, mainly when referring to time shortness. A case study is the selection of a single entity to explore and collect detailed information by using a variety of data collection procedures. Blaikie (2000) claimed that a single case may be a useful source of hypotheses, either to refute a universal generalization, or to demonstrate the existence of a phenomenon which needs to be taken into account. Case studies are related to techniques of data collection such as participant observation, the using of informants, interviewing, and the study of personal documents and records. In this specific case, the last two methods will be used to conceptualise our case study.

The reason for the selection of the University of Aveiro as a case study of this dissertation is related, on one hand, to our “home consciousness” natured for more than 10 years, and, on the other hand, to the expected facility to access information.

As one of the most recent and qualified universities in Portugal, the University of Aveiro, was found to be a very interesting example to study and look into further detail.

3.1.1. Brief Overview of the University of Aveiro

The University of Aveiro was founded in 1973 and is one of Portugal’s 14 public universities. Till this time there were only the University of Lisboa, Coimbra, Porto and then the University Católica. It has almost 15,000 students working across 36 university undergraduate programmes, 16 polytechnic undergraduate programmes, 20 masters programmes, 31 doctoral programmes and 21 post-secondary vocational programmes (UA, 2007).

As stated before, the University of Aveiro is a medium-sized university, located in a medium-sized city in Portugal’s central region, a well developed industrial region and a prosperous centre for commerce and services. The University of Aveiro is also located between two large and prestigious universities such as the University of Porto and Coimbra. This positioning has represented from the beginning a rough challenge to the University of Aveiro. Besides the main campuses located at the city centre, the UA has also more three schools located in the region.

In this particular case, we are referring to a relative small community that allows us to treat and cover almost every aspect we would like to analyse, that in any other institution of superior dimension would become possible.

In Table 15 are presented the registered students in 2009/10 in all public universities in Portugal.

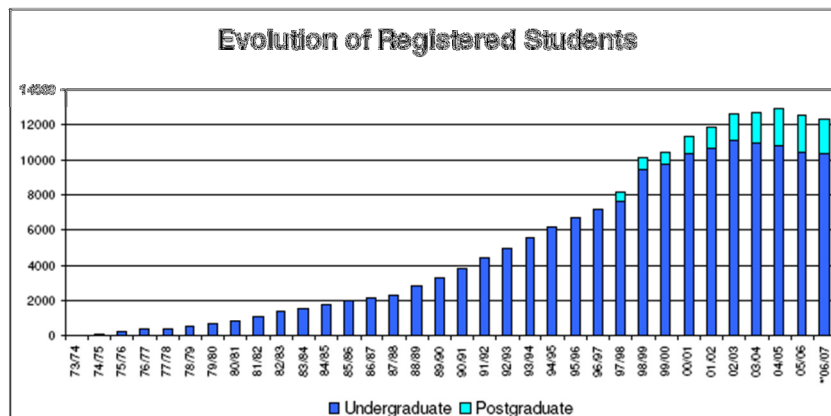
Table 15: Registered students in Higher Education Public System in Portugal

Higher Education Public System	Registered students in 2009/10
University of Açores	3681
University of Algarve	8644
University of Aveiro	12419
University of Beira Interior	5960
University of Coimbra	20868
University of Evora	8119
University of Lisboa	20830
University Técnica de Lisboa	22970
University Nova de Lisboa	16702
University of Minho	16057
University of Porto	28628
University of Trás-os-Montes e Alto Douro	7709
University of Madeira	3111
University of Aberta	8450

Source: GPEARI (2011)

In Figure 7 it is presented the evolution of registered students in the case of the University of Aveiro.

Figure 7: Evolution of Registered Students at the University of Aveiro



Source: UA (2007)

The logotype and its main slogan “theoria, poiesis, praxis” represent the connection with the city and at the same time the power and the universal knowledge. The mission of the University of Aveiro is to create knowledge and expand access to knowledge through

research, education and cooperation for the benefit of people and society. Its main aims are to undertake the project of global development of the individual; to be active in the construction of a European research and education community; and to endorse a model of regional development based on innovation and scientific and technological knowledge (UA, 2007).

“Committed from the start to innovation, quality and the attainment of national and international recognition in the three pillars of Education, Research and Cooperation with society, the UA has built a profile based on sciences and technology and on pioneering areas” (UA, 2007: 6).

The UA was created in order to respond to necessities that have not been fulfilled before. Its main programmes were Electronics, Ceramics and Teacher Education. Subsequent programmes in Environmental Engineering, New Technologies of Communication, Industrial Management and Engineering, Regional and Urban Studies, Music and Design were all new areas at the national level.

The main aim of UA is to be always placed at the three best public universities in Portugal. For now, it has been considered by the Ranking of the Higher Education Evaluation and Accreditation Council of Taiwan the best Portuguese university, the 50th European university and the 172nd world university.

3.2. Data collection methods

Multiple methods to collect information were followed in the research to elaborate our study. The first stage began with document and content analysis, which mostly focused on the collection of information that allowed us to write our literature review and to contextualize our work with frequently used terms. On a second phase, our documentary analysis was extended to institutional and official documents that allowed us to better identify and characterise local, national and international responses to internationalisation of HEI.

In this study, interviews were the main instrument to collect data. As they represent our fieldwork they were an important instrument to obtain knowledge. The interviews were conducted with University of Aveiro key actors, who helped us to better understand UA's

evolution towards internationalisation. On a latter phase, after qualitative interviews, we found it important to complement the collected data with quantitative information. Therefore the collection of information was also extended to some administrative staff in order to gather important quantitative data on internationalisation activities that were not published on institutional and official documents.

Considering the complexity of the theme and the lack of definition on its limitation, our main concern was to combine the greater and better methods to collect rich, useful, reliable and complementary information in order to create a consistent and interesting work.

3.2.1.Document analysis

Having followed several stages, the document analysis was first focused on the collection of information to our literature review. Having known the specialists on the theme of internationalisation in business contexts, it was then important to analyse an amount of articles and literature produced on the theme of internationalisation of higher education, in order to feel comfortable in the writing of this work. For that reason, and as one of the most important data sources, an extensive document analysis was made. Literature review allowed for the conceptualisation of the main rationales and internationalisation activities taken by HEI.

Our document analysis was also completed with the collection of data from institutional and official documents, including those of the Rectorate, such as reports, programmes, statistics, publications or news.

From the diversity of documents we outline the following:

- Activity Plans from 1973 to 2010 [when available] or equivalent document;
- Annual Reports from 1973 to 2010 [when available] or equivalent document;
- The Great Strategic Plan to the Development of University of Aveiro from 2004;
- The European University Association Evaluation Report from 2006.

3.2.2. Interviews

Mindful of time available and taking into account the advantages of a guide to an interview, semi-structured interviews with a set of constant questions were created in order to best compare social actors' meanings, responses, interpretations and perceptions.

The interview guideline (Appendix 1) is divided into 5 main sections organised as follows:

- Reporting the most important characteristics of the period when the interviewee was rector;
- Defining the term internationalisation in HEI context;
- Describing the level of internationalisation of the institution and its organisation;
- Characterising national politics concerning the motivation of HEI internationalisation and their awareness of competitions' positioning;
- Understanding rectors perceptions on the evolution, rationales and advantages of internationalisation procedures as well as their desires to the future.

According to Blaikie (2000), an interview sample should be representative of rich sources of information for the theme. Taking into consideration our case study, it was also important to construct a valid source of information that would allow us to understand how the University of Aveiro has been responding to internationalisation throughout time. The main reason of these interviews is the importance of gathering these actor's perspectives and perceptions as they were the representatives of academic community of the University of Aveiro. In this case, interviews that were recorded and then transcribed were conducted with the following actors to allow for a variety of perceptions:

- The rector of University of Aveiro (1973-1978), Professor Victor Gil;
- The vice-rector of University of Aveiro (1978-1986), Professor Fernandes Thomaz;⁷
- The rector of University of Aveiro (1986-1994), Professor Joaquim Renato Araújo;
- The rector of University of Aveiro (1994-2001), Professor Júlio Pedrosa;

⁷ Between 1978 and 1986 the rector was Professor José Ernesto de Mesquita Rodrigues who died in 1998. Conducting the interview with Professor Fernandes Thomaz was a personal choice considering the pertinence of the period, the consistency on the evolution and the relevant paper performed by Professor Fernandes Thomaz as vice-rector as well as in his subsequent experience in HEI context.

- The rector of University of Aveiro (2001-2002), Professor Isabel Alarcão;
- The rector of University of Aveiro (2002-2010), Professor Maria Helena Nazaré.

The argument for selecting academic leadership is related to an assumption that they possess more information on internationalisation issues than most other groups in HEI, but also that they are central in the interpretation and evaluation process with respect to the impact of internationalisation for the individual institutions (Stensaker et al., 2008). These were considered appropriate interviewees as they were key actors to provide information on the way HEI responded to the new challenges. They are situated at senior level management in the university and thus know about top-down policies as well as bottom-up operational matters.

Another important issue for the selection of the academic leaders is that, as the University of Aveiro is a young and dynamic institution, it could be possible to assess the evolution of its internationalisation process and assess how influential or influenced it was from the changes implemented in Europe in recent years. This dynamic perspective could be added value when assessing the validity of “classical” internationalisation strategies.

3.3. Data analysis

The process of reducing data consists on the transformation of raw information into a form that can be analysed for drawing final conclusions. To assist our analysis, a computer programme of qualitative analysis supporting software (WebQDA) was used. WebQDA is software designed to help investigators dealing with non numeric and non structured data and was mainly developed at the University of Aveiro.

Data was studied according to Bardin (1991) proposal to do content analysis that consists on the following sequence: Organising the analysis > Codification > Categorization > Inference. Bardin's proposal of content analysis is a method that it is used to the description and interpretation of documents and texts. In this particular case, interviews were recorded and reduced to texts that result in exhausting work of interviews' transcriptions. The codification and categorisation process resulted in the creation of categories and codes according to research questions as expressed in Appendix 2. Interviewees classification accorded to attributes (Appendix 3) were also used. However,

minor differences were registered in interviewees responses according to these attributes. This classification revealed insignificant as responses were constant, steady and coherent. During the process, the logic of analytic induction was used to find relations in concepts, themes and variables and establish casual relationships.

Concerning other material rather than the interviews such as documents and official data the main activities were the selection of important and relevant information and its summarisation into patterns, themes and statistical tables.

4. Internationalisation activities and its evolution in the University of Aveiro

This chapter aims to present the main findings of our exploratory study. The main aims exposed at the beginning of this work include understanding the term internationalisation in HEI and comprehend its origin, importance, causes and consequences. Considering the use of these questions in a case study, the University of Aveiro was analysed in further detail in order to satisfy the main questions of this exploratory study. The main findings are here presented, as well as the perceptions of the interviewees on the topic analysed.

4.1. Brief description of the context of the University of Aveiro

As stated before, the University of Aveiro was created in 1974 in an environment characterised by turbulence, instability and change. A growing demand that could not be corresponded by former and classical universities was being anticipated and there was a willingness to avoid the strong separation of the two educations: on the one hand sciences and technologies and on the other hand the humanities and arts.

“Scientifically it was recognized the need to explore new areas in particular through interdisciplinary approaches, and in our particular case, a greater willingness to be exposed to investigation projects of other countries. Simultaneously there was a growing concern about the practice, immediate and direct relevance of scientific investigation. Pedagogically and not independently of the previous factor, there was the possibility of launching new curricular structures or combining different subjects that were segregated (...) another important challenge was the organic structure and the autonomy: the possibility to innovate in terms of more functional, autonomous and simultaneously more responsible organic unities” (Gil, 2011).

After the 25th of April 1974, the University of Aveiro considered as one of the new Portuguese universities suffered several vicissitudes. Considerable changes in previously established priorities were required due to a political background that was not normal or appropriate in the creation of a university. The 25th of April was also responsible for the first signal of internationalisation at the University of Aveiro. Lecturers who were returning from universities such as Lourenço Marques (Mozambique) got immediate contracts with UA, overtaking therefore several stages on the process of creating a university.

After 1977 and 1978 the University of Aveiro grew considerably and in the 80's the openness from the European and American scientific world towards Portugal favoured UA's position and sustainable growth. At that moment, for the first time in Portugal, several PhD scholarships were created allowing quality and reputation among lecturers and investigation.

Having received a strong emphasis from the beginning, the relation and the proximity with the people, the region and the international community were emphasised. As an example, there is evidence of the creation of an association of twenty businessmen that besides contributing to university revenue, projects of their own interest were also developed in mutual cooperation.

“Our policy was to reinforce the university at international forums, to stimulate the outgoing lecturers movement to international investigations centres and to bring to university those people, guaranteeing all the conditions that would allow them to stay and contribute to the development of the university” (Araújo, 2011).

With a solid growth in the 1990s, quality became the main focus of UAs development. Printing a quality seal to the name UA was in fact the most important concern in the following years. There was also an expansion period with the development of new subjects such as music or mechanical and civil engineering. Recently, UA is associated to a period of consolidation providing qualitative assessment on investigation and teaching.

Considering this evolution, some relevant phases might be associated to UA's development (UA, 1997). Between 1973 and 1979 is considered the “Resistance phase” characterised by the need of the university to resist to natural and contradictory forces to its

creation. The period between 1980 and 1984 is characterised by the continuous reinforcement in lecture's recruitment and qualification and the launching of bases to research and investigation. At organisational level, and following unique organisational strategy among Portuguese universities, departmental culture was fortified as well as an institutional awareness. The period between 1985 and 1993 is named UA's affirmation based on the growing number of students. The following periods were concentrated on consolidation, quality and internationalisation of the university.

4.2. Internationalisation and UA's important milestones

Understanding internationalisation in HEI is one of our main questions of research. This question was dealt with all interviewees in an attempt to understand how internationalisation in HEI is comprehended and which activities are immediately associated with the internationalisation level of a university. If we take into consideration our interviewees' opinions there is a combination of interpretations associated with internationalisation and with UA's evolution.

Internationalisation in HEI assumes a very particular meaning and a singular dimension. Believing that the university is the base of knowledge creation and diffusion – and considering knowledge to be universal – there cannot be limits in its activity. It requires constant comparison and learning. Learning with similar organisations - how are they structured, how do they work, what do they know - and bring that knowledge inside our organisation. Important inward and outward movements of knowledge, experiences and cultures are brought to and from our HEI.

“Internationalisation is to get in the universal world – university – of knowledge. Therefore, it is about sharing our knowledge with others, as well as seeing, learning and understanding the knowledge that is produced by others and produce all together (Alarcão, 2011).

To some interviewees internationalisation in HEI represents a very pragmatic number traduced in the amount of non national members among the academic population. A comparison with the business context is also made.

“Internationalisation (in HEI) allows products to get to international market. It is a transaction that is made to win something. When there’s exchange of students in Erasmus or any other PhD programme, if we think carefully, we are looking to improve our products so that they can be better and be known among others.(...) The product is enriched in this internationalisation circle and a market is created (Pedrosa, 2011).

All respondents have mentioned internationalisation as a natural and inherent dimension of HEI’s life. Signals about the interpretation of internationalisation issues on several moments or descriptions on UA’s evolution may also be found. The first and most important topic associated with the process of internationalisation of the University of Aveiro is related to the intervention of World Bank when UA was created. The University of Aveiro was chosen as an institution to benefit from the intervention of World Bank. There was a failure in Portuguese higher education system concerning technical, specialised and advanced training. The creation of UA deserved World Bank’s attention in order to fulfil this breakdown. Very focused on lecture’s training, the World Bank was decisive to UAs’ development particularly in this area, but also with its natural extensions to other areas.

“The intervention and collaboration of World Bank brought to UA a life that other universities did not have. We do not know why it happened (...) the fact is that we were chosen and that was really good for UA. It gave an impulse to UA that other universities did not have because they had not been chosen to the same programme” (Thomaz, 2011).

It is interesting to note that respondents easily relate internationalisation to research rather than to the learning process. In investigation there are several international programmes, there are relationships already created and therefore international networks are easily established.

Since the beginning, the absence of PhD programmes in Portugal forced many people to go out of national borders and study abroad. This “forced” movement progressively induced an internationalisation dimension in every project or activity in which they would be later involved. Since the beginning of UA till nowadays, this dimension of

internationalisation is always present and mentioned by all respondents. Examples of these movements, contacts and relations are multiple and can be reproduced in the personnel cases of every respondent. As stated before, this effort was also complemented with a strong motivation of UA's academic leaders to receive international lecturers and investigators at the university. Evidence of this effort is very clear in the list of professors of many departments that still keep contracts with renewed international lecturers and investigators, known all around the world.

At the beginning of its creation, UA also benefited from inward movements of lecturers returning from PALOP. This relation with PALOP is still today nurtured by a desire to help those countries to develop and to preserve already created relations. Additionally, the PALOP represent an interesting market niche to be explored.

An important feature must be pointed out in relation to internationalisation activities: for several years UA kept an agent in Brussels, the centre of all decision making. This contact was determinant to UA's relations and fund raising. In our opinion, this agent represents an extraordinary vision of UA's development and commitment to expansion, affirmation and internationalisation.

The launching of ERASMUS programme was made for the first time in Portugal at University of Aveiro in 1987. This presentation represents the beginning of official student and lecturer's mobility and is an important high point in UA's internationalisation activities.

This dedication is also visible in the enthusiasm of constantly receiving or promoting the realisation of congresses, colloquiums, seminars with specialists from all over the world. There is evidence of several meetings that represented an opportunity to bring known people, lecturers and investigators to university. Knowledge and learning resultant of their visit contributed to UA's staff development. Important evidence on the sharing of knowledge and of the learning process of the University of Aveiro with experts was the teaching model applied to the School of Technology and Management of Águeda. It was desired a school focused on a pedagogical and innovative project appropriate to training and professionals. The Problem-based Learning was a model imported from Aalborg that resulted from contacts with Aalborg's University and the consequent experience, stimulus and preparation of our staff process learning with that university.

“We did a small scrutiny to know who could help us. And we did not find any models that could satisfy our intentions. Therefore, we went to Aalborg’s University (...) After the promotion of a seminar so that our staff could learn how to use and adapt the model, we launched in Águeda, in engineering areas, the Problem-based Learning. We were always in favour of this international permeability. Internationalisation was an opportunity created for us to learn what was of our own interest” (Pedrosa, 2011).

Considering its importance, there are two more actions that we would like to highlight in this phase: the adhesion of UA to the European Consortium of Innovative Universities (ECIU) and the evaluation of European University Association (EUA). ECIU represents a consortium committed to innovation in teaching and learning fostering economical and social development of regions in transition. The fact that UA was invited to take part of this Consortium represents the high status and the prestigious image of UA outside national borders. The evaluation made by the EUA in 1995, 1998 and 2007 is also in our opinion an important milestone to understand the importance of internationalisation in UA. This evaluation, as well as the self-evaluation report written to these assessments, shows the openness of UA leaders towards international standards.

Taking all these references into account, we may conclude that the definition of internationalisation is quite abstract and cannot be defined in one sentence or in a list of activities. Internationalisation in HEI is a response to globalised world and a need to grow and be known among their similar. Internationalisation is the combination of all activities related to this issue and is essentially the awareness of a mission focused on development, knowledge sharing and universal world. As stated in the first part of our work, internationalisation of HEI translated into assorted activities must include a national and institutional dimension and requires a combination of motivations and approaches defined according to HEI’s resources, priorities and contexts.

4.3. Definition of HEI internationalisation policies and its evolution

There were always people – governments, directors and technicians – who were truly interested in the internationalisation of universities. Therefore they stimulated and

encouraged HE but a clearly politics towards internationalisation did not exist. References on discourses and political programmes were abundant, but of difficult formulation. Moreover, enthusiasm on the theme was variable depending on the people who constituted the ministerial teams throughout all this time.

Reporting to the first years of UA, national structures were also misadjusted from our reality. Existing structures such as the National Laboratory of Civil Engineering, the Nuclear Committee or the Agrarian Structures neither of them appropriate to UA's vocational profile at that time.

Despite most of the activities resulted from personal relationships, networks and knowledge, UA was always a very attentive institution to national and international opportunities of funding. It had always a proactive attitude and looked for financial support.

“After defining what we wanted to do, UA looked around and pursued for financial support (...) we have always taken the first step, we asked for funding to institutions. And we made it! There was funding even from the town hall! There was support regionally, nationally and internationally. There were cases in which we succeeded; there were cases in which we did not succeed” (Nazaré, 2011).

In addition to World Bank already mentioned, in recent years we may also consider the influence of the Science and Technology Foundation (FCT) in the process of internationalisation of HEI. Orientation guidelines to European projects of investigation were always defined very clearly. FCT promoted in HEI a dynamic perspective that all investigation should occur according to international standards and should be revealed and published in an international dimension.

All interviewees are unanimous when referring to the evolution of internationalisation policy issues in last years. Besides national development, most interviewees associate this development to the accession of Portugal to the European Union in 1986. The participation in EU enable that already existing contacts and relationships became stronger.

This accession was considered very important and still is decisive today. The European programmes were and still are essential and decisive in the internationalisation of Portuguese universities, and in this case – in UA's development. They represent the most

meaningful signal of participation and evolution of all involved institutions. Erasmus programme is still today the most known and well succeeded mobility programme in HEI. However, it is not all about Erasmus. European projects and framework programmes are useful and in some cases vital to the survival of the institutions.

Despite colossal evolutions truthfully positive in the past 20 years when compared to the past, a long path to perfect contexts must yet be made. The divergences between defined objectives, politic discourse and legislation still limit HEI performance. The omission of adequate legislation that would allow free movement of academic people is limited and short. It was mentioned the lack of appropriate legislation concerning education, health, insurance and economy systems. Furthermore, some respondents even mentioned a withdrawal in recent years. UA had already in 1999 the movement “*Repensar os curricula*”, and consequently was better prepared to implement the Bologna process directives than other universities, as most of the work concerning the curricula was already done. However, the perception of disappointment and withdrawal associated with the Bologna process is related to the fact that did not produce the expected results.

“In Portugal, academic freedom is confused with research autonomy (...) there is here a characteristic of Portuguese being little disciplined in the conception of personal objectives in relation to the objectives of the institution” (Araújo, 2011).

4.4. The rationales for the internationalisation of UA

The rationales for the internationalisation of UA are of several natures according to our respondents. Some interviewees classify the internationalisation of UA as external and internal motivations.

Even though we are referring to new student’s recruitment processes, external motivations are related to the income and profits. Although not recognised clearly, the economic perspective associated to internationalisation has to be taken into consideration. International and foreigner students, lecturers and staff mean different revenues to the institution. We are referring to profits in long term relationships, either related to direct tuition fees, or indirectly through their spending patterns in the host country. Even though many results are not immediate, an example that can be mentioned is international students

who continue to live in the receiving institution even though they have finished their studies.

The need to be part of universal investigations and knowledge is also identified as a fundamental external motivation. The possibility of having access to knowledge allows HEI to do better investigation and improve students' learning process. Quality research is only possible in a universe without frontiers. Being internationally known and having access to materials and resources of other institutions are some of the main advantages pointed out by our interviewees. Moreover, there is a clear convergence of markets, cultures, societies and individuals. Every aspect of our life takes place in a globalised world characterised by increasing movements of exchange and cooperation.

“Students are aware that when leaving university they will be working in a world without frontiers” (Pedrosa, 2011).

Internal motivations are directly related to HEI's mission and vision.

“The need of producing knowledge. Also the awareness of knowing that knowledge is also produced by others and that it is much more interesting if we share knowledge and might produce it together. Meaning to co-produce knowledge. Having an enlarged perception of humanity and the idea of living in a globalised world, for better and for worse” (Alarcão, 2011).

If we take into consideration the rationales for the internationalisation of HEI presented in the first part of this work, according to Knight and de Witt (1995) we are able to identify in the responses of our interviewees the main rationales to the internationalisation of the University of Aveiro: academic and economic. It is interesting to note that the differentiation made between internal and external rationales can be associated to the division of Stensaker et al. (2008) of “old” forms and “new” forms of internationalisation. According to Stensaker et al. (2008) academic and socio-cultural rationales are institution-specific and internal in nature, political and economic reasons usually demand an adaptation of the institution to external forces.

In this particular case, the most relevant rationale for the internationalisation of UA is the academic rationale. Every interviewee outlined the relation of UA's mission to the benefits of internationalisation processes of producing and sharing knowledge and taking

part in qualified researches. The emphasis is on producing and sharing knowledge, student and staff development, the establishment of strategic alliances and networks and the consequent reputation of teaching and research.

“Internationalisation contributes in great scale for the prestige of an institution and there is no institution that does not aspire to be known”
(Thomaz, 2011).

As previously mentioned, this should be in our opinion the most important rationale in the process of internationalisation of an institution. It is inherent to its mission, vision and values. The idea that gave birth to universities in the Medieval Era of dynamism and circulation of people should be extended to all levels of institutions nowadays. HEI can only survive being part of the world and being a recognised actor. The possibility of giving more opportunities to UA’s own students and to attract international talents should be the core mission of all internationalisation strategies.

Economic rationale is also important for internationalisation strategies of the University of Aveiro. Although not so relevant as the former, economic motivations play a significant role in UA’s strategies. Associated with a “new” form of internationalisation the economic rationale must be in fact identified as a dominant rationale as higher education is becoming much more market oriented. Financial restrictions, growing competition and the pursuit for new forms of funding are some of the reasons that force institutions to become focused on economic objectives. The importance of generating alternative income mainly through the enhancement of international brand and profile is of fundamental importance to UA’s survival.

According to answers of our interviewees to this specific topic, academic and economic rationales are identified as the main motivations for the internationalisation of UA. However, if we take into consideration all the answers of the interview, socio-cultural rationale must also be pointed out. In fact, networks and alliances with PALOP are referred by all respondents when asked about specific activities. Intercultural development, social and community development or human resources development are taken into consideration since the creation of the University of Aveiro.

4.5. UA's internationalisation activities

In terms of organisation, UA's internationalisation was only reflected in its human resources latter in its existence. At the beginning, internationalisation activities, processes and responsibilities were generally attributed to vice-rectors, usually chosen to this area due to their personal international experiences and in favoured contacts. Considering the context, at that time, internationalisation was assumed as inherent to academic activities. In the 80s particular human resources were allocated to an international office that has been growing till today. The idea of university communion continued up until now.

“A single person office was created to help internationalisation activities. Obviously, the performance continued to dependent in great scale from departments. And that was the model we intended to reiterate: every department must be a development engine to university” (Araújo, 2011).

The importance of internationalisation in UA's organic structure and hierarchy was understandably very unstable throughout the years. This expression helps to classify internationalisation in relation to other activities.

4.5.1. Perceived internationalisation activities

The examples given by interviewees to illustrate the level of internationalisation of the university are diverse and multiple. Examples of perceived internationalisation activities by institutional actors are here presented.

“Most of the times, in investigation there were already international programmes and relations of those who have been formed in other countries. Therefore, it was easier to establish networks (...) and that really contributed to a closer interaction with international groups” (Thomaz, 2011).

“Since the beginning, we were in favour of taking part in European meetings. At that time, there was not yet the European University Association, but there were already meetings. We have been to Brussels in every possible reunion (...) we promoted colloquiums, meetings, seminars, international

congresses of world dimension so that known scientists could come to the university” (Araújo, 2011).

“We launched a programme, similar to Erasmus - with the University of Goa (...) we had a very strong programme with Mozambique with the support of Gulbenkian Foundation (...) The University of Cape Verde chose the University of Aveiro as a model university and a huge cooperation programme was developed. (...) By that time we signed a programme on environmental politics with Brazilian universities that is still on today. We have worked with Macau and there was also a programme to reinforce cooperation and exchange (...) I went to Brazil for other reasons, but signed an agreement with Minas Gerais Federal University because it was of our mechanical engineering interest to work with them” (Pedrosa, 2011).

“UA had the concern to be present in every European projects. Therefore, there was someone in Brussels at a projects’ office that gave fundamental support to university development (Alarcão, 2011).

“There were several projects with the PALOP and we decided to organise all those individual projects into programmes with a continuous perspective (...) There was a strong investment in resources so that investigation units could bring to our university known and praiseworthy investigators. And at that time we received people for Chemistry, Physics, Electronic and Biology” (Nazaré, 2011).

4.5.2.Strategic features on UA’s internationalisation

Strategically, internationalisation has always figured in rectors’ programmes and annual strategic plans of the university. Objectives such as declaring the internationalisation of the university as a main purpose are clearly stated in many documents of running for elections. An example of aims concerning internationalisation in one of those documents is presented (UA, 1994).

- To strengthen the internationalisation of research and technological transference of innovation throughout framework programmes, PRAXIS programme and scientific and technologic bilateral programmes;
- To continue the internationalisation effort already made in UA undergraduate, postgraduate and continuous, through communitarian framework programmes;
- To significantly stimulate cooperation with PALOP;
- To induce relations with institutions and regions from all globe that might be significant to emigrate Portuguese communities and consequently receiving in UA students of those communities.

Browsing UA's website on international area and analysing some of UA institutional documents it is clearly stated that the University of Aveiro assumes the challenge of highlighting its international position. UA's strategy includes: knowledge production in collaboration with foreigner partners; definition of a policy of alliances and identification of priority geographical areas with foreigner partners; the recruitment of international talents (lecturers, investigators and students); the growing cross boarder visibility through events promotions or reinforcement of UA's international presence in supranational organisations.

Besides Erasmus Programme, the most well known and succeed programme of student exchange, UA's students might study abroad through other programmes such as Campus Europae, ECIU network or Erasmus mundus. As a result from UA's institutional relations with socioeconomic partners such as Santander group and Top Atlântico, UA's students have also the opportunity to study in one of more than thirty institutions of Portuguese Speaking Countries Community (CPLP) countries. The main institutions are Brazilian but there are also others such as Agostinho Neto University in Angola. UA students have also the opportunity to do European internships in Europe through programmes such as Leonardo da Vinci, Grundtvig, or Comenius or in Japan through programmes such as Vulcanus in Japan. UA has also several development projects in straight cooperation between its offices and other institutions. An enormous evidence of this cooperation is the PmatE project that has at the moment two different projects with the PALOP: the

OUTclass that created a virtual academic community to students from basic education and the PENSAS@moz that promotes teaching through new technologies.

Exchange students receive language training during their exchange and assistance concerning accommodation. There are a limited number of rooms at the halls of residence, but help to find accommodation in the private sector is provided.

The Erasmus Buddy is a University of Aveiro student who works with International Office ensuring that exchange students feel welcome within the University's academic community and who will offer support and assistance if needed to exchange students.

UA international office provides immigration and support and promotes cultural travels with the initiative "Discover Portugal with us". This allows exchange students to better know Portugal and take closer contact with Portuguese reality and people. There is also evidence of student's structures such as International Students Association of Economic and Entrepreneurial Sciences Students (AISEC).

UA is part of several networks and international forums:

- The European University Association (EUA);
- The European Consortium of Innovative Universities (ECIU);
- The European University Foundation (EUF) – Campus Europae;
- The European University Continuing Education Network (EUCEN);
- The European Chemistry Thematic Network Association (ECTN);
- Universia;
- Columbus Torino;
- The Tordesilhas Group of Universities;
- Carnegie Mellon Portugal;
- UTEN Portugal;
- Campus do Mar;
- The Association of Portuguese Language Universities;
- EURAXESS.

UA currently participates in five international masters degree:

- Joint European Masters Programme in Materials Science (EMMS);
- Functionalised Advanced Materials and Engineering (FAME);
- European Masters Degree in Higher Education (HEEM);

- Joint European Master Programme in Environmental Studies (JEMES);
- International Master in Advanced Clay Science (JMACS).

UA is also involved in several European Union projects:

- GALAPRO;
- The European Teachers Professional Development for Science Teaching (EuSTD);
- Benchmarking Flexibility in the Bologna Reforms (BeFLEX);
- Network of European Tertiary Level Educators (NETTLE);
- ECTs Helpline;
- Interfacing Sciences, Literature and Humanities (ACUME 2);
- Teaching and Research in Engineering en Europe (TREE);
- Strategic Spatial Planning.

4.5.3. Labelling UA's internationalisation activities

The evolution of UA's students from 2005/06 to 2010/2011⁸ (UA, 2011) has also traduced a natural evolution of international students. In 2005/06 the number of international students grew from 641 to 1145 in 2010/11. In relation to the total number of UA enrolled students, this represents 7,58% of international students. According to OECD (2011) report "Education at a Glance" Portugal average is 2,4%, OECD average is 6,4% and EU21 average is 5,4%. When compared to countries that have the highest percentages of international students such as United Kingdom (15,13%), Australia (15,1%), Austria (15,1%) or New Zealand (14,6%), Portugal's percentage is roughly low. Even not comparing UA's percentage to the total of other countries percentage it must be pointed out UA great contribution to the increasing number of Portugal as a hosting country for international students. As exposed on Appendix 3, UA international students are mainly originally from Brazil, Cape Verde, Spain, Poland, Mozambique, France, Angola, São Tomé and Príncipe, Italy, China, Germany, Venezuela and India.

The results from mobility programmes⁹ (UA, 2011) also show a general growing tendency throughout the years. Incoming student's members have been growing except in

⁸ Appendix 3

⁹ Appendix 4 and Appendix 5

the last academic year of 2009/10. Most students are originally from Spain, Brazil, Poland, Italy, Czech Republic, France, Germany, Romania and Turkey. In descending order Spain, Italy, Poland, Czech Republic, Brazil, Germany, United Kingdom, the Netherlands and France are UA's mobility student's favourite destinations. In relation to the total of enrolled students, incoming mobility students represent 7,48% and outgoing mobility students represent 7,43%. Table 16 shows the result of mobility programmes and incoming and outgoing students' movements.

Table 16: Incoming and outgoing UA's students

Programme	Total 2003/04 - 2009/10	Total 2003/04 - 2009/10
	Incoming students	Outgoing students
Bilateral agreement	208	65
Portuguese and Brazilian scholarships Santander Universities	3	19
Campus Europae	76	57
Galiza and North Portugal Cooperation	0	1
ECIU	4	3
ERASMUS	838	961
Free mobility	3	19
Alban	1	0
TOTAL	1133	1125

Source: UA's Rectory (2011)

A categorisation of UA's internationalisation activities will be made in this sub-chapter, according to Knight's (2007) classification presented in the first part of our work.

Knight (2007) used terms such as internationalisation strategies to refer to activities in order to enlarge its meaning and comprehension. The main categories were academic programmes, research and scholarly collaboration, external relations (domestic and cross-border), extra-curricular, governance, operations, services and human resources.

Taking into consideration the information presented above, we may affirm that main internationalisation activities developed by UA are focused on the following aspects: academic programmes, research and scholarly collaboration, external relations: domestic and cross-boarder and governance activities.

According to our interviewees responses, the official information and the statistics previously presented, academic programmes and research and scholarly collaboration seems to be the most important and relevant categories of internationalisation activities. Internationalisation activities have in fact an immediate association to academic programmes such as student exchange programmes (Erasmus, Socrates, Tempus, among others), foreign language study, work/study abroad, international students,

learning/teaching process, joint double degree projects, visiting lecturers and scholars or cross-cultural training. In the category of research and scholarly collaboration, evidences are also in joint research projects, international conferences and seminars, published articles and papers, international research agreements or research exchange programmes.

External relations including domestic and cross-boarder are evident in UA's activities translated in community service and intercultural project-work (Diverse programmes with PALOP), customised education and training programmes for international partners and clients (UA services portfolio), international development assistance projects and cross-boarder delivery education programmes (PmatE), international linkages, partnerships and networks (ECIU), contract based training and research programmes and services and alumni abroad programmes.

Extracurricular activities are present with student clubs and associations (AISEC) and peer support groups and programmes exist in the initiative Erasmus buddy.

Government activities are also identified in UA's internationalisation actions. Evidence of some of its activities is in organisational strategic documents consulted. This involves expressed commitment by senior leaders, articulated rationale and goals for internationalisation, recognition of international dimension in institutional mandate statements and in planning as well as integrated into institution-wide and department/college level planning. We could not find evidence of international dimension evaluation policy documents. Bearing in mind that some respondents considered the inexistence of formal evaluation, this issue is pointed out as a failure in activities scheme.

Concerning UA's operation activities we can only find evidence of informal systems for communication (through internet). No evidence is found in appropriate organisational structures, formal systems for communication, liaison and co-ordination, balance between centralised and decentralised promotion and management of internationalisation and adequate financial support and resource allocation system. Furthermore, responses confirm the insufficient allocation of financial resources to internationalisation and a carefully analysis of today's organic structure with internationalisation divided by three vice-rectors without confirmed connection to international office are supportive issues of this evaluation.

Although with malfunctions also identified by interviews with staff, services activities must be in some extent considered. Support from institution-wide services units such as

student housing, registrar, information technology and library resources are relevant to UA, as well as student support services for incoming and outgoing students with programmes such as orientation programmes, counselling, among others. Although we may find some evidence of the involvement of academic support units such as library, teaching and learning and research services, we could not find evidence of curriculum development or faculty or staff training.

Despite references in interviews to human resources activities supporting for international assignments and sabbaticals, no evidence was found to recruitment and selection procedures which recognise international expertise, reward and promotion policies to reinforce faculty and staff contributions.

4.6. Expected developments to the internationalisation of UA

As our fieldwork of this dissertation involved interviews to all former rectors of the University of Aveiro, one of the main objectives was to understand their opinions, perceptions and expectations about the future. In this section are presented the results concerning our interviewees' opinions regarding the future of UA.

Nowadays HEI are aware of their national and international congener's level of internationalisation. Either to compare or to compete, this presence is evident and constitutes a general concern all time. There even are in some cases specialised offices to work on these "rankings". Although it is fundamental to know information about potential partners and to choose the right institutional partners, comparisons should be aware of national or international dimensions and realities.

"When referring to Europe, it is obvious that when comparing to countries such as England, Ireland or France we are immediately losing due to the linguistic factor. If we are comparing to Norway or Denmark, a less attentive analysis might tend to consider that in this case we are at the same level as they do not have English language also. But a mistake would be made. They do not speak English, but they have motivation policies to learn English far from the beginning, since secondary school. And most HEI courses are in English" (Nazaré, 2011).

Considering that every HEI has the legitimacy to only perform at a regional or national context, it is almost impossible to imagine that such HEI may endure. In that case, an institution would survive at such a lower level that couldn't be of any interest to any institution and considering institutional statements it is not if any interest to UA.

“An excellent university cannot be in fact excellent without being an international university, recognised by their similar. Nationally and internationally” (Pedrosa, 2011).

According to some of our respondents as UA is a small-medium university when compared to international or even national universities and considering national restrictions, higher education sub funding, the decrease in the number of students, the intended higher education network restructuration, it might have in the future some problems that should be well managed.

“I would like that the university at this moment, particularly difficult to all, would have the talent and the art of recognizing an opportunity that would allow the university to become stronger after the crisis. Sometimes, crisis periods may be opportunities to test the capacity of institutions and organizations capacity (...) It is the opportunity to establish important differences and to renew strengths” (Pedrosa, 2011).

Often related to adjectives about quality and excellence, UA must take advantage of its reputation and image. UA must be constantly affirmed as an excellent university in teaching and research areas. It should be taken into consideration the university core competencies in order to define its priorities and focus on what it does best. To most interviewees UA is better classified internationally than nationally. In our opinion there could not be a better reason for UA to change its resources to an international dimension.

“UA is extraordinarily renowned outside national borders. Therefore, we have to guarantee that lecturers, investigators and students that arrive to UA, in the end might say: UA is so good, in fact, it is much better than what I thought!” (Nazaré, 2011).

The affirmation and excellence of UA might be consolidated throughout international standards. As previously mentioned, UA has already an international background created all over the years that is important to its development and to international affirmation.

4.7. Presentation of scenarios to future developments

Despite its valuable contribution to poor national outcomes in terms of international standards, UA needs to reinforce its position, take advantage from its international image and reputation and improve some internal aspects. An international dimension is already included in UA intentional directions exposed in its mission, objectives and strategic documents but quantitative data as well as formal evaluation systems should be added. International ambitions and intentions although present in every strategic document are generally vague and broad. Specific aims, goals, operational priorities as well as funding and staffing responsibility should be clearly and quantitatively defined and consequently improved. The EU has established in Leuven Communiqué the quantitative aim of 20% of mobility by 2020. Therefore, by 2020, one in each five students should participate at least once in a mobility programme out of its origin country. To UA achieve this goal, it would be important that intermediary goals are established, assessed and achieved.

There is no evidence of evaluation processes to assess internationalisation activities. Despite a constant concern on the evaluation and the need to take share accounts with responsible identities, there was not a clear and defined process to evaluate internationalisation activities in particularly and formally. Considering the amount of protocols, networks and programmes involved an evaluation of the feedback, revenue or consequences should be made in any circumstance. This absence of formal evaluation is understandable in the first years of the constitution of the university as resources were short and internationalisation was inherent part of other activities, but it is inconceivable today.

UA self evaluation report shows that members of the Senate when asked about which should be UA internationalisation objectives answered in descending order: international networks, research, mobility (staff and students), teaching and attracting post graduation students, relationships with Portuguese speaking countries, dissemination of results, external evaluation and the Bologna process. To actually considerer some of these

objectives such as international networks, evaluation of their revenue and formal feedback should be considered. Furthermore, considering UA's dimension nowadays it is urgent that formal evaluation processes focused on internationalisation activities must take place.

The communication system is also deficiently presented. Despite dispersion of information concerning international area information, a simple action such as having its web site version in English is not available at UA. Only a university with a serious commitment to communication and marketing should achieve its international aims.

According to OECD (2011), underlying factors in students' choice of a country of study include at first scale its language of instruction. The language spoken and used in instruction sometimes determines in which country a student chooses to study. Countries whose language of instruction is widely spoken and read such as English, French and German are therefore leading destinations of foreign students. Either because students have learned English in their home country or want to improve their language skills, offering English courses is a core advantage to HEI which want to internationalise. Quality of programmes based on the quality perceived from a wide array of information on and rankings of higher education programmes is also an underlying factor in students' choice. UA has been recently considered the best Portuguese university by Ranking of the Higher Education Evaluation and Accreditation Council of Taiwan. An excellent promotion and communication should be in fact taken out of this classification. Tuition fees, cost of living, immigration policy and other factors such as recognition of foreign degrees, restrictive university admission policies at home, geographical, trade or historical links between countries, future job and cultural aspirations and government policies to facilitate transfer of credits between home and host institutions are also underlying factors in students' choice of a country to study that UA should be aware and improve.

UA as well as HEI in general should recognise existing political, economic, social, cultural and educational conditions, evaluate their impact on the organisation context and potentiate their best conditions and competencies. Serious considerations on future actions, actors, partners and costs concerning internationalisation must be deeply analysed. The desire of internationalisation meaning universities fusion, international enterprises association, campus expansion must be taken into account. In fact, these aspirations should be taken into consideration if HEI desire to evolve, to progress, and to advance.

UA has been growing nationally and internationally throughout the years. Quality, excellence and prestige are immediately associated to UA brand and its contribution to the internationalisation of Portuguese higher education is significant. However, a process of reflection in order to analyse the necessity, opportunities and challenges of integrating its teaching and research within a higher international level should be questioned. There are only two possible scenarios to UA's future: either assumes internationalisation as a priority area to its development or sustains the actual internationalisation level.

Maintaining today's level of internationalisation and considering some expected problems it is acknowledged that university level will be associated to a scenario of survival or decadency. UA will be clearly overwhelmed by other institutions, either nationally or internationally, if sustaining actual conditions is its only aim to internationalisation area.

Defining internationalisation as a priority area implies deeply structuring some of its main activities and deepening their contacts, relations and partnerships. Enormous decisions that set previous periods of its history such as the intervention of World Bank, the adhesion to Erasmus and the structuring of curricula must be made. Decisions concerning tuition fees, campus expansion or assuming English as the language of instruction are decisive to future UA international development and affirmation. Although Kerkaan et al. (2008) argues that at UA very few disciplines are taught in English, on the grounds that it is neither economically viable nor pedagogically efficient, HEI are forced to think about changing their curricula from Portuguese to the English language in order to become a more attractant destination to worldwide students.

Considering UA's ambitions clearly stated in its official documents, national borders and limitations are not enough to university desirable and expected development.

4.8. Appropriate relevance of internationalisation theories

According to information on the first part of our work where we have exposed some of the most relevant theories of internationalisation, they can be divided into two main groups: economic and behavioural theories.

From the analysis of our case study one cannot be conclusive about the application of some of this theories in HEI neither their internationalisation strategies. But a closer

analysis of UA movements based on results presented above can be taken. Indeed, even though some interviewees have used business language to describe internationalisation activities, the aim and processes in HEI are quite different from business contexts. UA's case study and evidences from interviews, formal information and statistics presented indicates that UA internationalisation is a process that demands progressive involvement in international activities. Nevertheless, although behavioural theories are more appropriate than any of the previously presented economic theories, when referring to future developments an accent in economic theories development processes would be desirable to UA internationalisation status. When expected developments were presented it was highlighted the importance of finding core competencies and take the best possible profit advantage of it. International markets theories that include theory of absolute advantage and the theory of comparative advantage are somehow here present as international resources and services specialisation is desired by respondents. According to Porter (1990) the two types of basic competitive advantages – cost advantage and differentiation advantage – are both desired to improve UA's capacities. Either delivering services at lower costs (concerning tuition fees and cost of living) or differentiation advantages (services provided, courses in English) should be benefits delivered by UA better than their similar in order to become competitive.

A glance of the internalisation theory conceived by Buckley and Casson (1976) is also present when referring to UA's campus expansion and international fusions either with other HEI or international enterprises. According to this theory, one should internationalise going from an exportation process to other more complexes in order that shared resources might be all of institution responsibility. At last, Eclectic paradigm may also be unveiled as we have evidence of internationalisation motivations recognised by Dunning (2000): market demand, resources demand, efficiency demand and strategic resources demand. According to this theory, using ownership, location and internalisation advantages, outcomes, profits and success may be develop by its own.

Although focus on economic theories is desirable to UA's international development, behavioural theories of internationalisation are more adequate to characterise UA's internationalisation strategies. Taking into consideration the information about internationalisation activities throughout the years, Uppsala theory and networks theory could not be more appropriate to this particular case. The association with Uppsala theory

cannot be made as a straight association of UA's internationalisation process as an established chain where progressively we go from no regular exportation activities to direct investment. Internationalisation process should instead be understood a stage or procedural process where resources and knowledge are managed to become wiser and proficient. In fact, according to Uppsala theory, knowledge obtained from experience and learning processes is vital to organisation development and more proficient participations and partnerships in the future. Bearing in mind UA's evolution and growing process, this dynamic theory is associated to UA internationalisation process. Furthermore, networks theory that represents an evolution of Uppsala theory also represents in our case study an important evolution – and outcome – of the evolutionary process of internationalisation. A careless analysis of UA's international activities might tend to affirm that this is the actually internationalisation strategy of our case study. Taking into account the above explanations, one cannot consider this theory unique to classify UA's internationalisation strategies. However, it is certain the most important, relevant and easy internationalisation strategy. As sustained by Johanson and Mattson (1988) organisations gather relevant information if involved in networks as they obtain knowledge, trust and reputation. Throughout all the years and even today when referring to UA's international dimension, networks, partnerships, associations are the most relevant internationalisation activity and strategy.

One cannot identify a single theory of internationalisation that might characterise UA's internationalisation strategies and processes. In fact, as previously stated, there is no better theory or model of internationalisation that we can apply to organisations. In our case study analysis we are able to identify the applicability of several theories of internationalisation depending on contexts, motivations and resources. Considering UA's internationalisation activities a strong emphasis on behavioural theories of internationalisation must be made, both the Uppsala theory and especially the networks theory. However bearing in mind expected developments of UA and taking into account the main rationales identified it is impossible not to consider the need to focus on economic theories of internationalisation such as international market theories, theory of competitive advantage, internationalisation theory or the eclectic paradigm.

5. General conclusions

Final conclusions, limitations of the study and suggestions for future research projects are presented in this chapter.

5.1. Conclusions

This work intended to understand the importance of internationalisation in HEI. Having known internationalisation framework concerning business contexts, our main purpose was to comprehend whether the same features could be appropriate to organisations with the characteristics of HEI.

To proceed with our study, the University of Aveiro was chosen as a case study. The most important outcomes are to understand what internationalisation in HEI context is, how UA have been influenced by internationalisation, what the main rationales and approaches to the internationalisation of HEI are, which internationalisation activities are being taken, how they are evaluated and what the expected developments to the future of HEI are.

Taking into consideration our case study analysis that involved interviews to all former rectors, formal information of institutional documents and statistics released by rectory offices, the following results resume in table 17 were accomplished.

Either to affirm its position in relation to the existing universities of Porto and Coimbra or because from the start UA was committed to innovation and quality, the attainment of national and international recognition was always a priority to decision makers. Although national policies concerning higher education and in particular internationalisation have always been very intermittent, UA have always had a proactive position towards funding recruitment. Throughout the years UA grew as well as its importance and international recognition. Important phases all over the years have contributed to this position: the intervention of World Bank, the receiving movement of lecturers from PALOP universities after the 25th of April, the launching of Erasmus programme, the adhesion to ECIU and EUA first evaluation and most of all, the preservation of contacts, relations and knowledge acquired in previous experiences by the academic community and the constant desire to contribute and take part in world forums of discussion.

Table 17: Summary of main findings

Definition		
<i>Business contexts</i>	<i>HEI contexts</i>	<i>UA</i>
Increasing process involvement in international operations and valuable activities (Welsh and Luostarinen, 1988); (Meyer, 1996); (Viana and Hortinha, 2002);	Increasing process of integrating an international and intercultural dimension in HEI's activities (Knight, 1993);	Natural and inherent process to HEI's activities; Mission statements; Knowledge sharing, comparing and learning; Product enrichment; Amount of international members in the community;
Adaptation to organisational processes in international contexts (Calof and Beamish, 1995);	Awareness, interaction and dialogue with other countries (Yang, 2002);	
Micro-macro opposition or inward-outward polarization (Simões, 1997);		
Theories of internationalisation		
<i>Theoretical base</i>	<i>Main characteristics</i>	<i>UA</i>
International market theories;	Absolute advantage (Smith 1776); Comparative advantages (Ricardo, 1817);	The importance of finding core competencies and take the best possible profit advantage of it (Future);
Theory of competitive advantage;	Differentiation and specialisation (Porter, 1990);	
Internalisation theory;	Advantages of the minimization of transaction costs and maximization of market imperfections (Buckley and Casson, 1976);	UA's campus expansion and international fusions (Future);
The Eclectic paradigm;	Owenship, location and internalisation advantages (Dunning, 2000);	Focus on market demand, resources demand, efficiency demand and strategic resources demand (Future);
Uppsala theory;	Gradual stage process (Johanson and Wiedersheim-Paul, 1975);	Stage or procedural process where resources and knowledge are managed to become wiser and proficient (Present);
Networks theory;	Evolution based on knowledge acquired in networks (Johanson and Mattson, 1988);	Networks, partnerships, associations are the most relevant internationalisation activity and strategy (Present);
Rationales		
<i>Business contexts</i> (Simões, 1997)	<i>HEI contexts</i> (Knight and de Witt, 1995)	<i>UA</i>
Endogenous; Market characteristics; Relational motivations; Access to exogenous resources; Governmental incentives;	Academic;	Access and take part in global knowledge; Having access to materials and resources;
	Socio-cultural;	Networks and alliances with PALOP;
	Political;	
	Economic;	Search for new forms of revenue;
Activities		
<i>HEI contexts</i> (Knight, 2007)	<i>UA</i>	
Academic programmes;	EX: Mobility programmes (Erasmus, Campus Europae, Erasmus Mundus...); Work / study abroad; Internships in Europe; Lecturers PhD trainings; Investigation projects; International networks and forums; European Union projects; International masters degree; Foreign language study; Internationalised curricula; Visiting lecturers and scholars;	
Research and scholarly collaboration;	Colloquiums, meetings, seminars, international congresses of world dimension; International networks and forums; Joint research projects; Published articles and papers; International research partners in academic and other sectors;	
External relations: Domestic;	Associations with community partner (Top Atlântico and Santander); Customised education and training programmes for international partners and clients;	
External relations: Cross-border;	Cross-border delivery education programmes (PALOP); International development assistance projects (PmatE); International linkages, partnerships and networks (World Bank intervention); Representation in Brussels, ECIU, EUA);	
Extra-curricular;	Student clubs and associations (AISEC); International and intercultural campus events (Discover Portugal with us); Peer support groups and programmes (Erasmus Buddy);	
Governance;	Expressed commitment by senior leaders; (Documents for running elections); Active involvement of faculty and staff (Relation departments and rectory); Recognition of international dimension in institutional mission/mandate statements, and in planning (Mission statements and objectives);	
Operations;	Appropriate organisational structures (International office);	
Services;	Support from institution-wide services units (accommodation); Student support services for incoming and outgoing students; Portuguese classes to foreigner students;	
Human resources;	Recruitment and selection procedures which recognise international expertise;	

Source: Self elaboration

Internationalisation is comprehended as a natural and inherent activity of university's mission. It is understood as the process of sharing and producing knowledge and can be accounted considering its relations, partners or non-national members among the academic community.

The main motivations to the internationalisation of UA are academic, economic and cultural rationales. Academic rationale is intrinsically related to research and education pillars of the university. Economic rationale concerns the financial and profitable outcomes also important to UA's international development. Cultural rationale regards the close relation with PALOP.

Participation in European networks and partnerships with foreign universities and student mobility are the main UA internationalisation activities. They are seen as a tool to further develop research and postgraduate studies, attract international publics, increase incoming and outgoing students and consolidate quality practices. Cooperation with Portuguese speaking nations is a particular area of interest in UA policy. Despite its considerably relevant contribution to national outcomes, considering international and mobility students' results, UA is still far from the reference numbers established by the European Union. Furthermore, when referring to national results, the scenario is even more pessimist. The categorisation of UA's activities is clearly into academic programmes, research and scholarly collaboration, external relations (domestic and cross border) and governance activities.

Considered by Ranking of the Higher Education Evaluation and Accreditation Council of Taiwan the best Portuguese university, UA has an interesting image of innovation and quality related to its name. Assumed by many to be better known outside national borders, a considerable and consistent path must be made to ensure UA's international position. An investment by the Rectorate in order to meet the demands of an internationally-oriented university must go further than intentions and need to be materialised. Tangible goals must be defined and assessed and important decisions concerning tuition fees, campus expansion or language of instruction should be considered to further developments.

A relation between theories of internationalisation developed to business contexts and their applicability to HEI contexts in particular to UA case study is in fact very interesting. Although one cannot assume the appropriateness of only one theory to UA process of internationalisation, the truth is that considering different contexts and phases there is

evidence of some of the internationalisation theories developed to business contexts. Evidences of behavioural theories of internationalisation, either the Uppsala theory or the networks theory are evident in UA internationalisation process. Although less relevant, economic theories such as the theory of absolute advantage, the theory of comparative advantage, the internalisation theory or the Eclectic paradigm are also present or desired to future university's developments.

5.2. Limitations of the study and suggestions for future research

The main limitation in this work is related to the fact that is an exploratory study as there are still some reservations in relation to its validity. Considering this reservation overstepped as we are referring to a methodology as relevant as any other in a qualitative research, the actual failure is on the limitation of the results and the risk to reproduce them to augmented realities. In the impracticality of conducting such results, analysing the importance of internationalisation in HEI became an unworkable task to accomplish. Therefore, results report to an unique institution, the University of Aveiro, that hypothetically may be taken as an example of what is happening in Portuguese HEI.

The election of University of Aveiro as our case study besides our subjective preference was done under the assumption that access to information would be easier than in other institution. However, notwithstanding several formal requests the information given by the university was minute, insufficient and incomplete. Consequently, the presented results correspond to the possible results taking into consideration the information available.

Many of the literature and studies analyzed is shortcoming in new concepts and ideas. Most of the texts produced are based on the same rationales, evidences and outcomes. Taking this into consideration, it would be very interesting to show that there is somewhat more to find and to discover in the field of internationalisation, specially pertaining to HEI internalisation.

There are some interesting areas which are under studied and that would be widely accepted as interesting new studies. Most of the produced studies are based on common themes, such as mobility (students and academic staff), understood by many to be the

synonym of internationalisation activities. The impact of mutual higher education systems, the influence of supra national institutions and associations and the impact of national policy making are other substantial themes analyzed in common literature describing internationalisation.

Despite recently we have found some studies produced on the importance and analysis of institutional and national strategies to cooperation and competition, we would find very interesting the production of a deeper learning on the revision of internationalisation strategies. To the future, it would be extraordinary if further studies on internationalisation outcomes would appear. Considering that most literature is based on the rationales, definition and description of internationalizing activities, much study is needed to understand the outcomes of those activities. Despite the exceedingly and extenuate work we are referring to, it would be of immeasurable significance studies produced on the (economics) impacts of internationalisation or cost-benefits analysis. To end, we should also refer the startling interest it would rely on studies about the cultural impact of internationalisation, on the relation between internationalisation and culture, and cross and multinational ideas.

Obviously these are interesting themes to study and simultaneously very hard to measure or analyse. It is definitely on the capacity of delimitation of the object of study that relies on the main difficult and which constitutes the main barrier for the lack of production in this field. However, it is exactly on the concentration of this barrier that depends the amazing importance and interest of such a theme when it appears well studied.

Bibliography

- Altbach, P. (2004). Globalisation and the University: Myths and Realities in an Unequal World. *Tertiary Education and Management*, 10 (1), 3-25. doi: 10.1023/B:TEAM.0000012239.55136.4b
- Amaral, A., Magalhães, A. (2007). Implementation of Higher Education Policies: A Portuguese Example. In Gornitzka, A. Kogan M. And Amaral, A. (Eds.). *Reform and Change in Higher Education. Analysing Policy Implementation*. Dordrecht: Springer. Pp117-134.
- Arroteia, J. (1996). O Ensino Superior em Portugal. Aveiro: Fundação João Jacinto Magalhães.
- Bardin, L. (1991). *Análise de Conteúdo*. Lisboa: Edições 70.
- Blaikie, N. (2000). *Designing Social Research*. Oxford: Polity Press.
- Bok, D. (2003). *Universities in the Marketplace. The Commercialization of Higher Education*. Oxfordshire. Princeton University Press.
- Bologna Declaration .(1999). Joint Declaration of the European Ministers of Education. Bologna. June 19.
- Buckley, P., Casson, M. (1976). *The Future of the Multinational Enterprise*. New York: Homes and Meier.
- Calof, J., Beamish, P. (1995). Adapting to Foreign Markets: Explaining Internationalisation. *International Business Review* 4 (2), 31-115.
- Coase, R. (1937). The Nature of the Firm. *Economica*. 4, 386-405.
- Daniels, J., Radebaugh, L. and Sullivan, D. (2006). *International Business Environments and Operations*. London: Prentice Hall.
- Dunning, J. (2000). The Eclectic Paradigm as an Envelope for Economic and Business Theories of MNE Activity. *International Business Review*. 9 (2), 163-190.
- Dunning, J. (1998). Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies*. 29, 45-66.
- Dunning, J. (1977). Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach. In Ohlin, B., Hasselbor, P. and Wijkman, P. *The International Allocation of Economic Activity: Proceedings of a Noble Symposium*. London: Macmillan.
- Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais (2011). Retrieved 4th June from www.gpeari.mctes.pt
- Ghiglione, R. and Matalon, B. (2005). *O Inquérito, Teoria e Prática*. 4th Edition. Oeiras: Celta Editora.
- Gornitzka, A., Svein, K. and Stensaker B. (2007) Implementation Analysis in Higher Education. In Gornitzka, A. Kogan M. And Amaral, A. (Eds.). *Reform and Change in Higher Education. Analysing Policy Implementation*. Dordrecht: Springer. Pp35-56.
- Haug, G. (2006). Education & Training 2010: Are Europe's Universities on Track? In Kelo, M. (eds.).(2006). *The Future of the University. Translating Lisboa into Practice*. Academic Cooperation Association. (ACA) Papers on International Cooperation. Bonn: Lemmens. Pp 29-36.

Hoffman, Rolf. (2006) Destination Europe. How Will EU Universities Do in a Global Competition? In Kelo, M. (eds.).(2006). *The Future of the University. Translating Lisboa into Practice*. Academic Cooperation Association. (ACA) Papers on International Cooperation. Bonn: Lemmens. Pp 77-84.

Horta, H. (2009). Global and National Prominent Universities: Internationalisation, Competitiveness and the Role of the State. *Higher Education*. 58. 387-405. doi: 10.1007/s10734-009-9201-5.

Huisman, J. (2007). Research on the Internationalisation: The State of Art. *Seminar on Internationalisation of Higher Education*. University of Bath. 4th July.

Huisman, J. and van der Wende, M. (eds.) (2004). On Cooperation and Competition. National and European Policies for the Internationalisation of Higher Education. Academic Cooperation Association (ACA) Papers on International Cooperation. Bonn: Lemmens.

Jiang, X., (2008). Towards the internationalisation of higher education from a critical perspective. *Journal of Further and Higher Education*, 32(4), 347-358. doi: 10.1080/03098770802395561.

Johanson, J., Mattson, L. (1988). Internationalisation in Industrial Systems – A Network Approach. In Hood, N., Vahlne, J. (eds.). *Strategies in Global Competition*. London: Croom Helm.

Johanson, J., Vahlne, J. (1977). The Internationalisation Process of the Firm: A Model for Knowledge Development and Increasing Foreign Market Commitment. *Journal International Business Studies*. 8, 35-40.

Johanson, J., Wiedersheim-Paul, F. (1975). The Internationalization of the Firm - Four Swedish Cases. *Journal of Management Studies*. 12 (3), 305-222.

Kelo, M. (eds.).(2006). The Future of the University. Translating Lisboa into Practice. Academic Cooperation Association. (ACA) Papers on International Cooperation. Bonn: Lemmens.

Kerklaan, V., Moreira, G. & Boersma, K. (2008). The Role of Language in the Internationalisation of Higher Education: an example from Portugal. *European Journal of Education*,43 (2).

Knight, J. (1993). Internationalization: Management Strategies and Issues. *International Education Magazine*. 9 (6), 21-22.

Knight, J., de Wit, H. (1995). Strategies for Internationalisation of Higher Education: Historical and Conceptual Perspectives. *Strategies for Internationalisation of Higher Education: A Comparative Study of Australia, Canada, Europe and the United States of America*. De Witt (eds.). Amsterdam: European Association for International Education.

Knight, J. (1999). Internationalisation of Higher Education. In Organisation for Economic Co-Operation and Development. *Quality and Internationalisation in Higher Education*, Paris. Retrieved March, 21, 2011, from [<http://books.google.pt/books>]

Knight, J. (2001). Issues and Trends in Internationalisation: A Comparative Perspective. In Bond, S. & Lemasson, J.P. (eds). *A New World of Knowledge: Canadian Universities and Globalisation*, International Development Research Center. Ottawa. Retrieved March, 13, 2011, from [http://www.idrc.ca/en/ev-29569-201-1-DO_TOPIC.htm]

Knight, J. (2004). Internationalization Remodeled: Definition, Approaches, and Rationales. *Journal of Studies in International Education*. 8 (5). doi: 10.1177/102831530320832

Knight, J. (2007), Internationalisation: Concepts, Complexities and Challenges. James, J.F and Altbach P. (eds.) *International Handbook of Higher Education*. Springer International Handbooks of Education,18 (1), 207-227. doi: 10.1007/978-1-4020-4012-2_11

Kreber, C. (2009). Different Perspectives on Internationalisation of Higher Education. *New Directions for Teaching and Learning*, 118. Retrieved from www.interscience.wiley.com. doi: 10.1002/tl.348.

Kvale, S. (1996). *Interviews. An Introduction to Qualitative Research Interviewing*. London: Sage Publications.

Larsen, I., Maassen, P., Stensaker, B. (2006). The Adaptation of Institutional Governance Structures in European Higher Education Institutions. In Kelo, M. (eds.).(2006). *The Future of the University. Translating Lisboa into Practice*. Academic Cooperation Association. (ACA) Papers on International Cooperation. Bonn: Lemmens. Pp 63-70.

Machado, M. L., Taylor, J. (1995). The Struggle for Strategic Planning in European Higher Education: The case of Portugal. *Tertiary Education and Management*, 12 (2), 137-160. doi:10.1007/s11233-006-0003-3

Magalhães, A. (2001) A Transformação do Mode de Regulação Estatal e os Sistemas de Ensino: A Autonomia como Instrumento. *Revista Crítica de Ciências Sociais*. 59, 125-143.

Mattoso, J. (1997). *História da Universidade de Portugal*. Coimbra: Universidade de Coimbra.

Meyer, R. (1996). The Internationalization Process of the Firma Revisited: Explaining Patterns og Geographic Sales Expansion. *Erasmus University: Rotterdam Management Report*.

Mitgwe, B. (2006). Theoretical Milestones in International Business: The Journey to International Entrepreneurship Theory. *J Int Entrepr*. 4. 5-25. doi: 10.1007/s10843-006-5872-5.

Moreira, A. (2009). The Evolution of Internationalization: Towards a New Theory?. *Economia Global e Gestão*. 14 (1), 41-59.

OECD. (2011). *Education at a Glance: 2011: OECD Indicators*, OECD Publishing. <http://dx.doi.org/10.1787/eag-2011-en>.

OECD. (2010). *Factbook 2010. Economic, Environmental and Social Statistics*. doi:10.1787/Factbook-2010-en

Penrose, E. (1959). The Theory of the Growth of the Firm. *Journal of Management and Governance*. 12 (1), 119-125.

Porter, M. (1990). *The Competitive Advantage of Nations and Firms*. New York: Free Press.

Provenmodels. (2011). Retrieved 25th October from www.provenmodels.com.

Rugman, A. (1979). *International Diversification and the Multinational Enterprise*. New York: Lexington Books.

Scott, P. (2006). The Death of Public Higher Education: A Premature Announcement or an Inevitable Event? In Kelo, M. (eds.).(2006). *The Future of the University. Translating Lisboa into Practice*. Academic Cooperation Association. (ACA) Papers on International Cooperation. Bonn: Lemmens. Pp 37-46.

Serrão, J. (1983). *Historia das Universidades*. Porto: Lello & Irmão – Editores.

Simões, V. (1996). O Processo de Globalização. Implicações para Portugal. In Conselho Económico e Social. *Globalização. Documento de suporte ao parecer “Globalização – Implicações para o Desenvolvimento Sustentável*.Lisboa.

Simões, V. (1997). A Internacionalização das Empresas Industriais Portuguesas: Caracterização e Perspectivas. In Conselho Económico e Social. *Globalização. Documento de suporte ao parecer “Globalização – Implicações para o Desenvolvimento Sustentável*. Lisboa.

Stensaker, B., Frolich, N., Gornitzka, A., & Maassen, P. (2008). Internationalisation of higher education: the gap between national policy-making and institutional needs. *Globalisation, Societies and Education*, 6 (1), 1-11. doi: 10.1080/14767720701855550.

Teixeira, S., Diz, H. (2005). *Estratégias de Internacionalização*. Lisboa: Publisher Team.

Thomaz, F. (2011). *O Ensino Superior em Portugal ao Longo da História à Luz da Estrutura dos Mercados*. Communication.

The Bologna Process 2020. (2009) The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve.

Toyoshima, M. (2007). International strategies of universities in England. *London Review of Education*, 5 (3), 265-280. doi: 10.1080/14748460701661328.

UNESCO. 1997. *Educating for a Sustainable Future: A Transdisciplinary Vision for Concerted Action*. EPD-97/Conf.401/CLD.1.

Universidade de Aveiro. (2007). Self-Evaluation Report. Retrieved 25th October, from www.ua.pt.

University of Aveiro. (2011). Retrieved 25th October 201, from www.ua.pt.

Veiga, A., Rosa, M. J., & Amaral, A. (2006). The Internationalisation of Portuguese Higher Education: How are Higher Education Institutions Facing this New Challenge? *Higher Education Management and Policy*, 18 (1).

Veiga, A., Rosa, M.J., & Amaral, A. (2004). Portugal. Huisman J. and van der Wende (eds.) *On Cooperation and Competition. National and European Policies for the Internationalisation of Higher Education*. Academic Cooperation Association (ACA) Papers on International Cooperation. Bonn: Lemmens.

Vernon, R. (1966). International Investment and International Trade in the Product Life Cycle. *Quarterly Journal Economics*. 80 (2), 190-207.

Viana, C., Hortinha, J. (2002). *Marketing Internacional*. Lisboa: Edições Sílabo.

Welch, L., Luostarinen, R. (1988). Internationalization: Evolution of a Concept. *Journal of General Management*. 14 (2), 36-64.

van der Wende, M. (1998). Quality Assurance in Higher Education and the Link to Internationalisation. *Millenium*, 3, (11), 20-29.

Williamson, O. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press.

Yang, R. (2002). University internationalisation: its meanings, rationales and implications. *Intercultural Education*, 13 (1). doi: 10.1080/14675980120112968

Appendix 1

Appendix 1: Interview Guideline

1. Characterising the context
 - a. How do you characterise the period when you were Rector?
 - b. Which were the main guidelines of your programme to become Rector?

2. Defining internationalisation in Higher Education context
 - a. In your understanding and considering your experience, what is internationalisation in a Higher Education Institution? Which are the main activities?

3. Organisation, functioning and conceptualisation
 - a. Reporting to your Rectorate, which were the activities or policies associated to understand the level of UA's internationalisation?
 - b. How important was internationalisation in your agenda? How was internationalisation related to other objectives and programmes of the university development?
 - c. How internationalisation was organically reflected in the university structure? Were there any resources to internationalisation? Which were their responsibilities and main activities? Were they evaluated?
 - d. Reporting to the period when you were Rector, what did you do to motivate the university internationalisation?

4. Defining an internationalisation policy
 - a. Which were the main issues that defined a national policy towards internationalisation? To what extent did they contribute to HEIs development? And today, do you identify determinant issues?
 - b. Which evolutions do you register from the process of cooperation between the government and HEIs?
 - c. How national internationalisation policies intervene and are conditioned by European contexts?

5. Perceiving the results and consequences
 - a. Which are the rationales to internationalisation? And the main advantages?

- b. In your opinion, are universities aware of their congener's level of internationalisation?
- c. Do you identify significant evolutions in the internationalisation process in recent years? How do you classify the results?
- d. Is there any discrepancy between the defined objectives, national reality and legislation?
- e. Concerning internationalisation process, what would you like to become reality in universities that hasn't become yet? Which is the most significant tendency?

Appendix 2

Appendix 2: Categorisation and codification of interviews responses

[Q1] Context

[Q1a1] Characterisation

[Q1a2] Outlines

[Q2] Concept

[Q2a1] Definition

[Q2a2] Activities

[Q3] Organisation

[Q3a1] Classification

[Q3a2] Relationship

[Q3a3] Hierarchy

[Q3a4] Organic

[Q3a5] Evaluation

[Q3a6] Actions

[Q4] Politics

[Q4a1] Relevant issues

[Q4a1b1] Past

[Q4a1b2] Present

[Q4a2] Evolution

[Q4a3] Programmes

[Q4a4] Portugal/Europe relation

[Q5] Perceptions

[Q5a1] Motivations

[Q5a2] Advantages

[Q5a3] Bench marketing

[Q5a4] Evolution

[Q5a5] Divergences

[Q5a6]Wishes

Appendix 3

Appendix 3: Interviewees classification and attributes

Rector's time

- Period
 - Non applicant
 - Non attributed
 - 1973 – 1978
 - 1978-1986
 - 1986-1994
 - 1994-2001
 - 2001-2002
 - 2002-2010
- Period
 - Non applicant
 - Non attributed
 - Rector
 - Vice-rector

Responders' characteristics

- Gender
 - Male
 - Female
- Activity
 - Non applicant
 - Non attributed
 - Working
 - Retired
- Area
 - Non applicant
 - Non attributed
 - Sciences
 - Social Sciences

Appendix 4

Appendix 4: Evolution of Registered Students at the University of Aveiro by school, degree and nationality from 2005/06

			2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	
			31-07-2006	31-07-2007	31-07-2008	31-07-2009	31-12-2009	31-12-2010	
ESAN	Undergraduation	Portugal	33						
		Angola			1	1	2		
	Post secondary vocational training	Brazil				1	2	2	
		Cape Verde		1	2	2	2		
		Luxembourg		1	1				
		Mozambique					1	1	
		Nederland				1	1		
		Portugal		231	435	369	408	425	
		Sao Tome and Principe			1	1			
		Ukraine					1	2	
		Undergraduation 1st cycle	Angola					1	1
			Brazil						1
	Cape Verde							1	
	Portugal			64	101	107	117	119	
	Switzerland			1	1	1	2	1	
	Venezuela			1	2	2	1	2	
ESSUA	Undergraduation	United States of America	1	1					
		Portugal	260	280	275	136			
		Venezuela	1	1					
	Formation complement course	Angola	1	1					
		France	1	1					
		Portugal	46	18	1				
		Venezuela	1	1					
	Specialization	Portugal	15	11					
	PhD internships	Brazil			1				
	Undergraduation	Brazil	2						
		United States of America			1				
		France	1	1					
		Italia	1	1	1				
		Norway	2	1					
		Portugal	304	333	352	285			
		United Kingdom		1	1	1			
		Venezuela		2	1	1			
Undergraduation 1st cycle	Brazil					4	2		
	Portugal				199	611	613		
	Romania					1	1		
	Ukraine				1	2	2		
	Venezuela					1			
ESTGA	Undergraduation	Angola	1	1					
		Brazil		1					
		Cape Verde	6	5					
		United States of America		1					
		France		2					
		Mozambique	1						
		Portugal	684	638	19	10	4		
		Switzerland		1					
		East Timor	3	2					
		Venezuela	1	2					
		Post secondary vocational training	South Africa			1	1		
	Angola				1	1	1	2	
	Brazil			1	1	3	6	3	
	Cape Verde				1	1	2	2	
	Spain							1	
	United States of America					1	1		
	France			1		1	1		
	Guinea-Bissau			1				1	
	Mozambique					1	1		
	Portugal			144	133	317	407	428	
	Romania							1	
	Sao Tome and Principe						2	2	
	Ukraine					1	2	1	
	Venezuela		1		3	5	2		
	Specialization	Portugal	20	19					
	Under graduation 1st cycle	Afghanistan				1	1		
		Germany					1		
		Angola			1	1	2	2	
		Brazil					1	1	
		Cape Verde			5	5	5	6	
		United States of America				1	1	1	
		France			3	2	1	1	
		Pakistan					1		
Portugal				920	748	772	712		
Sao Tome and Principe				1	2	1	1		
Switzerland				1	1	1	1		
East Timor				2		2	2		
Venezuela			3	3	3	2			
ISCAA	Post secondary vocational training	Portugal						25	
		Angola							
		Brazil						2	
		Spain							
		France							
		Portugal						171	

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			2005/06	2006/07	2007/08	2008/09	2009/10	2010/11		
			31-07-2006	31-07-2007	31-07-2008	31-07-2009	31-12-2009	31-12-2010		
ISCAA	Post secondary vocational training	Sao Tome and Principe						1		
		Venezuela								
		Zimbabwe							1	
	Undergraduation 1st cycle	Angola							1	
		Brazil							2	
		Cape Verde							7	
		United States of America							1	
		Guinea-Bissau							3	
		Mozambique							1	
		Portugal							927	
		Republic of Moldova							1	
		Samoa Americana							1	
		Sao Tome and Principe							4	
		Ukraine							2	
		Venezuela							2	
	Master 2nd cycle	Angola							1	
		Brazil							1	
		Cape Verde							2	
		Mozambique							2	
		Portugal							272	
Sao Tome and Principe								1		
UA	Undergraduation	France		1						
		Portugal	130	132						
		Venezuela		1						
	Formation complement course	Guinea-Bissau	1							
		Portugal	59	36	1					
	PhD	Germany	2	2	2	2	2	2		
		Angola	1		2					
		Byelorussia		1	2		2	1		
		Brazil	25	27	38	43	46	18		
		Bulgaria	2	2	1					
		Cape Verde	1	3	3	4	2			
		China	3	5	4	4	2	2		
		Cuba	3	2	4	2	2			
		Slovakia	1	1	1	1	1			
		Spain	3	2	3	4	1			
		Finland				1				
		France	2	1	1	1				
		Georgia	1	1						
		Guinea-Bissau		1	1	1	1			
		Hungria	1	2	2	2	2	2		
		India		2	3	2	2	1		
		Iran		1	1	2	3	2		
		Italia	2	4	4	3	3	2		
		Libya			1	1	1			
		Marrocos	1	1	1	1				
		Mozambique			2	2	2	1		
		Nederland		1		1	1			
		Pakistan		1	1					
		Poland					1	1		
		Portugal	461	528	554	498	527	218		
		United Kingdom	1		1	2	3			
		Romania	4	5	5	4	3	2		
		Russia	4	3	6	5	5	2		
		Serbia			1	1	1			
		Sri Lanka					1			
		Sweden		1	1					
		Switzerland	1	1	1	1	1	1		
		Ukraine		1			1			
		Venezuela		1	2	1	1			
		PhD 3rd cycle	Germany							2
			Angola				1	2	2	
			Argelia					1	1	
			Bangladesh				1	2	5	
			Benin			1	1	1	1	
			Byelorussia					1	1	
			Bosnia Herzegovina				1	1	1	
			Brazil			4	10	19	97	
			Cape Verde				4	7	12	
			China			1		1	2	
			Colombia					2	2	
			Costa Rica						1	
			Cuba				1	1	3	
			Egypt						1	
			Spain					2	6	
			Ethiopia					1	1	
			France				1	2	3	
			Granada				1			
			Guinea-Bissau						1	
			India			1		5	12	
			Iran					2	2	6	21
			Italia						1	1	3
			Malaysia			1				
			Marrocos						1	
			Mexico					1	1	
			Mozambique				9	3	5	
			Nepal						1	
			Niger			1				
			Pakistan					2	4	

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		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	
		31-07-2006	31-07-2007	31-07-2008	31-07-2009	31-12-2009	31-12-2010	
UA	PhD 3rd cycle	Poland				2	3	
		Portugal		5	26	184	297	875
		United Kingdom						2
		Romania						1
		Russia					1	1
		Serbia						1
		Sri Lanka						1
		East Timor				1	1	1
		Tunisia					1	1
		Ukraine					1	2
	Specialization	Mozambique				7		58
		Portugal				7		8
	PhD internships	Germany		1	1	2	3	4
		Austria		1				
		Belgium	1	1	2	1		
		Byelorussia	4	3	4		2	2
		Brazil	11	23	15	9	10	12
		China	11	9	13	9	6	3
		Colombia	1	1	1			
		Croatia						1
		Cuba			1		3	1
		Slovakia						1
		Spain	4	5	9	3	6	6
		Estonia						1
		France	1	3	3	2	1	2
		Bouvet island Bouvet	1					
		India	2	8	9	4	5	6
		Italia	2	1		1		1
		Lebanon			1			
		Marrocos			1			1
		Mexico	1	1	1	1		
		new Zealand	1	1	1		1	1
		Poland				2		
		Portugal	59	66	63	61	45	58
		United Kingdom	3	1	2	1	1	
		Czech Republic		1		1		
		Republic of Korea				1	1	
		Romania	1	1	1		1	
		Russia	7	5	7			2
	Ukraine	2	1					
	Post graduation internships	Byelorussia		1				
		Brazil	3	3	9	5	2	5
		Spain			1			
		India				1		
		Iran					1	
		Italia		1				
		Malta						1
		Portugal	1			1		1
		Russia			1			
		Sweden				1		
	Advanced formation	Brazil			1	1		
		Bulgaria				1	1	
		Cape Verde				1		
		Portugal			24	35	35	44
		Sao Tome and Principe				1		
	Specialised formation	Germany		1				
		Brazil	6	8			1	
		Cape Verde	1					
		United States of America		1				
		Portugal	224	211	16	31	7	3
	Undergraduation	África do Sul	2			1		
		Germany	12	24				
		Angola	21	24	9	1	1	
		Argentina	1	2	1			
		Australia		1				
		Austria	1	2				
		Belgium		2				
		Brazil	57	51	6	1		
		Bulgaria	8					
		Cape Verde	54	44	5	1		
		Canada	2	2				
		Dinamarca		1				
		Slovenia	1	2				
		Spain	37	63	1			
		United States of America	7	4	1			
		Finland	2	1				
		France	25	16				
		Greece	7	5				
		Guinea-Bissau	4	5	4	1		
		Hungria	2	2				
		Ireland	1	1				
		Italia	24	15				
		Japan	4	4				
		Latvia	4	3				
		Luxembourg	1	2				
		Mexico		2				
		Mozambique	15	12	2			
		Nederland	11	7				
		Panama	1					

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		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11		
		31-07-2006	31-07-2007	31-07-2008	31-07-2009	31-12-2009	31-12-2010		
UA	Undergraduation	Papua New Guinea	1						
		Poland	16	29	1	1			
		Portugal	7240	5778	1270	354	127		
		United Kingdom	1	1					
		Czech Republic	12	9					
		Republic of Moldova	1	1					
		Romania	7	7					
		Russia	2	2	1				
		Sao Tome and Principe	13	11	1				
		Serbia	4	6					
		Switzerland		1	1				
		East Timor	2	1					
		Turkey	5	11					
		Ukraine	2	2					
		Venezuela	10	7	2				
		Undergraduation 1st cycle	África do Sul		1	1	2	1	1
			Germany		3	3	3	4	2
			Angola		5	13	14	8	7
			Austria					2	
	Bermuda				1	1	1	1	
	Byelorussia						1	1	
	Brazil			6	13	17	27	16	
	Bulgaria			3	1		1	1	
	Cape Verde			11	32	38	41	35	
	Canada			1	3	2	1		
	Kazakhstan				1				
	Cuba				1				
	Slovenia			2					
	Spain			1	1	1	29	2	
	United States of America				1	1	1	1	
	France			11	8	9	13	5	
	Guinea-Bissau				5	8	5	7	
	Ireland			1					
	Italia			1	1	1	3		
	Japan						4		
	Latvia						3		
	Lithuania			1			1		
	Luxembourg				2	1			
	Marrocos			1	1				
	Mozambique			1	7	9	8	3	
	Nederland			1	1	2			
	Poland			3			9		
	Portugal			1202	4438	4521	4639	4450	
	United Kingdom					1	1	1	
	Czech Republic			2			2		
	Republic of Moldova				1	1	1	1	
	Romania			1	1	3	2	2	
	Russia			2	2	3	4	4	
	Sao Tome and Principe			1	10	18	16	17	
	Serbia						1		
	Switzerland			1	2	2	2	1	
	East Timor						5	4	
	Ukraine			1	3	4	6	3	
	Venezuela			5	8	5	3	3	
	Master		Albania	1					
			Germany		2	1	1		
		Angola	1	3					
		Australia			1				
		Byelorussia	1						
		Brazil	46	52	37	8			
		Cape Verde		41	13	39	18		
		Cameroon			1				
		Canada		1					
		China		4	5	1			
		Colombia		1	1	1			
		Cuba		1	1				
		United States of America		2	1	2			
		Ethiopia				4			
		Filipinas			1				
		France		1	1				
		Ghana			1	2			
		Guinea-Bissau		1	1	1			
		India			1	2			
		Indonesia		2	1				
		Iran			1				
		Italia		1					
		Japan			1				
		Yugoslavia			1				
		Malaysia			1				
		Mozambique		1		1			
		Nigeria			1	2			
		Norway			2	2			
		Pakistan			2	3			
		Poland		2	1	1			
	Portugal	1101	956	637	307				
	Republic of Moldova	1		1					
	Romania	2							
	Russia	2	5	1					
	Sao Tome and Principe		3	1	2				

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		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11		
		31-07-2006	31-07-2007	31-07-2008	31-07-2009	31-12-2009	31-12-2010		
UA	Master	Serbia		1					
		Singapore			1				
		Sri Lanka			2				
		Sweden		8	1				
		Thailand		1	1				
		Taiwan			2				
		Turkey	1						
		Ukraine		1					
		Uganda		1	1				
		Venezuela		2	1				
		Vietnam	1		1				
		Zimbabwe		1					
		2nd cycle master	África do Sul					1	2
			Albania				1		
			Germany			3	2	3	2
			Angola		1	2	4	5	2
	Australia					3			
	Bangladesh					1	1	1	
	Byelorussia				1	1			
	Bolivia					1	1		
	Brazil			9	45	56	79	81	
	Bulgaria						1	1	
	Cape Verde			1	6	15	17	19	
	Cameroon					1	1	1	
	Canada					2	2	1	
	Kazakhstan					1			
	China				4	6	7	2	
	Colombia			1	2	1	4	6	
	Dinamarca					1			
	Ecuador							1	
	Slovakia					1			
	Spain				2	6	8	6	
	United States of America					3	2	3	
	Ethiopia				5	13	10	5	
	Filipinas					1			
	France						1	3	
	Ghana					1	2		
	Georgia						1	1	
	Greece					2		1	
	Guinea-Bissau					2	1	1	
	Hungria					1	1	1	
	India				1	5	10	7	
	Indonesia					1	1	3	
	Iran				1	3	1	5	
	Ireland							1	
	Italia						4	6	
	Libya						1	1	
	Lithuania							1	
	Luxembourg					1	2	1	
	Macedonia							1	
	Mexico					2	3	2	
	Mozambique			1	4	8	5	4	
	Nepal							2	
	Nicaragua							1	
	Nigeria				4	6		2	
	Norway						2		
	Nederland						2		
	Pakistan				2	3	1		
	Peru					1	1		
	Poland						7	4	
	Porto Rico				1	1	1		
	Portugal			175	1239	1709	2005	2246	
	Kenya					1			
	United Kingdom						1	1	
	Czech Republic							1	
	Republic of Korea					1		1	
	Republic of Moldova						2		
	Romania				1		3	1	
	Russia				1	2	2	4	
	Sao Tome and Principe				1			5	
	Serbia					1	4	2	
	Switzerland					1	1	1	
	East Timor						2	4	
	Turkey						2	2	
	Ukraine				1	4	6	2	
	Uzbekistan					1	1		
	Vanuatu					1			
	Venezuela						3	4	
	Vietnam					1	2	2	
	Integrated master		Afghanistan					1	1
			África do Sul		3	2	2	2	2
			Germany		1	1	1	1	1
			Angola		4	4	3	4	4
			Brazil			2	4	7	5
			Cape Verde		11	30	34	32	28
			Cuba		1				
			Spain					7	
			United States of America		2	3	1	2	1
			Estonia					1	

Appendix 4: Evolution of Registered Students at the University of Aveiro by school, degree and nationality from 2005/06

		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	
		31-07-2006	31-07-2007	31-07-2008	31-07-2009	31-12-2009	31-12-2010	
UA	Integrated master	France		2	2	1	2	
		Guinea-Bissau		1	1	1	2	
		India				1		
		Iran				1	3	
		Italia					1	
		Luxembourg						1
		Mozambique			2		1	3
		Nederland			1			
		Poland			1	2	6	1
		Portugal		446	1877	1821	1931	2359
		Czech Republic					1	
		Republic of Moldova		1	1	1		
		Romania					1	1
		Sao Tome and Principe		2	11	12	13	13
		Switzerland					1	1
		East Timor			2	1	1	1
		Ukraine						1
		Venezuela			2	2	1	1
		Germany			6	5	6	4
		Without degree						
		Argelia				1		
		Austria				1	2	5
		Bangladesh						3
	Belgium				2	1	2	
	Byelorussia						3	
	Brazil	2	1	48	52	43	54	
	Bulgaria			6	8		7	
	Bhutan						1	
	Cape Verde		1					
	Chile			1				
	China			1		1	13	
	Colombia				1			
	Croatia						4	
	Slovakia			2	2	4	3	
	Slovenia			4	2	3		
	Spain			57	48	13	69	
	Estonia					1	1	
	Ethiopia			2				
	Finland			1		1	1	
	France			14	7	4	7	
	Greece			2	4	6	6	
	Hungria			4	4	4		
	India						8	
	Indonesia						1	
	Ireland			1				
	Italia			13	9	7	22	
	Japan			2	3		1	
	Latvia			2	5	4	8	
	Lithuania			2	2	1	3	
	Macau				2	4		
	Mexico				3	2	2	
	Nepal						4	
	Norway					1	1	
	Nederland			2	4	4	3	
	Panama				1			
	Poland			38	32	16	33	
	Portugal	28	26	21	39	24	40	
	United Kingdom			4	4	1	3	
	Czech Republic			12	15	14	24	
	Republic of Moldova			1				
	Romania			6	12	4	5	
	Russia				3		2	
	Serbia			2	5		6	
	Switzerland					1		
	Thailand					2		
	Turkey				6	14	5	10
	Total		11306	12099	13296	12636	12893	15141
	Variation			7,01%	9,89%	-4,96%	2,03%	17,44%
Total without Portugal		641	800	894	897	937	1147	
Variation			24,80%	11,75%	0,34%	4,46%	22,41%	
Total without Portugal		629	789	875	875	918	1129	
Total without Portugal		576	727	851	847	888	1087	

Appendix 5

Appendix 5: Evolution of Incoming Students at the University of Aveiro by country of origin from 2005/06

Origin Country		Academic Year							Total
		2003/2004	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010		
Germany	Campus Europae	0	2	2	1	1	0	6	
	ECIU Exchange Programme	0	1	0	0	0	0	1	
	ERASMUS	4	7	14	5	4	4	38	
Germany Total		4	10	16	6	5	4	45	
Austria	Campus Europae	0	0	2	1	2	0	5	
	ERASMUS	3	1	2	0	0	1	7	
Austria Total		3	1	4	1	2	1	12	
Belgian	ERASMUS	0	0	2	2	1	5	10	
Belgian Total		0	0	2	2	1	5	10	
Brazil	Acordo Bilateral	5	23	32	46	48	25	179	
	Bolsas Luso-Brasileiras Santander Universidades	0	0	0	3	0	0	3	
Brazil Total		5	23	32	49	48	25	182	
Bulgaria	ERASMUS	3	4	3	4	7	0	21	
Bulgaria Total		3	4	3	4	7	0	21	
Cuba	Alban	1	0	0	0	0	0	1	
Cuba Total		1	0	0	0	0	0	1	
Denmark	ERASMUS	1	0	1	0	0	0	2	
Denmark Total		1	0	1	0	0	0	2	
Slovakia	ERASMUS	2	1	3	5	4	2	17	
Slovakia Total		2	1	3	5	4	2	17	
Slovenia	ERASMUS	0	0	0	1	0	2	3	
Slovenia Total		0	0	0	1	0	2	3	
Spain	ERASMUS	33	28	51	54	43	47	256	
Spain Total		33	28	51	54	43	47	256	
Estonia	ERASMUS	0	0	0	0	0	2	2	
Estonia Total		0	0	0	0	0	2	2	
Russian Fed	Campus Europae	0	0	0	0	2	0	2	
Russian Federation Total		0	0	0	0	2	0	2	
Finland	ERASMUS	2	2	1	1	0	0	6	
Finland Total		2	2	1	1	0	0	6	
France	Acordo Bilateral	1	0	0	0	0	0	1	
	ERASMUS	14	13	11	13	7	2	60	
France Total		15	13	11	13	7	2	61	
Greece	ERASMUS	3	6	6	2	4	3	24	
Greece Total		3	6	6	2	4	3	24	
Hungary	ERASMUS	4	2	2	4	4	1	17	
Hungary Total		4	2	2	4	4	1	17	
India	Acordo Bilateral	2	0	0	0	0	0	2	
India Total		2	0	0	0	0	0	2	
Ireland	Campus Europae	0	0	2	0	0	0	2	
Ireland Total		0	0	2	0	0	0	2	
Italia	ERASMUS	13	19	17	14	9	8	80	
Italia Total		13	19	17	14	9	8	80	
Japan	Acordo Bilateral	2	4	4	3	3	4	20	
Japan Total		2	4	4	3	3	4	20	
Latvia	Campus Europae	0	3	2	2	3	0	10	
	ERASMUS	0	0	0	0	1	0	1	
Latvia Total		0	3	2	2	4	0	11	
Lithuania	Campus Europae	0	0	0	2	1	0	3	
	ERASMUS	0	0	1	0	2	0	3	
Lithuania Total		0	0	1	2	3	0	6	
Mexico	Acordo Bilateral	0	0	0	0	4	1	5	
	ECIU Exchange Programme	0	0	2	1	0	0	3	
Mexico Total		0	0	2	1	4	1	8	
Mozambique	Acordo Bilateral	0	0	0	0	1	0	1	
Mozambique Total		0	0	0	0	1	0	1	
Norway	ERASMUS	0	2	1	0	0	1	4	
Norway Total		0	2	1	0	0	1	4	

Netherlands	ERASMUS	0	9	8	2	4	4	27
Netherlands Total		0	9	8	2	4	4	27
Poland	Campus Europae	0	0	10	11	11	0	32
	ERASMUS	10	14	19	23	19	18	103
Poland Total		10	14	29	34	30	18	135
United Kingd	ERASMUS	2	0	1	4	2	1	10
United Kingdom Total		2	0	1	4	2	1	10
Czech Repu	ERASMUS	11	11	13	11	14	11	71
Czech Republic Total		11	11	13	11	14	11	71
Romania	ERASMUS	10	5	6	6	12	2	41
Romania Total		10	5	6	6	12	2	41
Serbia	Campus Europae	0	4	5	2	5	0	16
Serbia Total		0	4	5	2	5	0	16
Sweden	ERASMUS	1	0	0	0	0	0	1
Sweden Total		1	0	0	0	0	0	1
Switzerland	ERASMUS	0	0	0	0	0	1	1
Switzerland Total		0	0	0	0	0	1	1
Turkey	ERASMUS	0	1	9	6	14	3	33
	Livre Mobilidade	0	3	0	0	0	0	3
Turkey Total		0	4	9	6	14	3	36
Total		127	165	232	229	232	148	1133

Appendix 6

Appendix 6: Evolution of Outgoing Students at the University of Aveiro by countries of destination from 2005/06

		Academic Year							Total Geral
Origin Country	Programme	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	
Germany	Campus Europae			1			3	2	6
	ERASMUS	11	7	4	6	3	9	5	45
Germany Total		11	7	5	6	3	12	7	51
Angola	Acordo Bilateral						1		1
Angola Total							1		1
Austria	ERASMUS	3	2	1		1	6	4	17
	Livre Mobilidade			1				1	2
Austria Total		3	2	2		1	6	5	19
Belgium	ERASMUS	4		2	5				11
Belgium Total		4		2	5				11
Brazil	Acordo Bilateral	6	2	6	9	8	12	20	63
	Bolsas Luso-Brasileiras Santander Universidades					8	5	6	19
Brazil Total		6	2	6	9	16	17	26	82
Bulgaria	ERASMUS							1	1
Bulgaria Total								1	1
Denmark	ECIU Exchange Programme					1			1
	ERASMUS	1		1			2	3	7
Denmark Total		1		1		1	2	3	8
Slovakia	ERASMUS				1	1	1	3	6
Slovakia Total					1	1	1	3	6
Slovenia	ERASMUS						1		1
Slovenia Total							1		1
Spain	Campus Europae							1	1
	Cooperação Galiza e Norte f		1						1
	ECIU Exchange Programme					1			1
	ERASMUS	40	27	45	53	38	49	41	293
	Livre Mobilidade			1		2			3
Spain Total		40	28	46	53	41	49	42	299
Estonia	ERASMUS						1		1
Estonia Total							1		1
Finland	ECIU Exchange Programme	1							1
	ERASMUS	1		3	1	1	2	4	12
Finland Total		2		3	1	1	2	4	13
France	ERASMUS	5	1	13	10	4	2	8	43
France Total		5	1	13	10	4	2	8	43
Greece	ERASMUS	3	3		6	4	9	1	26
Greece Total		3	3		6	4	9	1	26
Hungary	ERASMUS	1		5	5	9	3	4	27
Hungary Total		1		5	5	9	3	4	27
Ireland	ERASMUS			1					1
Ireland Total				1					1
Italia	Campus Europae		2	3			1		6
	ERASMUS	29	16	20	22	16	29	18	150
	Livre Mobilidade	1					1		2
Italia Total		30	18	23	22	16	31	18	158
Latvia	Campus Europae				2			1	3
Latvia Total					2			1	3
Luxembourg	Campus Europae							3	3
Luxembourg Total								3	3
Norway	ERASMUS				2	1	1		4
	Livre Mobilidade	1							1

Norway Total		1			2	1	1		5
Netherlands	ERASMUS	2	10	10	9	4	9	2	46
Netherlands Total		2	10	10	9	4	9	2	46
Poland	Campus Europae					11	3	3	17
	ERASMUS	4	8	8	18	15	22	21	96
	Livre Mobilidade				2	2			4
Poland Total		4	8	8	20	28	25	24	117
United Kingdo	ERASMUS	10	9	4	5	7	5	7	47
	Livre Mobilida	1							1
United Kingdom Total		11	9	4	5	7	5	7	48
Czech Repub	ERASMUS	8	4	9	13	20	20	16	90
	Livre Mobilidade						3		3
Czech Republic Total		8	4	9	13	20	23	16	93
Romania	ERASMUS	1	1	3	2	2	2		11
	Livre Mobilidade			1					1
Romania Total		1	1	4	2	2	2		12
Serbia	Campus Europae			2	8	2	5	4	21
Serbia Total				2	8	2	5	4	21
Sweden	ERASMUS	5	3	2	2	3	6	3	24
Sweden Total		5	3	2	2	3	6	3	24
Switzerland	Acordo Bilateral					1			1
	ERASMUS			2					2
Switzerland Total				2		1			3
Turkey	Livre Mobilidade					2			2
Turkey Total						2			2
Total		138	96	148	181	167	213	182	1125