

An investigation into export market orientation in UK universities from the international marketing managers' perspective: A mixed-method approach

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Marketing

Brunel University 2011

DEDICATION

To my parents and brother for their continual love and support that helped me to achieve my dream.

To my country Morocco for the inspiration.

ACKNOWLEDGEMENTS

I would like to express my gratitude to many people for the support I received from them during the time I studied at Brunel. First, I would like to sincerely thank my first supervisor, Dr. Geraldine Cohen, who has always believed in my project and provided guidance and encouragement throughout my research. I also thank my second supervisor, Professor T.C Melewar, who not only provided me with constructive comments about my thesis, but also inspired me with his exceptional passion for research.

My deepest gratitude to many academics for their thoughtful feedback on different aspects of my research: Professor John Cadogan for his consistent feedback and guidance throughout my PhD; Dr. Marko Sarstedt who verified my analysis and results chapter. Many thanks go to Dr. Charles Dennis, Dr. Josko Brakus and Dr Frederick Mmieh.

I also thank many UK universities' administrators and managers for the participation and feedback as well as the secretariat of BUILA Mr Richard Farr for his assistance to get in touch with the respondents. I would like to take this opportunity to thank many friends for their input and, most importantly, for their friendship: Khaled Ibraheem, Sharif Abbasi, Adel Flici, Jamshed Halepota, Dr. Olusoji George, Dr. Tayo Otubanjo, Narissara Kawesurin, Ahmed Rageh, Roland Bartholme and Raed Algharabat; and my housemates: Tian Liang, Artemis Stylianou, Etienne Desjardins and Omar Alvi. I am so grateful to all of them.

Thanks also goes out to the entire staff members especially for Mrs Emma Sigsworth for the kindness and hospitality they showed during my research.

Last, but not least, my warm and heartfelt thanks go to my parents and brother for their love and support that sustained me in the years it took to bring this work into completion. This thesis would not have been possible without your blessings and support. Special thanks to my inspiring country Morocco that has given me solid raw materials which have enabled me to come this far in my educational development.

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Journal articles

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1. "Export market orientation and export performance in the higher education context: a comprehensive review and conceptual model for future research", target journal, **International Journal of Management Reviews** (with Geraldine Cohen and TC Melewar).

2. "Uncovering the underlying dimensions of export market orientation in universities: A qualitative study from the international marketing managers' perspective in UK universities", target journal, **European Journal of Marketing** (with Geraldine Cohen and TC Melewar).

3. "A PLS structural model to examine the antecedents and consequences of export market orientation in UK universities: from the managerial perspective", target journal, **International Marketing Review** (with Geraldine Cohen, TC Melewar and John Cadogan).

Contributions to conference proceedings

4. "The marketing of higher education: from marketing goods to marketing services", proceedings of **the Academy of Marketing SIG services marketing conference**, **Westminster University**, September 2007 (with Sevgi Ozkan).

5. "Antecedents and consequences of market orientation in higher education institutions: conceptual framework and research hypotheses", proceedings of **the Academy of Marketing Annual Conference**, Aberdeen, July 2008 (with Geraldine Cohen and TC Melewar).

6. "A qualitative study and PLS structural model investigating export market orientation in UK universities, from the international marketing managers' perspective", proceedings of **the Academy of Marketing Annual Conference**, Coventry, July 2010 (with Geraldine Cohen and TC Melewar).

ABSTRACT

Recent developments in the theories of export marketing have resulted in the conceptualisation of export market orientation in the manufacturing industry. However, little research investigating the concept of export market orientation in the higher education context exists, despite the importance of the export market in shaping the direction of the marketing of higher education. Building on the existing literature on export marketing and higher education marketing, this research offers a conceptualisation of export market orientation in universities and its antecedents and consequences from a managerial perspective.

A mixed-method research design was adopted, consisting of two main phases. The first phase involved conducting key informant interviews with the international marketing managers of UK universities. Together with the literature review, an analysis of the key themes led to the development of research hypotheses and an operational model. The model was tested in the second phase with a survey directed at the international marketing managers of different UK universities. Partial Least Squares structural equation modelling was used to analyse the survey responses. The structural model showed a good fit with the data and good convergent, discriminant and nomological validity and reliability stability.

This research is the first to formulate and develop the concepts of export market orientation and export performance in the higher education context. The outcome of this research adds new perspectives to the growing body of higher education marketing literature, and suggests directions for future research. This research also offers important implications for management bodies in universities, academia and public policy-makers alike.

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Chapter 1 Introduction

The theme of this thesis is export market orientation (EMO) in universities from the managerial perspective. It is addressed by developing and testing an empirical model linking EMO in universities, higher education export-specific variables, university export performance and university international reputation.

This chapter begins by discussing the scope of the research and the analytical approach. Subsequently, the contribution of the research to theory, practice, academia, and public policy-makers is outlined. Finally, the structure of the thesis is summarised.

1.1 THE SCOPE OF THE RESEARCH

This section introduces the focus of the thesis by discussing the stream of export marketing research in universities, as well as the unit of analysis that forms the basis of the research.

1.1.1 Export marketing research in higher education

Since the mid-1980s, higher education has become a significant international tradable business (Larsen and Vincent-Lancrin, 2002). The balance of payments of some exporters of higher education reflects the revenues of this international commercialisation (Harman, 2004). With the expansion of business philosophy in

the higher education sector, universities are increasingly adopting marketing activities. These activities are directed in particular at the international market (Ivy, 2001). In this context, a modest body of literature examined some aspects of international marketing in universities (e.g., Gomes and Murphy, 2003; Russell, 2005).

Most of these studies were based on a consumer/student perspective. However, there is a lack in examining managers' perceptions of the international marketing behaviour in higher education institutions (Conway *et al.*, 1994). Specifically, the conceptualisation of EMO (referring to the implementation of export marketing) in the educational setting remains an unchartered territory.

The focus of this study is the conceptualisation of export market orientation in universities, as well as clarifying its higher education export-specific antecedents and consequences.

1.1.2 The unit of analysis

The focus of the present study is the university with an emphasis on organisational (university) constructs and their hypothesised relationships in the conceptual model (figure 4.4). Therefore, the appropriate unit of analysis is the university. More specifically, the data collection was completed at the individual level (i.e., international marketing managers) (detailed in section 5.4.3).

1.2 RESEARCH OBJECTIVES AND QUESTIONS

The aim of this study is to investigate how universities manage and perceive market orientation in their export operations of educational services to international students (i.e., export market orientation). The specific objectives of this thesis are:

- 1. To assess the role of export market-oriented behaviours in the success of the universities.
- To determine how universities can enhance their performance in their foreign markets.
- To contribute to a more comprehensive understanding of the simultaneous links among higher education export-specific variables, EMO and export performance.
- To lay a theoretical and empirical foundation on which further research can be based.
- 5. To provide research relevant to managers, academics and policy-makers.

In particular, this study intends to answer the following research questions:

- 1. How do universities perceive and practice export activity?
- 2. What elements constitute EMO in universities?
- 3. What factors specific to exporting universities determine EMO in universities?
- 4. What are the consequences of adopting EMO as perceived by universities?
- 5. What is the effect of EMO in universities on their export performance?

6. What is the mechanism by which EMO influences export performance of universities?

1.3 PROPOSED METHODOLOGY

The study predominantly employs a quantitative method, in particular, a selfadministered questionnaire survey, to investigate the antecedents and consequences of export market orientation in universities. Qualitative methods (i.e., semistructured interviews) are primarily used to validate measurement scales before the main survey is undertaken.

Formally, the researcher adopted a sequential research design (Creswell *et al.*, 2003). This design is characterised by an initial phase of qualitative data collection and analysis followed by a phase of quantitative data collection and analysis. The findings of these two phases are then integrated during the interpretation phase. The adoption of a sequential design enabled the researcher to form the scales framework for the explanatory phase of the study, which aimed to test the different relationships.

The study uses the principles of constant comparative method in order to analyse the qualitative data. However, the study also conducted structural equation modelling (SEM) so as to examine relationships among the constructs.

1.4 RESEARCH CONTRIBUTION

The study has made significant contributions at the theoretical level and also assists managers, academics and public policy-makers by providing a number of useful guidelines.

1.4.1 The theoretical contribution

This thesis made contributions along the following perspectives: theory extension, conceptualisation and measurement, and methodology.

At the theory extension level, the study attempted to broaden the scope of EMOexport performance theory when examining these two concepts in a new service context: higher education. This thesis is offered as an additional contribution to the field of export marketing. This research also contributes to the literature on higher education marketing. The research presented a framework of EMO in universities as well as the variables related to this orientation.

At the conceptualisation and measurement level, the research presents an attempt to clarify the concepts of EMO and export performance in universities. It has also developed new variables which can be used by future researchers.

In terms of methodology, the current study used a mixed methods approach. The major methodological contribution stems from the use of partial least squares structural equation modelling (PLS SEM).

1.4.2 The managerial contribution

This study provides practical guidelines for the effective implementation of EMO. In addition, an understanding of the forces influencing EMO in universities can help managers to assess the strategic orientation of their universities while assisting them in deciding which export markets to target and the most appropriate channels to respond to these markets' needs.

The study also highlights the benefits of this orientation and the mechanism leading to financial benefits, which represent steps for managers in universities to follow in order to enhance their export performance.

1.4.3 Contribution to academia

Uncovering the processes by which universities can generate, disseminate and respond to foreign market information enables the academics at universities to become well-informed about recent trends in the global job market. This awareness of the needs of the job market can influence managers to adapt the programmes offered accordingly, in order to fit the social and economic environment in which universities operate. This is in line with the emergence of a student body with generally more vocational attitudes due to their concerns regarding job prospects (Lomas, 1997). Therefore, in conceptualising EMO in universities, a vocational model of education is emphasised.

1.4.4 Contribution to policy-makers

This study responds to calls for developing more policy oriented international marketing research (Czinkota, 2000). The study is in parallel with the growing

importance of international public policy making for international marketing practice. More specifically, the General Agreement on Trade in Services (GATS) has made major contributions to the development of the international commercialisation of higher education.

From a national government perspective, serving foreign markets is attractive given that exporting has a positive effect on a nation's balance of payment (Santos-Paulino and Thirlwall, 2004) and therefore contributes to its economy. By identifying useful export marketing practices for universities, this research calls for further domestic support from governments of some leading countries of transnational education to the implementation of export marketing in universities.

In summary, the present research framework draws parallel conclusions with the interests of both national and international public policy-makers in encouraging universities to go global.

1.5 LIMITATIONS OF THE RESEARCH

The current research presents a comprehensive examination of EMO in universities, its higher education export-specific antecedents and consequences. However, the research still has a number of limitations. First, the study was conducted in the UK. Thus, the results may not be generalisable to higher education systems of other countries. Second, the study does not investigate an exhaustive list of variables that relate to EMO in universities. It is possible that other variables can be used. Finally, the study is based on the perspective of managers, which does not necessarily reflect the perception of other stakeholders (e.g. academics, students). These limitations suggest avenues for future research on export marketing in universities.

1.6 THE STRUCTURE OF THE THESIS

The study is divided into nine chapters. After this introduction (chapter 1), chapter 2 considers the relevant literature pertaining to export marketing by universities. Firstly, the chapter presents the background supporting the business philosophy in the higher education context. Then, it outlines developments in the marketing of higher education. The logic behind exporting educational services is subsequently highlighted based on models from the literature on exporting services. Finally, gaps in the literature of export marketing in higher education are identified.

Chapter 3 introduces the relevant literature on market orientation (MO), export market orientation (EMO) and export performance, as well as the antecedents and consequences of EMO.

In chapter 4, a conceptual framework revealing links among export market orientation in universities, export performance in universities, and other variables is developed and hypotheses are presented.

In chapter 5, the research philosophy and approach on which the study is based is explained. Then, the methodology used to test the hypotheses and the operational model developed in chapter 4 is presented. The various steps and procedures associated with the data collection and analysis are discussed in detail. Chapter 6 explains the qualitative data collection and analysis procedures, and identifies the findings of the qualitative study. The researcher integrated these findings into the quantitative findings reported in the next chapter.

Chapter 7 reports the results of the quantitative study. This chapter presents different steps of the data analysis: data cleaning, data simplification and structural equation modelling using PLS.

Chapter 8 discusses the findings from the previous chapter. This chapter presents an interpretation of the entire analysis (i.e. both qualitative and quantitative).

Chapter 9 summarises the research findings. In addition, different types of research contributions are presented as well as the research limitations and directions for further research.

Chapter 2

Literature review part one: contextual background

2.1 INTRODUCTION

With the expansion of the business philosophy in the higher education sector, higher education institutions are increasingly adopting marketing activities that are largely oriented towards the international market (Ivy, 2001). However, there has been only a modest body of literature that examined some aspects of international marketing in higher education institutions (e.g., Gomes and Murphy, 2003; Russell, 2005) despite the increasing importance of export operations in the success of universities. Therefore, the focus of this chapter is to outline the business paradigm underlying the activities of universities towards the international market.

This chapter will be divided into seven sections. After this brief introduction, the second section will discuss the business philosophy pertaining to higher education institutions. This involves defining the core business of educational institutions as well as their customers and business performance measurement. The third section will discuss the historical development of different concepts and models related to the marketing of higher education. The fourth section will examine the export behaviour of higher education institutions based on delineating the theories underpinning the export of services. The fifth section will present the literature discussing some themes in the export marketing of higher education. In the sixth section, through the integration of the previous chapters, the various gaps in the

literature are discussed and directions for further research presented. Finally, conclusions are presented.

2.2 HIGHER EDUCATION AS A BUSINESS

2.2.1 The business approach to higher education

Traditional models (Goodman, 1962; Millett, 1962; Cohen *et al.*, 1972; Clark, 1972; Weick, 1976), which consider higher education institutions as bureaucratic collegial entities, emphasised the peculiarities of educational institutions and stressed the dissimilarities between higher education and organisations in the private sector.

Since the 1980s, alternative models emerged in contrast with the traditional view of educational institutions. A number of more recent models in the higher education literature (Karol and Ginsburg, 1980; Bleiklie, 1994; Tjeldvoll, 1997; Tjeldvoll, 1998; Cummings, 1998; Clark, 1998; Marginson and Considine, 2000; Jongbloed and Goedegebuure, 2001) advocate a business approach to higher education institutions. Henkel's (1997) study revealed that there is an increasing change in thinking by educational institutions towards the university as a corporate enterprise. A number of authors (e.g., Marginson and Considine, 2000; Jongbloed and Goedegebuure, 2001) support the idea of entrepreneurship in universities with stronger links between universities and the private sector.

The increasing competition among institutions in the education market represents a key driver behind the adoption of business philosophy by higher education. The education market has become gradually characterised by the forces of supply and demand. Therefore, new institutions and a variety of academic programmes and other educational services have been created in order to increase the demand, and hence survive in a highly competitive market. In addition, considering universities as corporate enterprises similar to other enterprises in the private sector, with both financial factors (revenues and expenses) and market factors (supply and demand) implies the need to implement business management principles and activities.

2.2.2 Higher education core business

Higher education has become a big business (Coate *et al.*, 2001). However, there exists some ambiguity in understanding the nature of universities' core business (Umashankar, 2001; Maringe, 2005). A number of authors conceptualised the core business of universities as goods encapsulating different courses and programmes (e.g., Litten, 1980; Levitt, 1980); others advocate the service nature of the educational offerings (e.g., Nicholls *et al.*, 1995; Umashankar, 2001; Nguyen and LeBlanc, 2001).

A historical review of the higher education marketing literature reveals a growing tendency in conceptualising the core business of universities from a product to a service-marketing approach (Hemsley-Brown and Oplatka, 2006). Pioneers of the marketing of higher education adopted a product-marketing approach to the offerings by universities in the early 1980s. Litten (1980) and Levitt (1980) conceived the courses and programmes offered as the principle goods commercialised by universities to students.

A few years later, Smith and Cavusgil's (1984) work brought authors' attention to a distinctive peculiarity of higher education marketing whereby the student is deemed to be strongly involved in the process of learning. This specificity created the initiative of perceiving students rather than courses as the products of universities. As a result of this demarcation, some authors (e.g., Kotler and Fox, 1985) argued that it was more appropriate to conceive of students as the universities' product to be conveyed to the employer.

Nevertheless, the previous view has been criticised by Conway *et al.* (1994). The student is not an inanimate "raw material" that receives education to be transformed into an outcome. Students enter university with a considerable technical and cultural background (Lowe and Cook, 2003), which enables them to interact with their environment. As a result, perceiving the student as the universities' product is not appropriate.

On the other hand, conceiving courses as goods can also be misleading. Educational courses and programmes are not physically tangible goods. They are basically associated with the activity/service of delivering the knowledge, skills and expertise embedded in these offerings. Accordingly, such critics have called into question the appropriateness of conceptualising universities' core business following a product-marketing approach.

The question of ownership is another argument to add to the criticism of the productmarketing approach. The transaction of goods involves an exchange of ownership. However, when offering an educational programme, for example, only part of the price paid is for a transfer of ownership. The acquisition of the certificate representing the award can be taken as an illustration. In combination with the course being provided, students acquire the provisional right to use physical assets (e.g., the classroom, the library facilities and laboratories access, etc) needed for the completion of that programme and the acquisition of the award. Therefore, it is concluded that the full transfer of ownership is missing in the context of higher education.

In the middle of the 1990s, it was later recognised that higher education was not a product, but a service (Nicholls *et al.*, 1995; Hemsley-Brown and Oplatka, 2006). Thus, higher education core business is associated with the service of delivering the knowledge, skills and expertise embedded in universities' curricula (Maringe, 2005). Therefore, the theme to be addressed is about identifying the service(s) that represent universities' core business.

A recent and general consensus considers teaching and research to be the main higher education services delivered to students (Nicholls *et al.*, 1995; Tjeldvoll, 1997; Tjeldvoll, 1998; Cummings, 1998; Maringe, 2005). It is through the activities of teaching and research that universities seek to develop their curricula. In studies dealing with the concepts of teaching and research and the relationships between them, there is an inclination in the literature to examine "teaching" and "research" without defining what each concept is (Brew and Boud, 1995). Yet, it is necessary to clarify the definition of each concept.

2.2.2.1 Teaching

Teaching is commonly recognised as merely an act of lecturing (Shore *et al.*, 1990). However, the traditional mode of classroom teaching is not the only option. A broader conceptualisation of teaching extends the traditional notion of lecturing to refer to teaching as the content of the relation between a learner and some aspect of the environment (Brew and Boud, 1995). For example, a book may teach a learner about a subject. This is different from the notion of pedagogy which always assumes the existence of a personal learning relationship between people (Van Manen, 1991). Accordingly, teaching is the transmission of knowledge which is specific to a particular subject to a learner (i.e., the student) (Hattie and Marsh, 1996).

2.2.2.2 Research

While teaching is about integrating and applying a partial and fragmented knowledge (Hatton and Smith, 1995), research is more about discovering and even producing knowledge (Reich *et al.*, 1988). In a similar vein, Barnett (1992) argued that while teaching involves the imparting of knowledge; research refers to stimulate the discovery of knowledge (Hattie and Marsh, 1996). As a service provided by universities, research is not only about exposing students to the outcome of recent research, the research service is also intended to assist students in developing additional research through the supply of technical resources, supervision and advice.

The present categorisation of teaching and research is built upon the incompatibility theory (Baker and McLean, 2004). In opposition to the integrationist approach emphasising the overlap between teaching and research (Westergaard, 1991), the

incompatibility theory supports the existence of a distinction between the two activities (Ramsden and Moses, 1992). The practices of universities reveal this distinction. According to university tradition, a distinction is usually made between teaching and research (Coate *et al.*, 2001). In this context, the programmes offered to students are categorised as taught versus research programmes. For example, bachelor programmes are usually considered to be taught courses, masters programmes contain more teaching activities than research, while doctorates are research programmes that entail greater research activity than teaching.

This classification can be justified by the fact that teaching focuses on delivering stipulated and specific knowledge. Hence, the student does not have to seek this "pre-set knowledge". An undergraduate student will need to acquire the knowledge mainly through teaching, given that, at this early stage, the student is unlikely to have the full research abilities to acquire the information needed. Conversely, at a masters or doctorate level, the student is expected to incrementally acquire the research skills.

From the above, the core educational services supplied to students include both teaching, which refers to the main activity characterising taught programmes; and research, which corresponds to research programmes offered to students. In addition to the core services, universities provide auxiliary services related to: accommodation, library facilities, student loans and finance, employment or placement services and legal advice (Nguyen and LeBlanc, 2001).

2.2.3 Identification of higher education customers

Another peculiarity of the higher education business is the variety of roles that the student can perform (Litten, 1980; Kinnell, 1989; Conway *et al.*, 1994; Owlia and Aspinwall, 1996). For instance, Weaver (1976) perceives four parties as potential customers of universities: the government, administrators, teachers/academics, and the actual consumers (the learners, their families, employers and society as a whole). In the same line of argument, Robinson and Long (1987) presents a classification of primary, secondary and tertiary customers. They see the students as primary customers; secondary customers as the paymasters (e.g., employers); and tertiary customers such as employers and parents.

According to marketing theory, customers are defined as:

The ones who receive the benefit of the product or service and they are the ones who put their hands in their pockets to pay for it.

(Lindsay and Rodgers, 1998, p.167).

Both of these conditions can apply to the student and the industry (i.e., employers). Essentially, students are the ones who mostly and directly benefit from the educational services that universities provide. In addition, they are potentially the ones paying for the education they receive. Thus, students are perceived to be the main customer of higher education services.

Another marketing concept, put forward to confirm the primacy given to students as the main customer, is the notion of "interaction" (Cowell, 1984). The interaction idea is described by Gummesson (1991, p.68) as the "point of marketing" which is likely to influence a customer's purchases. It can be concluded that, since the student participates heavily in the interaction process with the university and its members (Naude and Ivy, 1999), its position as the main customer is thereby reinforced.

Students are becoming increasingly more concerned about their job prospects and are interested in the educational programmes that will best contribute to future employment opportunities (Lomas, 1997). Students' wants and needs are influenced by the economic and social needs of industry and society. Therefore, students' expectations embody the outlook of some other parties (e.g., governments, employers). As a result, the student body is the primary customer of higher education institutions.

2.2.4 Business performance of universities

Performance has largely been addressed in higher education literature from an academic (e.g., degree quality, research productivity) rather than a business perspective (Abbott and Doucouliagos, 2003). Only a few studies discussed universities' business performance (e.g., Caruana *et al.*, 1998a,b; Binsardi and Ekwulugo, 2003). In this respect, some indicators, namely: students' satisfaction, delivering value for students and the ability to attract non-government funding were stated as representing universities' performance. In addition, Binsardi's and Ekwulugo (2003) study emphasised the importance of the increase in international market share as an indicator of export performance in higher education institutions. Although these studies attempt to reveal the importance of some indicators of business performance, examining performance measurement in an educational context remains anecdotal and speculative. The research lacks a strong theoretical

framework conceptualising as well as operationalising the business performance of universities.

2.3 THE MARKETING OF HIGHER EDUCATION

This section examines the evolution that the marketing of higher education witnessed during three eras: the first era (1970-1979) was characterised by the emergence of the marketing of higher education; the following era (1980-1997) witnessed some developments in educational marketing; and lastly, the third era (1998-present) where the marketing of higher education has matured to the model of market orientation (MO) in higher education.

2.3.1 First era (1970-1979): the emergence of the marketing of higher education

Since "the marketing revolution" (Keith, 1960), marketing has gained importance throughout the 20th and 21st century (Cohen and Harris, 2003). Marketing theories and concepts have witnessed a growing application to different domains of the business world. The concept of marketing was no longer exclusively applied to the business sector. As an aspect of its expansion, principles and concepts of marketing started to gain acceptance in sectors that were unfamiliar with marketing previously. Examples of these sectors include the political (e.g., Hayes and McAllister, 1996), socio-cultural (e.g., Spiegler, 1996), and educational fields (Naude and Ivy, 1999).

With reference to the higher education sector, the beginning of the 1970s witnessed the conceptualisation of higher education as a market-led sector, driven by the interplay of demand and supply (Hawkins and Cocanougher, 1972). This conceptualisation originated from the transformation that some Western countries pioneered in their educational approaches. Higher education was no longer perceived as a form of "traditional liberal ideal" learning (Watts, 1970, p.18), which should be detached from the economic and social requirements of the State. In opposition to the liberal approach, there emerged a more extrinsic and instrumental form of education, predominantly shaped by the market forces of supply and demand. This new market-driven form of educational preferences of its members (Watts, 1970; Schultz, 1971; Tapper and Salter, 1995). As an illustration, Schultz (1971) stressed the economic importance of investing in higher education, so that the workforce acquires the necessary skills for better international competition.

Since the late 1970s, a number of financial constraints imposed on higher education by governments contributed to the development of a market-led higher education system (Russell, 2005). Thus, the development of an institutional market-led education was emphasised to achieve better value for money from public expenditure on higher education.

Similar and parallel to the offer side, developments on the demand side have also encouraged the establishment of an institutional market-led education. "Due to their concerns regarding job prospects, a new student body has emerged with more instrumental attitudes" (Lomas, 1997, p. 113). This new student body is interested in the educational programmes that will best contribute to future employment opportunities. This interest emphasises a market-led education that takes into account the educational preferences of students.

Viewing higher education as a market-led sector led to the application of marketing philosophy to higher education. Subsequent to that, the development of the higher education sector in the late 1970s facilitated the emergence of the marketing of higher education.

The higher education sector expanded significantly in the late 1970s. Academic expansion had a twofold aspect. On the one hand, the growing number of national and international students - seeking superior education - shaped considerably the demand for tertiary education (Kotler, 1979). On the other hand, and as a reaction to the increased demand, the types and numbers of institutions providing higher education increased considerably (Doyle and Lynch, 1979).

In addition to the quantitative development experienced, towards the end of the 1970s, governments encouraged the marketisation of their higher education systems with the aim of enhancing the quality of higher education. Considering students as rational and informed consumers, it is expected that students would make rational decisions with regards to the choice of programmes in institutions offering better quality (Baldwin and James, 2000).

Taken collectively, both quantitative and qualitative developments led to an increase in sector competition among institutions to attract more students and thus to increase their market share. This competitive tendency was intensified by the universities' aim of raising revenues as a means of substituting the decrease in public funding (Tapper and Salter, 1995).

These developments encouraged universities to adopt marketing principles and activities (Kotler, 1979). Rather than being limited to the business world, marketing expanded to other fields and more specifically gained importance in the higher education sector. The application of marketing in higher education institutions is in line with the aim of gaining a competitive edge and achieving a larger market share internationally.

2.3.2 Second era (1980-1997): the development of the marketing of higher education

The marketing of higher education started to gain significant importance in the 1980s, when it was perceived as a necessity rather than an option. Student subsidies were substituted with a full-fee system in the 1980s (Gomes and Murphy, 2003). The introduction of a full-fee system created an open market for providers of higher education in a number of Western countries (e.g., Australia, the UK). Given that international students pay significantly higher tuition fees than national students in several Western countries (Vincent-Lancrin, 2004), international students have remained the focal target of universities when designing and implementing marketing models.

The motivation of universities to recruit more international students was translated into substantial efforts to promote higher education institutions. Persuasive efforts included both advertising (posters, bulletins and announcements, letters to colleagues) and personal selling (direct contact with promising students) (Hemsley-Brown and Oplatka, 2006). It seems that every college and university was carrying out some aspects of marketing activity during the 1980s.

The need to adopt marketing philosophy clearly required the conceptualisation of marketing into higher education for an enhanced application of marketing. In response to that, a theoretical normative literature on education marketing originated in the UK and the USA in the 1980s. This literature included manuals on how to apply advertising practices to higher education (e.g., Davies and Scribbins, 1985) and how to apply marketing models to educational institutions (e.g., Kotler and Fox, 1985).

In discussing the application of marketing models, a large proportion of the literature published in the early 1980s relied heavily on the application of a product-marketing approach (Conway *et al.*, 1994). Colleges and universities were said to be among the enterprises that market complete and complex packages of goods with subtle indicators of quality (Litten, 1980). Similarly, Levitt (1980) in his earlier work broadened the product concept to include the following levels:

1. The core: it represents the benefits that a degree can provide in terms of employment prospects and social status.

2. Tangible: tangible features can include the physical layout of the campus, the library, laboratories and sport centres.

3. Augmented product: this level consists of intangible attributes such as library membership for graduates, student loans and finance, an employment or placement service.

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Within the "product-marketing approach", the element of "product-market mix" is important. Products, prices, and persuasion were considered to be among the basic ingredients of the marketing process (Litten, 1980). Therefore, the adoption of a product-marketing philosophy led to the application of the total marketing programme to academic institutions. A total marketing programme includes: market, product, distribution system, communication mix, and price. Kotler and Murphy (1981) advised putting all these elements together harmoniously in order to produce the desired results. In the same year and following the same inclination, a "product portfolio" tool - developed by the Boston Consulting Group (BCG) - gained popularity in the academic sector (Kotler and Murphy, 1981; Newbould, 1982). Administrators were required to identify the stronger programmes and maintain full support for them, while reducing funds to their weaker programmes. This product portfolio tool has been used to analyse British and American universities (Newbould, 1980). Moreover, universities were advised to develop a "product/market opportunity strategy" to decide how to maintain enrolment, if not growth, in the future (Kotler and Murphy, 1981).

A few years later, when applying marketing models to higher education, a debate with reference to the identification of the customers of higher education surfaced during the second half of the 1980s. While some authors (Litten, 1980; Levitt, 1980) regarded students as the customers with courses as the higher education products, others considered students as products with the employers being the customers (Kotler and Fox, 1985; Conway *et al.*, 1994).

Following the debate on the identification of the product of higher education institutions, towards the middle of 1990s a new approach to higher education marketing emerged. Rather than approaching the educational offerings from a product-marketing perspective, scholars started to apply service-marketing theories to the educational setting. The literature (e.g., Morgan, 1991; Pardey, 1991; Conway *et al.*, 1994) conceptualised universities as providing professional services. When arguing the nature of higher education as a pure service, academic scholars made use of the theoretical development of the field of service marketing. For instance, Nicholls *et al.*, (1995) made use of the four distinctive features of services. They maintained that these characteristics are applicable in the context of higher education institutions, as evidence of the service nature of higher education.

Subsequent to the development of educational marketing from the university perspective, the second half of the 1990s saw the investigation of consumer behaviour in a higher education context. With most studies perceiving the student as the customer (Nicholls *et al.*, 1995), universities assumed that in order to achieve a considerable increase in enrolments by international students, examining the students' decision-making process is a key element. Research then focused on investigating students' decision process and examined appropriate promotional strategies in order to respond to the students' main criteria when choosing a higher education destination. Nevertheless, subsequent studies (e.g., Mortimer, 1997) showed the existence of a considerable information gap between the choice factors identified by students in the surveys, and the information available in universities' print communications. This reveals a lack of customer focus and market orientation (MO) in the educational setting. Universities can achieve a greater competitive edge

if they proactively seek to understand students' needs and expectations and respond to those needs through providing necessary information using suitable means of communication (Hemsley-Brown and Oplatka, 2006).

From the above, it can be argued that the majority of research in the field of the marketing of higher education adopted a purely operational perspective. This reveals a dearth of strategic insights in approaching higher education marketing. It was not until the late 1990s that literature on higher education strategic marketing started to materialise. With MO as the core of strategic marketing, principles and concepts related to MO started to gain acceptance in the educational field (Lindsay and Rodgers, 1998).

2.3.3 Third era (1998-present): maturity of the marketing of higher education

In response to several calls emphasising the importance of applying strategic issues of marketing to higher education, research on strategic marketing in universities emerged during the late 1990s. In this respect, literature addressing the applicability of MO to an educational setting developed towards the mid to late 1990s.

Research started investigating the level of MO pursued by some universities in different parts of the world. As an illustration, Lindsay and Rodgers (1998) examined the extent to which British higher education is market-oriented throughout the education reform process (1979-1993). Results reveal the absence of an MO practice, as the sector was still at the stage of adopting a selling orientation approach.

The absence of an MO practice in universities exhibited a need to primarily investigate the conceptualisation of MO in an educational context. Therefore, in perceiving education as a not-for-profit sector, Siu and Wilson (1998) presented a new model of MO that takes into account the specificities of the not-for-profit sector. In this context, Siu and Wilson (1998) criticised the suitability of the concepts of profit and competition and replaced them with "employee orientation" and "long-term survival" (Liao, 2000). Nonetheless, emphasis was given to not-for-profit rather than the independent nature of the education sector. Indeed, perceiving higher education institutions as purely not-for-profit organisations can be misleading. Universities do seek lucrative gains from international students and other ancillary services provided to different institutions (e.g., advisory services) (Binsardi and Ekwulugo, 2003). In addition, the competition dimension should not be excluded as it is perceived as an important element driving the strategic orientation of universities to adopt an MO approach (Maringe, 2004).

In the same year, another attempt at applying MO to the higher education sector emerged. Caruana *et al.*, (1998a, b) made use of the MARKOR original instrument (Kohli *et al.*, 1993) and applied the instrument to the university sector. The changes involved substituting department/school for business unit, tertiary education for industry, academic staff for departments, and courses for products. Moreover, Caruana *et al.*, (1998a, b) found a positive relationship between MO and different measures of performance. Furthermore, Wasmer and Bruner (2000) empirically examined the antecedents of MO in higher education and revealed the importance of institution size, innovation and source of funding in adopting an MO approach.

2.4 EXPORTING IN HIGHER EDUCATION

This section presents the experiences of some universities actively engaged in export activity. Additionally, it examines theories on the export of services as an underpinning to the export of educational services.

2.4.1 The university export experience

The concept of exporting entails the idea of commercialisation. Therefore, it seems necessary to investigate the commercial aspect of international educational exchanges before discussing the nature of this commercialisation.

2.4.1.1 The commercial aspect of international educational exchanges

International educational exchanges have long been associated with cultural, political and economic ties between countries (Larsen and Vincent-Lancrin, 2002). For example, providing higher education services to overseas students has long been perceived as an international aid offered by some developed countries (e.g., the UK) to different developing nations sharing some cultural, political or economic bonds (e.g., Commonwealth countries).

However, this situation started to change in the middle of the 1980s when universities faced reduced government funding. In order to attract sufficient revenues, a more commercial perspective on dealing with overseas students substituted the aid approach. A significant shift in emphasis from aid to trade became a guiding policy for allowing foreign students into universities in different industrialised countries (e.g., New Zealand, Australia and the UK) (Lewis, 2005). The main feature of the commercial approach is to offer educational services to international students at unsubsidised rates covering at least the cost of their education (Larsen and Vincent-Lancrin, 2002). Countries such as Australia, the UK and the USA are increasingly viewing cross-border higher education as a business with full-price tuition (Marginson, 2006).

Accordingly, international higher education became business-oriented, expansionary and commercial. Competition for international students and their funds has driven the provision of higher education to become increasingly international in scope (Mazzarol and Hosie, 1996; De Vita and Case, 2003; Bennell and Pearce, 2003; Harman, 2004; Lewis, 2005). As a result, higher education has gradually been discovered as a lucrative service industry and export commodity, and governments of industrialised countries have actively sought to take advantage of a growing international market (Martens and Starke, 2008).

When segmenting global competition in higher education, two exporting segments emerge, namely, exporting national research universities and teaching-focused export institutions (Larsen and Vincent-Lancrin, 2002; Marginson, 2006). With teaching and research as the services that constitute the educational curriculum, both of these segments are dominated by commercial provision to international students.

The emergence of the export philosophy in the higher education context has materialised through the expansion of a transnational higher education. This will be discussed in the section that follows.

2.4.1.2 The development of a transnational higher education

As the term "transnational" indicates, transnational higher education refers to the provision of higher education that involves students or even institutions crossing national borders (Liston, 1999). The provision of transnational higher education has increased rapidly since the second half of the 20th century (Hatakenaka, 2004). The development of transnational higher education can be categorised into three main phases or waves (Mazzarol *et al.*, 2003), as follows.

First wave: transnational education emerged with the movement of students to different host countries in order to receive education. This movement occurred with emerging/developing nations as the major sending countries, while developed countries have been an international destination for transnational higher education. A key driver of this movement was the poor access to higher education in some developing countries in Africa and Asia (Mazzarol and Soutar, 2002). Consistent with this view, McMahon (1992) found a negative association between economic development in the sending countries and the volume of international student flows. The direction of international student flows was fairly influenced by cultural, historical and colonial ties between sending and host countries (Mazzarol *et al.*, 2003). Another "pull factor" during the pre-1980s was the financial support of some host countries to international students, fundamentally via scholarships (Mazzarol and Soutar, 2002).

Despite the withdrawal of some financial assistance to overseas students in the 1980s, the number of overseas students worldwide increased by more than 60% between the 1980s and 1995 (Bennell and Pearce, 2003). This situation reveals the increased primacy of other factors over cost issues and financial benefits. This is

consistent with a recent study (i.e., Mazzarol and Soutar, 2002) revealing that cost issues are considerably less important than some other factors. In this context, Mazzarol and Soutar's (2002) findings demonstrate the considerable impact of Western culture on the students' decision to study abroad. Mazzarol and Soutar's (2002) study found that some students are driven by the enthusiasm to better understand the Western culture and live a 'Western experience' when opting for the developed world as a study destination.

Another push factor is the students' perception that an overseas course is better than a local one. Parallel to the Western inclination is the phenomenon of globalisation. Globalisation has been increasingly perceived as the context within which universities operate (Bolsmann and Miller, 2008). The higher education market is now well-established as a global phenomenon, especially in the major Englishspeaking nations: the USA, Australia and the UK (Hemsley-Brown and Oplatka, 2006). The increasing economic globalisation has emphasised the importance of internationally-recognised qualifications sought after by multinational corporations. Equally significant, developments in information and communication technology (ICT) and transport have facilitated transnational higher education (Harman, 2004).

As a consequence of this recent global trend, the beginning of the 21st century witnessed larger numbers of international students flows (Van Damme, 2001). According to the Organisation for Economic Co-operation and Development (OECD) statistics, the number of foreign students studying for higher education in OECD countries in 2001 doubled that of 20 years ago. The increase in the flow of international students was rapid and is expected to continue. Along with some

forecasts, the global demand for international higher education is expected to quadruple between 2000 and 2025 to reach 7 million students by 2025 (Hatakenaka, 2004).

However, this traditional mode of delivery presents some limitations. Essentially, the amount of effort and the costs associated with the decision to study abroad remains considerable. Accordingly, other more convenient modes of delivery of transnational higher education for international students developed.

Second wave: as an impact of the accelerating global trend and international competition, a considerable international market of higher education developed throughout the 1990s. This is characterised by a growing number of not only traditional modes of educational delivery, but also of some new types of international provision (Van Der Wende, 2001).

Rather than the students having to cross borders in order to study abroad, some higher education providers started to travel abroad to meet the demands of their export customers. An increased adoption of the marketing ideology in universities (i.e. getting closer to customers) in 1990s principally drove the development of transnational higher education. Thus, higher education institutions started to move to a forward integration with the export channel, forming collaborative links with some foreign institutions. This is represented by the organisation of validation agreements whereby "a degree-awarding body judges a programme of study offered in another institution overseas to be appropriate to lead to a qualification of that degreeawarding body" (UK Council of Validating Universities, 1996). Such validation agreements led to the offering of overseas-validated courses (OVCs). OVCs allow students to receive the same foreign award on completing the programme, while studying partially or totally in their home countries. OVCs witnessed a spectacular growth during the 1990s (Bennell and Pearce, 1998). For example, OVCs offered by UK institutions expanded, and in 1997 were enrolling at least 100,000 students (Fielden and Abercrombie, 2001).

A predominant form of OVCs is the establishment of a presence in foreign markets via twinning programmes (Smart, 1988). Through twinning courses, students can study part of the course (the first one or two years) in their home countries before completing the course abroad in an overseas awarding institution. This forward integration became widespread in Asia (e.g., Hong Kong, Malaysia, and Singapore) during the 1990s with many private institutions offering the possibility to students to study a foreign course in their home country (Prystay, 1996).

In addition, the liberalisation of the trade in higher education in the mid-1990s facilitated the cross-border movement of institutions. The inclusion of trade in higher education in the General Agreement on Trade in Services (GATS) has contributed to the expansion of this mode of delivery.

Third wave: the increasing worldwide demand for overseas degrees, evidenced by the considerable increase in OVCs, encouraged exporting universities to go even further in the export channel and set up their own branch campuses overseas during the 2000s (Martens and Starke, 2008). As a result, offshore education has recently

expanded worldwide with the UK and Australian institutions as the major providers (Larsen and Vincent-Lancrin, 2002).

The most illustrative example of offshore education is Monash University, with campuses in Malaysia, South Africa and also Europe. This concept of "moving education not learners" is of growing importance in the field of transnational education, due to the reduced costs compared with studying abroad (Van Der Wende, 2002).

In addition to the offshore presence, this recent wave shows a tendency towards elearning (Hatakenaka, 2004). The new modes of higher education provision emerged to meet the increasing demand for more diversified and flexible forms of education, to which the traditional provision of higher education remains insufficiently responsive (Van Der Wende, 2002). As an illustration, e-learning provides more convenience to full-time employees opting for an overseas programme to study parttime.

Developments in information and communication technology (ICT) have facilitated distance learning process between universities and students overseas over the Internet. The seminal development in ICT made e-education not only possible but largely widespread (Mazzarol, 1998). Hence, ICT allows higher education providers to accommodate the specific needs of students in terms of mode, pace, place and time of study, and to cater different and new market segments both locally and globally (Van Der Wende, 2002). In addition to the programmes offered by virtual

universities (e.g., Open University), many conventional universities are currently delivering their courses virtually (Larsen and Vincent-Lancrin, 2002).

E-learning has significantly developed as a medium of providing higher education. Both the number of international students enrolled in distance education, as well as the number of institutions providing e-education, witnessed considerable growth during the 2000s in different exporting countries (e.g., the UK, Australia and the USA) (Hatakenaka, 2004).

2.4.1.3 The experience of some exporting countries

Universities in some Western countries have been considerably active in the transnational provision of higher education over the last few decades (Bennell and Pearce, 2003). More specifically, most of the English-speaking countries in the Western world are attracting larger number of international students to their campuses as well as establishing a commercial presence largely in developing and transitional economies. Both these forms of delivery represent the major modes of exporting education in most of these countries (Bolsmann and Miller, 2008). With the English language as a significant competitive advantage, the UK, USA and Australia are said to be the primary export nations (OECD 2004, pp.284-286).

The USA: this country is perceived to be the leading exporter of higher education worldwide, with foreign students representing 30% of the total number of students in 1995 (Bennell and Pearce, 2003). Specifically, e-education has expanded significantly as an important mode of delivery in the last decade. Recently, the USA became the world's largest provider of e-learning (Van Der Wende, 2002).

The UK: within the English-speaking market for international students, the UK attracts almost 25% of students, in second place behind the USA (Bolsmann and Miller, 2008). Growth in delivering education to international students increased from 2.5% between 1999 and 2000 to 5% between 2001 and 2002 (Russell, 2005). By 1997, education exports from the UK accounted for over £9 billion (Bennell and Pearce, 2003). More recently, the UK has developed important offshore higher education in order to meet the increasingly global demand for higher education (Van Der Wende, 2002).

Australia: Since the introduction of the full-fees system for international students in the 1980s (Jackson, 1984), the Australian higher education sector has expanded strongly as an export industry. Accordingly, Australia has become the third largest exporter of higher education internationally over the past decade, coming in rank order after the USA and the UK (Binsardi and Ekwulugo, 2003). More significantly, Australia has the highest proportion of international students among its total student population, reaching 12% in 2004 (McBurnie and Ziguras, 2001).

Australia has developed a niche marketing strategy through focusing on the provision of higher education to some developing countries of the Asia Pacific region (e.g., Hong Kong and Singapore), whose own educational systems are characterised by a shortage of supply and therefore unable to meet increasing demand for higher education (Mazzarol and Hosie, 1996).

While two-thirds of international higher education students are enrolled on university campuses in Australia, the remainder are enrolled "offshore" (Harman, 2004). Offshore higher education has recently developed as a significant export delivery of Australian education. In 2000, an estimated 31,500 students were enrolled in Australian educational institutions' offshore programmes (McBurnie and Ziguras, 2001). In particular, partnerships remain a key mode in the offshore provision. Major international providers have numerous partnerships. For example, the Royal Melbourne Institute of Technology (RMIT) had 33 different partnerships in 11 different countries (RMIT University, 2002) in 2002. In addition, a growing number of Australian universities have established separate campuses overseas. Monash University, for example, has major campuses in Malaysia, South Africa and smaller campuses in London, Berlin and Prato (Italy) (Harman, 2004).

2.4.2 Exporting higher education services

Given that the export literature is largely based on theories and models from the export behaviour of manufacturing firms, this will represent a starting point for the examination of the export of higher education services.

2.4.2.1 From exporting goods to exporting services

Exporting activity has long been associated with physical goods. When exporting physical goods,

Goods leave country A, where they are defined as exports, and are transported to country B to be consumed, where they are defined as imports. (Lovelock, 1999, p.290).

From this definition, it could be argued that the exportation of goods as a business activity requires the following:

- **1. Separability of the production and consumption of goods**, as the two deeds take place separately in different territories.
- **2. Transportability of the goods exported**: the separable characteristic of production and consumption of goods internationally traded makes the transportation (physical movement) of the goods itself feasible.
- **3. Presence of the "Exports vs. Imports" sense**: the exportation activity involves "exports" for the country of supply and "imports" for the country of consumption.

Bearing in mind that the philosophy behind the concept of export emerged in a manufacturing setting, it is sensible to use the previous features characterising the exporting of goods as a basis for examining the conceptualisation of export in services (Winsted and Patterson, 1998). However, a number of specificities emanating from the single nature of services needs to be considered. Table 2.1 summarises some features that distinguish the nature of services, and the argued challenges that each characteristic could present to the exporting circumstances referred to earlier.

Services characteristics	Challenges to the definition of goods exportation
Intangibility	Difficulty of transporting the service
Perishability	exported
Heterogeneity	Challenges the separability of production
Inseparability	and consumption of the offering

Source: Developed by the author from the literature review and definition of service export by Lovelock (1999)

The present theory highlighting services' peculiarities has been, and is still widely used (Vargo and Lusch, 2004). There exists an invariable belief in the differences between physical goods and services (Fisk *et al.*, 1993).

Zeithaml *et al.* (1985) describes intangibility as the fundamental distinguishing characteristic of services, from which all other differences emerge. Being intangible and perishable (non-storable) performances (Gronroos, 1990), services are not usually subjected to a physical transportation.

In addition, services are heterogeneous (Edgett and Parkinson, 1993). Heterogeneity refers to the difficulty of standardising services. In this context, the expected need related to customising the service implies a closer contact between the supplier and the customer for an effective supply of the service in question. The required face-to-face contact when delivering the service will likely involve simultaneous service production and consumption (Erramilli, 1990; Erramili and Rao, 1990). This

represents a considerable challenge to the notion of separability of service production and consumption, as mentioned earlier.

Taken collectively, the unique characteristics of services present some challenges to the concept of the export of goods. Thus, it is clear that the notion of export in services does not necessarily fit with the pattern of exporting goods. This structural alignment is consistent with the work of Chadee and Mattsson (1998) suggesting that service exporters do not necessarily behave in a similar way as do traditional exporters of goods. Service exporters do have their own peculiarities and accordingly are expected to behave differently. Consequently, the constructs and relationships found in the literature of manufactured goods industries may not be relevant to service industries.

From this perspective, the notions of service transportability and separability mentioned in the definition of exporting physical goods are not conditions in exporting services. Service delivery can take place domestically and still have an impact on international trade flows (Segebarth, 1990).

Nonetheless, the "Exports vs. Imports" idea does exist within services. "Exporting services involves services sold by the residents of one country to residents of another country" (Daniels, 2000, p.2). These are international exports and imports in the conventional balance of payments (BOP).

Given the existing differences between goods exporters and services exporters, it is therefore sensible to examine the export behaviour literature of service firms as well as the associated classifications of international services. This will represent a theoretical foundation to the export of higher education services.

2.4.2.2 Theories of exporting services as the foundation of university export behaviour

Subsequent to the development of the literature examining the export behaviour of manufacturing firms, key theories of the export behaviour of services emerged at the beginning of the 1990s.

• Hard versus soft services (Erramili, 1990)

In the beginning of the 1990s, Erramilli presented a seminal classification of services. Since then, there has been a tendency to use Erramilli's (1990) distinction between hard and soft services in order to investigate the internationalisation process of service firms (Blomstermo *et al.*, 2006). Soft services represent the "purest services" that entail many of the peculiar characteristics of services. This implies that production and consumption of a soft service occur simultaneously. On the other hand, the production and consumption stages for hard services are completely separable (Erramili, 1990). This may be due to the nature of the service provided in the case of services embodied in some tangible form (e.g., disk, document, or cassette); or owing to technological developments (e.g., telecommunications making distance education possible) (Erramilli *et al.*, 1990). According to Erramilli and Krishna (1991), hard services can be exported as goods are, whereas soft services that require a close physical proximity are more difficult to export.

Erramilli's classification is a useful tool in analysing the pattern of the internationalisation of services. However, this perspective emanates from the logic of the exporting behaviour of goods. This is challenged by the earlier argument supporting the existence of considerable differences between the export of goods and the export behaviour of services. It can also be argued that Erramilli's (1990) perspective reveals a constricted conceptualisation of the exporting activity. Exporting is not merely a cross-border activity (service crosses the border in tangible or intangible form); there is also exportation of services where there is movement of consumers across borders (Cowell, 1983; Dunning, 1989; Segebarth, 1990; Roberts, 1999). Therefore, services can be generally subjected to exportation. Yet, the methods of delivery may differ between different types of services. This view is akin to Stare's (2002) observation asserting that the heterogeneity of services are easily traded across the border in the same manner as goods, others require the movement of either the consumer or the provider of the service across the border.

 Organisational profile of international service firms (Patterson and Cicic, 1995)

Towards the mid-1990s, rather than restricting the classification of services to merely one dimension (intangibility in Erramilli's (1990) model), Patterson and Cicic (1995) presented a more conclusive classification. Patterson and Cicic (1995) extended the parameters of the classification of services to include the degree of face-to-face contact with clients, in addition to the intangibility characteristic. The intersection of these two dimensions resulted in categorising services into four groups/cells as follows:

- 1. Location-free professional services: these services are intangible and do not require the client to be present during the service production (e.g., market research, finance and insurance).
- 2. Location-bound customised projects: these services require considerably more continuous contact with the client for successful delivery of the service, given their high degree of customisation (e.g., consulting, legal services).
- 3. Standardised service packages refer to standardised service packages bundled with goods (e.g., standardised distance education courses).
- 4. Value-added customised services: unlike the standardised service packages, these customised services require a high degree of supplier-client interaction for successful delivery (e.g., accommodation services, catering).

Patterson and Cicic's (1995) categorisation is considered to be valuable, as it depicts the connections between some of the main peculiarities of services (intangibility, inseparability and heterogeneity). Nevertheless, Patterson and Cicic's (1995) classification is general to services and does not specifically tap the distinctions existing between international services. In this context, the model does not address cross-border movements (i.e., what exactly crosses borders). Yet, Clark *et al.* (1996) maintain that cross-borders movements are salient in classifying international services (Clark *et al.*, 1996).

• International service types (Clark *et al.*, 1996)

Soon after Patterson and Cicic's (1995) work, a more international classification of services based on what particular characteristic of a service crosses national

boundaries, was developed. Clark's *et al.*, (1996) categorisation reveals four types of international services as follows:

1. Contact-based services, where people (producers or consumers) cross borders to engage in transactions;

2. Vehicle-based services, where communications are directed into and out of nations via radio, television and satellite transmissions, wires and/or other facilitating "vehicles";

3. Asset-based, where commercial service ideas tied to foreign direct investment cross borders to establish an operating platform (e.g., banks);

4. Object-based services, physical objects impregnated with services move into a nation (e.g., software and CDs, repairs to machinery, etc.).

Clark's *et al.* (1996) classification of international services is appropriate for an export setting given that this classification is based on identifying what in a service crosses borders.

• Stages of internationalisation of business service firms (Roberts, 1999)

Three years after Clark's *et al.* (1996) work and following a similar line of argument, Roberts (1999) developed a classification revealing various stages through which service firms progress in their export behaviour. The stages are defined as follows:

1. Provision of services to domestic clients only (no exports).

2. Provision of services to foreign clients in the domestic market (domestically located exports).

3. Provision of services to foreign markets through embodied service exports (final services in the form of, for example, a letter or report); trans-human exports (personnel travelling) and wired exports (delivery through ICT).

4. Establishment of a presence through delivering a service largely produced in the domestic market (intra-firm exports).

In addition to demarcating different modes of exporting services, Roberts' (1999) model takes into account a time scale revealing the usual development that service exporters generally experience. Hence, it could be argued that Roberts' (1999) model will serve as a basis for the conceptualisation of the export behaviour in universities.

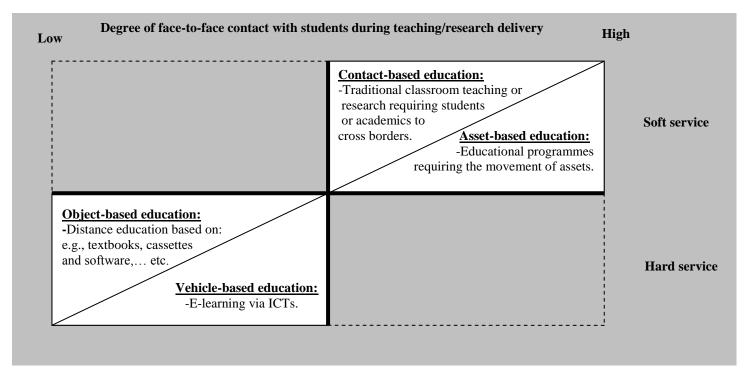
Given the service nature of educational services delivered to students, the classifications mentioned earlier are appropriate to the service context, and thereby are argued as being applicable to the educational setting.

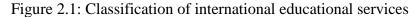
2.4.2.3 From exporting services to exporting educational services

The theories peculiar to the service sector, discussed in the previous section, are argued to be applicable to higher education services.

• International higher education services

A classification of international educational services is portrayed in figure 2.1. This framework is based on the application of the theories examining the different types of international services presented earlier.





Source: Developed by the author from Erramili (1990); Patterson and Cicic (1995); and Clark et al. (1996)

Drawing on Clark's *et al.* (1996) perspective, it is argued that international higher education services can be classified as follow:

1. Contact-based education refers to traditional classroom teaching or to research programmes requiring the student to be in close contact with the university. This type of education requires people (lecturers or students) to cross borders to engage in face-to-face contact.

2. Vehicle-based teaching, where the use of ICT serve as vehicles for electroniceducation delivery.

3. Asset-based education refers to universities which set up a physical presence (e.g., branch campuses) overseas.

4. Object-based education focuses on distance education through the export of some physical objects (e.g., computer software, video cassettes, textbooks).

Figure 2.1 shows that these types of services can be clustered based on Patterson and Cicic's (1995) classification. Thus, the different types of international educational services are categorised based on two dimensions: the degree of face-to-face contact with students in the educational delivery (i.e., inseparability and heterogeneity of teaching/research), and the degree of tangibility of the educational service (hard versus soft).

Both contact and asset-based education involve close face-to-face contact between the university and the student (e.g., classroom teaching), given the simultaneous nature of education consumption and production in both cases (soft services). Conversely, object and vehicle-based education entail some forms of distance

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education (hard service) that implies a low contact between the supplier and consumer of education.

• Modes of exporting higher education services

Figure 2.2 exhibits different modes of export higher education services. Based on Roberts (1999), universities do progress in their export behaviour following various stages.

In light of the previous framework, the OECD and the GATS agreements recognise four categories of export education (Knight, 2003; Lewis, 2005; Martens and Starke, 2008):

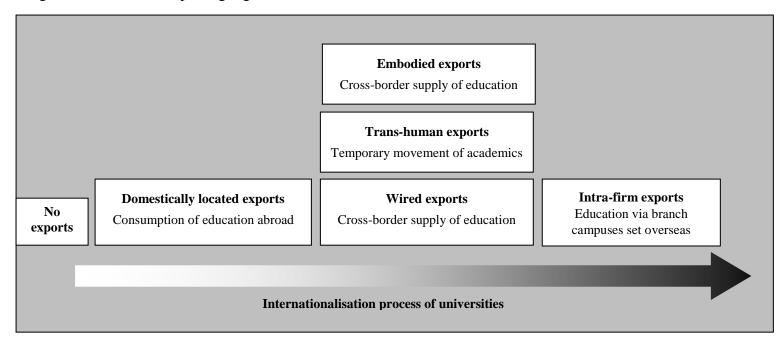
1. The cross-border supply of educational programmes through, for instance, distance education (Larsen and Vincent-Lancrin, 2002). This corresponds to "wired/embodied service" exports.

2. Direct investment in the commercial presence of an institution overseas essentially via the establishment of branch campuses abroad (Sauvé, 2002). Branch campuses play an important role in delivering educational services designed in the home country to export markets, in order to meet the increasing need for universities to look outside their boundaries at some new and prospective markets as some traditional markets (e.g., Asian) are nearing saturation. Consistent with Roberts' (1999) classification of exported services, this mode is consistent with "intra-firm exports".

3. An institutional presence involving domestic employees and consumption abroad, where the student moves to the country of the supplier to receive education (Marginson, 2006). Given that the educational service is directed toward international students, yet performed domestically, this mode is a "domestically-located export" (Lewis, 2005).

4. The temporary movement of academics and researchers to conduct teaching or research projects abroad corresponds to "trans-human exports".

It can be argued that the level of internationalisation in which the university is engaged shapes the mode of export of its services. Consistent with this view, a university in an early stage of internationalisation would more likely opt for domestically-located exports, as it involves less risk and involvement in the export market. However, some other universities are more involved in their export markets through embodied, trans-human or wired exports. Some universities have gone even further in their internationalisation process and have already set up campuses overseas. Figure 2.2: Modes of exporting higher education services



Source: Developed by the author from the literature review and categorisations by Roberts (1999)

2.5 EXPORT MARKETING IN HIGHER EDUCATION

Although a few studies investigating higher education marketing to overseas students emerged in the late 1980s as a response to the introduction of full-cost fees for overseas students (e.g., Woodhall, 1989; Kinnell, 1989), the majority of the research in the field developed in the late 1990s and early 2000s.

Mazzarol (1998) identified some critical success factors for marketing education to the export market. Emphasis was given to the image and resources of the institution as well as different types of coalition and forward integration with international partners. In this context, the adoption of carefully managed branding and positioning strategies can be designed to enhance the institution's image. On the other hand, the possession of strategic alliances - particularly with international partners and the forward integration into the marketing channel through the delivery of overseas educational programmes - has also been found to be critical to the success of universities. This empirical study is influential as it examined the critical success factors based on an investigation from the most active world providers of international education (the USA, the UK and Australia). However, this study did not address how the proposed marketing strategies are conceptualised and how they could be operationalised in an export context.

Four years after Mazzarol's (1998) seminal work, research focused on examining the behaviour of international students. Mazzarol and Soutar (2002) developed a framework of factors influencing the decision process in selecting a study destination. The framework includes both "push" and "pull" factors. The findings

reveal the existence of some economic and social forces within the home country which "push" the student abroad. On the other hand, the decision determining the particular study destination is dependent on a series of "pull" factors associated with the host country. In particular, the key finding concerns the quality of reputation, which is considered to be the most important "pull" factor. This study is undoubtedly valuable. Mazzarol and Soutar's (2002) findings need to be considered when developing an export marketing strategy. Specifically, controllable factors such as the quality of the programmes delivered need to be emphasised given that this factor represents an influential determinant in the decision making process of international students.

Following the same tendency, Binsardi and Ekwulugo (2003) focused on one specific study destination: the UK. According to this study, international students' perception is essentially related to a positive quality of education and the worldwide recognition of its qualifications. The study supported the importance of the quality of educational services and pricing variables in formulating market penetration strategies to attract more international students to the UK.

Subsequently, Gomes and Murphy (2003) made use of technological advances worldwide, and presented a new approach in investigating international students' behaviour when choosing a study destination. Gomes and Murphy (2003) emphasised the significance of the Internet as a tool of communication/promotion given that the website information and institutional e-mail responses were found to greatly influence prospective students' choices.

Furthermore, research has also defined service quality and word-of-mouth as important factors attracting international students. Russell's (2005) findings are consistent with previous studies (Binsardi and Ekwulugo, 2003; Mazzarol and Soutar, 2002). This study confirmed that the reputation of UK programmes is a decisive selling point in influencing international students' decision-making regarding their choice of programme and place of study.

Shah and Laino (2006) investigated the expectations of international students from different countries when seeking education from an American university. The study revealed the existence of considerable differences in expectations. Therefore, Shah and Laino (2006) argued that an adaptation approach is essential when designing communications strategies to prospective international students.

More recently, Paswan and Audesh (2009) introduced the concept of students' loyalty in the international higher education context. The study empirically examined the impact of satisfaction with educational service augmenters on loyalty within the context of international student market. The results showed that enhanced satisfaction in universities with strong augmenters is associated with a very strong brand loyalty.

2.6 GAPS IN THE EXPORT MARKETING OF HIGHER EDUCATION

The previous section examined export marketing in the higher education context, based largely on the review of literature in higher education marketing, international marketing, and marketing management. The review of literature reveals several directions for further research. The present section outlines the research gaps addressed in this thesis.

Research on the export marketing of higher education was restricted to interpreting marketing within the narrower definition of marketing communications. Additionally, most of the literature is general, as it examines some of the general principles of marketing (e.g., purchase decision process), rather than tapping the specificities of export marketing.

Additionally, most of these studies were based on a consumer/student behaviour approach, with a core theme of the investigation of the decision-making process of international students. Yet, there is a dearth of research examining strategic themes of the export marketing of higher education. Specifically, a central theme that has been overlooked is the implementation of export marketing in universities. With the construct of EMO connoting the implementation of export marketing (cf., Jaworski and Kohli, 1990), the conceptualisation of EMO in universities remains an important direction for future research.

The export market is of crucial importance in generating increased revenues for universities (De Vita and Case, 2003; Russell, 2005). As a result, the export market

remains the focal target of universities when designing and implementing marketing efforts. Therefore, the conceptualisation of EMO in universities needs to be examined in further research.

Furthermore, higher education literature has addressed performance in academic terms (e.g., degree quality, research productivity) (Abbott and Doucouliagos, 2003) rather than as a business performance. Although a few studies emphasised the importance of the international market share as an indicator of international business performance (e.g., Binsardi and Ekwulugo, 2003), there is a lack of conceptualising as well as operationalising export performance of higher education institutions.

2.7 SUMMARY

This chapter presented the contextual background defining higher education as a marketable business. In this respect, teaching and research are the main services that educational institutions provide to international students. An examination of the development of the marketing of higher education was presented subsequently. In order to examine the exporting behaviour of higher education institutions, theories on the exporting of services are used as a foundation for the exporting behaviour of higher education services. Then, a modest literature on export marketing in higher education institutions was reviewed. This reveals a number of gaps in the export marketing of higher education literature overlooked the examination of central themes in the export marketing of higher education. This is the implementation of export marketing in universities (i.e.,

export market orientation in universities) and the associated concept of export performance in universities.

Before addressing the gaps identified in the previous section, it is necessary to explain the theories and models supporting the concepts of export market orientation and export performance in the next chapter. This will represent a theoretical background to the investigation of the same concepts in a specific context (i.e., universities) (chapter 4).

Chapter 3

Literature review part two: theoretical background

3.1 INTRODUCTION

This chapter focuses on export market orientation (EMO) as the focal construct of this research, its antecedents, and consequence: export performance.

This chapter is divided into seven sections. Given that the concept of EMO originated from market orientation (MO) philosophy, the chapter firstly presents a historical development of MO models in the second section. This represents a strong theoretical underpinning to the EMO conceptualisation. Thus, the discussion of EMO models follows in the third section. The fourth section examines different dimensions of export performance measurement including financial versus non-financial indicators. Then, different antecedents to EMO are discussed in the fifth section. The sixth section sheds light on export performance as a consequence of EMO. Lastly, conclusions are presented.

3.2 MARKET ORIENTATION

The market orientation (MO) concept has attracted increasing interest from academics and practitioners alike. The literature discussing MO reveals two main

phases. The first phase represents the emergence of MO, and the second phase reveals the development of MO.

3.2.1 The emergence of market orientation

The concept of MO is rooted in marketing philosophy (McCarthy and Perreault, 1984; Kohli and Jaworski, 1990). Throughout the 1970s and 1980s, marketing gained increased importance in the business field (Houston, 1986; Olson, 1987; Webster, 1988; Deshpandé and Webster, 1989). This is because marketing has become a primordial corporate activity offering added value products and services (Kotler, 1979). However, in seeking to realise marketing benefits, firms were concerned with the implementation of marketing concepts (Shapiro, 1988), given that very little academic focus had been attributed to this theme (Deshpandé, 1999). It is therefore comprehensible that there was considerable academic and practitioner interest in implementing marketing concepts (i.e., MO) (Webster, 1988; Deshpandé and Webster, 1989). In this context, MO connotes the implementation of marketing within organisations (Kohli and Jaworski, 1990). This interest led to the call to conceptualise MO towards the end of the 1980s (Deshpandé and Webster, 1989).

From the above, it could be argued that the drive towards marketing laid the foundation for the emergence of MO. However, with the idea of MO yet to evolve as an independent marketing concept, there was a definite need to define, measure and model MO as a construct. This gap attracted academic interest in MO towards the beginning of the 1990s. The attempt to develop MO as a construct will form the bulk of some of the issues to be discussed in the following paragraph.

3.2.2 The development of market orientation (MO)

The calls by academics and practitioners for the conceptualisation of MO led to the materialisation of MO as an established concept in the field of marketing management. Thus, the beginning of the 1990s witnessed the establishment of MO as a construct.

Following a behaviouristic approach, Kohli and Jaworski (1990) conceptualised MO as a construct composed of three behaviours directed at the market, namely: intelligence generation, intelligence dissemination throughout the organisation, and responsiveness. Identifying the core elements of MO enabled the construction of a working definition.

Kohli and Jaworski's (1990) pioneering work undeniably provides new insights into the concept of MO and its dimensions. However, the authors only conceptualised MO and determined its constituents without questioning its measurement. Largely, firms are engaged in some degree of MO. Yet, some are more involved in MO than others (Narver and Slater, 1990). Rather than viewing MO as either existing or lacking, it is more appropriate to represent the concept with a scale lying on a continuum in order to measure MO.

Subsequently, research continued to develop the MO construct. In the same year, Narver and Slater (1990) provided the first operational measure of MO (Cadogan and Diamantopoulos, 1995) to gauge the extent to which a firm is market oriented. Additionally, Narver and Slater (1990) incorporated a philosophical dimension in conceptualising MO. Narver and Slater (1990) defined MO as: Although Narver and Slater's (1990) conceptualisation encapsulates both behaviouristic and cultural aspects, their operationalisation of MO is purely behaviouristic as it includes three activities, namely: customer orientation, competitor orientation, and interfunctional coordination.

The usefulness of Narver and Slater's (1990) MO scale is undoubtedly clear. Yet, restricting the "market" boundaries to merely include customers appears insufficient. This idea discounts other components of the market that can affect competition and customers (e.g., government institutions, suppliers, technology bodies and macroeconomic environment) (Matsuno *et al.*, 2000). Additionally, Narver and Slater's (1990) MO scale understated responsiveness. For example, the scale lacks some of the responsive actions associated with the implementation of a new marketing plan or the carrying out of necessary product/service modifications required by customers.

A few years later, Deshpandé *et al.* (1993) presented a different and new approach to MO conceptualisation. By adopting a more philosophical outlook, Deshpandé *et al.* (1993) view customer orientation (considered here as synonymous with MO) to be part of a corporate culture.

Deshpandé's *et al.* (1993) study reveals a new philosophical outlook when addressing MO. However, the study presents some challenges. In addition to focusing on customers as the sole target of MO, measuring a firm's MO based exclusively on organisational beliefs and values can be misleading. A scale reflecting simply intangible beliefs embedded in an organisation fails to depict the suitable actions that need to be taken in order to enhance an MO (Pulendran *et al.*, 2003). As a result, it could be concluded that this scale exhibits weak managerial implications for the practice of MO. This is explained by the fact that perceptions and beliefs are not tangible and could be interpreted differently. Accordingly, a market-oriented culture can achieve maximum effectiveness only if it is complemented by processes that operationalise cultural values (Deshpandé and Webster, 1989; Diamantopoulos and Hart, 1993; Lafferty and Hult, 2001).

Concurrently with Deshpandé *et al.* (1993), Kohli *et al.*,(1993) produced a different scale (MARKOR) to measure the level of MO carried out by organisations. MARKOR scale is based on Kohli and Jaworski's (1990) initial efforts to develop the MO construct. MARKOR scale incorporates the different stakeholders that constitute the market. Furthermore, the scale focuses on a set of specific behaviours as a basis of measurement (Matsuno *et al.*, 2000), which supports the managerial usefulness of the scale.

Subsequent to the establishment of different measurement scales of MO, some scholars (e.g., Jaworski and Kohli, 1993; Slater and Narver, 1994; Greenley, 1995; Harris and Piercy, 1997; Avlonitis and Gounaris, 1997) investigated the factors that influence MO. In this context, different managerial (Jaworski and Kohli, 1993; Slater

and Narver, 1994b), organisational (Harris and Piercy, 1997; Gounaris and Avlonitis, 1997) and external factors (Greenley, 1995; Avlonitis and Gounaris, 1997) were found to enable some organisations to be more market oriented than others.

Parallel to that, research emphasised the importance of MO. Towards the mid-1990s, some authors outlined the outcomes of MO (e.g., Slater and Narver, 1994; Day, 1994; Atuahene-Gima, 1995; Greenley, 1995; Hunt and Morgan, 1995). Seminal works (e.g., Jaworski and Kohli 1993; Slater and Narver 1994; Greenley, 1995; Han *et al.*, 1998) examined the relationship between MO and organisational performance. These studies exhibit some variations in their findings regarding the level and direction of the relationship between MO and organisational performance (Kirca *et al.*, 2005). Although the predominant view supports the primacy of organisational performance as a consequence of implementing market-oriented behaviours (Jaworski and Kohli 1993; Slater and Narver 1994), other researchers reported non-significant or even negative correlation between the two concepts (e.g., Agarwal *et al.*, 2003; Sandvik and Sandvik, 2003).

Scholars (e.g., Greenley, 1995; Pitt *et al.*, 1996; Sargeant and Mohamad, 1999; Pulendran *et al.*, 2003) applied MO, its antecedents and consequences to a variety of industrial and cultural contexts. This reveals the substantial development of the theory of MO. In spite of this development, the geographical context in which the concept of MO has been applied was restricted to organisations operating in specific domestic areas (Cadogan and Diamantopoulos, 1995). There was hardly any research regarding the potential consequences of a MO for internationally active organisations (Dalgic, 1994). This initiated a call to develop measures of the construct for organisations operating within an international context. As a response to this call, during the second half of the 1990s, some scholars (e.g., Cadogan and Diamantopoulos, 1995; Cadogan *et al.*, 1999) extended previous research on MO to an international and, more specifically, an export context. The following section reviews the subsequent work examining the application of MO in exporting organisations.

3.3 EXPORT MARKET ORIENTATION (EMO)

In order to offset the limitations of a single conceptualisation, Cadogan and Diamantopoulos (1995) presented an integration of the two dominant "Kohli and Jaworski's (1990)" and "Narver and Slater's (1990)" conceptualisations of MO (Jaworski and Kohli, 1993; Selnes et al., 1996). Based upon this integration, a reconceptualisation of the MO construct emerged in the same year. From this perspective, Cadogan and Diamantopoulos (1995) argued that MO includes generation, dissemination, responsiveness and a coordinating intelligence mechanism that reflects the degree of intra- and interfunctional coordination within the organisation. On the basis of this reconceptualisation and in response to the call for an application of the MO concept to exporting organisations, Diamantopoulos and Cadogan (1996) presented the first attempt at including an international dimension within the concept of MO. Diamantopoulos and Cadogan's (1996) exploratory study examined the way that market intelligence is generated, disseminated and responded to by a sample of interviewed exporters. This study suggested that the exporters' behaviour is consistent with a high MO, given that an MO is perceived as a necessary approach for the long-term survival of exporters.

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Diamantopoulos and Cadogan's (1996) findings advocate that the essence of the construct of MO remains unchanged in an export setting. The dimensions of an MO adopted by an exporting firm are also associated with the activities of generating, disseminating and responding to the market. Yet, the existence of some peculiarities related to the export environment (e.g., the existence of separate functions to perform international activities) involves the necessity of accommodating these peculiarities when operationalising the MO construct in an export setting (Cadogan and Diamantopoulos, 1995). In this context, Diamantopoulos and Cadogan's (1996) indepth interviews uncovered particular items capturing some of the specificities of an export setting. As an illustration, given that international activities are usually carried out by a separate function, Diamantopoulos and Cadogan's (1996) found that the interactions of export personnel with non-export personnel are critical in conducting effective market-oriented activities.

Within a short period, a new construct "export market orientation" (EMO) surfaced, referring to the nature of MO as applied to an export setting (Cadogan *et al.*, 1999).

From the previous definition, table 3.1 summarises the conceptualisation of the EMO dimensions.

EMO dimensions	Definitions
Export intelligence generation	It includes activities which constitute the creation of export market intelligence (e.g., export market research, export assistance) and which are focused towards export customers, competitors, or the related environmental changes (Souchon and Diamantopoulos, 1996, p.53).
Export intelligence dissemination	It includes activities which involve the sharing of export market intelligence (e.g., formal meetings) and which are focused towards export customers, competitors, or the related environmental changes (Cadogan <i>et al.</i> , 1999, p.692).
Export intelligence responsiveness	It includes the design and implementation of all responses to the intelligence that has been generated and disseminated. Such responses are directed towards export customers, competitors, and the related environmental changes (Diamantopoulos and Cadogan, 1996, p.38).
Coordinating mechanism	It reflects a coordinated effort to create superior value (Slater and Narver, 1990) and an organisation-wide responsibility for market-oriented activities (Kohli and Jaworski, 1990) and ensures that market- oriented activities are carried out effectively and efficiently (Cadogan and Diamantopoulos, 1995, p.54).

Table 3.1: Conceptualisation of EMO dimensions

Source: Developed from the literature review and categorisation by Cadogan *et al.*, (1999)

Based upon this conceptualisation, Cadogan *et al.*, (1999) developed a measure consisting of four multi-item scales to operationalise the construct of EMO. For this purpose, Narver and Slater's (1990) and Jaworski and Kohli's (1993) scales were initially adapted to the export setting. Subsequently, Cadogan *et al.* (1999) made use of Diamantopoulos and Cadogan's (1996) qualitative findings and added specific items that stem from the peculiar nature of the export environment (e.g., "our strategy for standardising or adapting our export product offerings is based on detailed customer research" p.705). Cadogan's *et al.* (1999) scale enabled the operationalisation of the export market-oriented behaviours to gauge the extent to which an exporting firm is market oriented towards its export markets.

Literature on EMO presents some inconsistencies to whether coordination is an antecedent or an inherent part of the EMO construct. Although Cadogan *et al.* (1999) conceptualised coordination as one dimension of EMO, it was later recognised that coordination is an antecedent to EMO (Cadogan *et al.*, 2001; 2002a). Statistical analyses in Cadogan's *et al.* (2001) and (2002a) studies revealed that coordination is an important antecedent to EMO, yet a distinct construct.

Studies that examined the concept of EMO (e.g. Diamantopoulos and Cadogan, 1996; Cadogan *et al.*, 1999) are pertinent because they represent a theoretical underpinning to the operationalisation of the concept of EMO in different contexts. However, it is maintained that the bulk of EMO research is biased towards the traditional physical goods and manufacturing sectors. Researchers have yet to examine the nature of EMO from the perspective of other international entities operating in different sectors. This is in line with Cadogan's *et al.* (2002b)

perspective suggesting that important measurement extensions could be made in future research in the field of EMO (e.g., not-for-profit organisations, non-traditional organisations, organisations in the public sector).

Describing and measuring the concept of EMO offered a foundation to the theory of EMO. Based on the theory of MO (Kohli and Jaworski, 1990), some scholars (Cadogan *et al.*, 1999; Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a) constructed a theory of the antecedents and consequences of EMO (detailed in sections 3.5 and 3.6). EMO theory suggests that a well developed EMO is associated with superior export performance (Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a).

3.4 EXPORT PERFORMANCE MEASUREMENT

Export performance is one of the most widely researched, yet most controversial areas of international marketing (Katsikeas *et al.*, 2000). In this context, there has been a lack of consensus regarding the conceptualisation and operationalisation of export performance (Al-Khalifa and Morgan, 1995; Zou and Stan, 1998). The measurement of export performance outcomes has varied widely, and no single indicator or construct definition dominates the field (Leonidou *et al.*, 2002). Therefore, current reviews propose a multidimensional performance construct (Francis and Collins-Dodd, 2000).

The most widely used dimensions in measuring export performance are financial versus non-financial measures and objective versus subjective measures (Zou and Stan, 1998; Francis and Collins-Dodd, 2000). Financial measures are usually

associated with objective terms and include numeric indicators of export performance. These measures are grouped into two main categories. The "sales" category is represented by measures of the volume of export sales or the export intensity. The "profit" category includes measures of overall export profitability (Zou and Stan, 1994; Katsikeas *et al.*, 2000).

On the other hand, non-financial indicators of export performance are more subjective. The "Satisfaction" category refers to the managers' perceived satisfaction with the company's export performance (Evangelista, 1994), and "goal achievement" refers to the managers' evaluation of export performance compared to objectives (Katsikeas *et al.*, 1996).

Leonidou *et al.* (2002) criticised non-financial measures as subject to bias due to their reliance on subjective perceptual evaluations (Leonidou *et al.*, 2002). On the other hand, there are also some difficulties associated with the exclusive use of financial measures (Evangelista, 1994) in spite of their popularity on an international level (Das, 1994).

Some indicators such as export intensity and export profit intensity take into account the firm's overall performance. Thus, these variables are not only dependent on a firm's export efforts. These measures can be affected by factors other than superior exporting activities and do not exclusively reflect export performance (Katsikeas *et al.*, 2000). In addition, firms do not usually report the financial details of their export operations; it is therefore difficult to access these data (Katsikeas *et al.*, 1996; Shoham, 1998; Akyol and Akehurst, 2003).

Another limitation to the reliance on financial measures of export performance is that these measures have emerged in a traditional manufacturing context and are generally useful to that context. Nevertheless, the logic behind sales and profitability does not hold true in some non-traditional (e.g., public institutions and not-for-profit organisations) settings. These organisations may consider some qualitative performance measures when assessing their export success. As a result, including subjective measures that reflect performance criteria specific to the type of firm being studied seems valuable. This is in line with some recommendations for using more perceptual measures of overall export success or success in achieving organisational goals (e.g., Cavusgil and Zou, 1994; Matthyssens and Pauwels, 1996). According to the "strategic choice" school of thought, managers use their own perceptions of performance, rather than objective values, when formulating their decisions (Bourgeois, 1980).

In summary, due to the advantages and disadvantages associated with various types of measures (Leonidou *et al.*, 2002), the use of both financial and non-financial measures of export performance is sensible.

In addition, Robertson and Chetty (2000) maintain that there is no unified standard export performance measure. Rather, the construct needs to be modelled according to the context within which it is used. In other words, the choice of indicators depends on firm-specific conditions. This is consistent with Katsikeas' *et al.* (2000) statement:

The choice of export performance measurement approach depends on contextual factors: research method-specific, concerning the ability of the research design to overcome measurement problems; export business-specific, such as the environmental factors surrounding the export activity; and target audience-specific, involving the focus of the investigation, along with the different parties interested in export performance assessments (e.g., top management, stakeholders) (Katsikeas *et al.*, 2000, p.505).

3.5 ANTECEDENTS TO EXPORT MARKET ORIENTATION (EMO)

3.5.1 Extension of market orientation (MO) antecedents to export market orientation

Some authors (e.g., Cadogan *et al.*, 2001) extended previous empirical work on the antecedents of MO to an export marketing context. Specifically, Cadogan *et al.* (2001) investigated the impact of export leadership, structures and systems on EMO behaviour.

3.5.1.1 Export leadership

• Management's emphasis on EMO

Borrowing from Jaworski and Kohli's (1993) model of the antecedents to MO, Cadogan *et al.*, (2001) presented the following definition of management's emphasis on EMO: Management's emphasis on export market orientation is related to those signals from a firm's management about the importance of being responsive to export customer needs and the export environment in general (Cadogan *et al.*, 2001, p.266).

Cadogan *et al.*, (2001) argued that management's emphasis on EMO is an important driver of the firm's EMO. This means that managers should emphasise the importance of being responsive to export customer needs so that the rest of the organisation is export market oriented.

• Management's commitment to exporting

Diamantopoulos and Cadogan (1996) stated that as managers' commitment to exporting increases, the greater the importance placed on EMO. From this perspective, it is expected that favourable attitudes to exporting will lead to greater allocation of time, effort and resources to EMO behaviour (Gencturk *et al.*, 1995). Furthermore, empirical evidence suggests that management's commitment to exporting is positively related to EMO (Cadogan *et al.*, 2001).

3.5.1.2 Export structures

• Formalisation

Formalisation is defined as

The degree to which rules define roles, authority relations, communications, norms, and sanctions and procedures (Kohli and Jaworski, 1990, p.10).

In contrast to prior research on MO (e.g., Jaworski and Kohli, 1993), Cadogan *et al.* (2001) stated that formalisation is negatively associated with EMO behaviour mainly under high levels of environmental turbulence. Less formalised and more flexible organisational structures are required to constantly adapt to a highly dynamic environment.

• Centralisation

Based on Kohli and Jaworski (1990), centralisation refers to the lack of delegation and limited participation of the export department members in export market decisions. Similar to formalisation, Cadogan *et al.* (2001) found that centralisation is negatively associated with EMO behaviour under high levels of environmental turbulence. In highly complex and rapidly changing markets, more decentralised structures that enable prompt responses as well as the delegation of decisions to personnel in close contact with the market facilitate EMO.

3.5.1.2 Export systems

• Reward systems

Reward systems are set to encourage organisation members to align their efforts with organisational objectives (Anderson and Chambers, 1985). If the reward systems are based on criteria such as export customer satisfaction indexes, market shares and export performance indicators, then reward systems are likely to promote the EMO behaviour (Cadogan *et al.*, 2001; based on Jaworski and Kohli, 1993).

• Training systems

Formal training programmes would enable personnel involved in the export marketing activities to acquire the skills required to develop an export marketing strategy, as well as the ability to interpret relevant information and respond to it in a timely fashion. This supports Cadogan's *et al.* (2001) findings which reveal the positive impact of export market-oriented training system on EMO.

Although previous studies contributed to the advance of the EMO literature, the antecedents discussed are quite general and do not tap the specificities of exporting organisations. Therefore, it is useful to identify any factors specific to firms' export operations which would facilitate or discourage EMO activity. As a result, the following section discusses some export factors that are specific to EMO.

3.5.2 Export-specific factors

3.5.2.1 Export experience

Research examining the impact of export experience on EMO presents mixed results. According to Diamantopoulos and Hart (1993), exporting organisations' awareness and familiarity with available sources of export information increases as they become more experienced within their foreign markets. This familiarity is likely to facilitate the effective and efficient generation of export market information given that information is often difficult and costly to obtain in an international setting (Walters, 1983). Furthermore, experienced exporters are expected to recognise and thereby generate relevant information (Hart and Tzokas, 1999). This relevant information needs to then be disseminated and responded to. Experience helps firms better understand the likely consequences of their actions (Robertson and Chetty, 2000) and therefore deliver effective responses. As a result, Diamantopoulos and Cadogan (1996) and Cadogan *et al.*, (2001) support the positive influence of export experience on EMO.

On the contrary, Cadogan's *et al.* (2002) findings reveal a significant negative relationship between the number of years the firm has been exporting and EMO. Cadogan *et al.* (2002) argued that long-term and well-established exporters are more averse to changes in their environments and more likely to keep to embedded export experiences and practices, which run counter to the entrepreneurial view of being export market oriented (Cadogan *et al.*, 2002).

3.5.2.2 Export dependence

Firms that are dependent substantially on their export operations need to make effective use of relevant export information as the wrong use of such information may lead to high costs (Souchon and Diamantopoulos, 1996). Therefore, exporting firms need to conduct effective EMO activities as they become more dependent on their exports for their sales and profits (Cadogan *et al.*, 2002). A similar opinion is shared by Diamantopoulos and Cadogan (1996). Diamantopoulos and Cadogan's (1996) and Cadogan's *et al.* (2002) findings suggest that export dependence is positively related to EMO.

3.5.2.3 Export coordination

Cadogan *et al.* (1999) described export coordination as consisting of several interrelated and overlapping themes. These themes include:

Communication and shared understanding between export and non-export specific staff members; an organisational culture which emphasises the acceptance of responsibility, cooperating with and helping and assisting others within the firm; a lack of dysfunctional conflict; and sharing the same work-related goals (Cadogan *et al.*, 1999, p.692).

Diamantopoulos and Cadogan (1996) stated that if the firm's export coordination is characterised by high levels of intra- and interfunctional cooperation as well as a lack of dysfunctional conflict, then EMO activities will be performed effectively and efficiently. Hence, Cadogan *et al.* (2002) suggested that export coordination is positively related to EMO activities (Cadogan *et al.*, 2002). Nevertheless, when conceptualising EMO, Cadogan *et al.* (1999) conceived organisational coordination as an important part of the EMO construct rather than an antecedent to EMO. This is supported by the fact that coordination is vital to the effective and efficient execution of export intelligence generation, dissemination and responsiveness.

In summary, Cadogan's *et al.* (2002) empirical study examining the export-specific antecedents to EMO undeniably represents a considerable development within export marketing literature. These antecedents apply to wide-ranging exporters operating in a variety of industries, yet overlook the specificities of particular industries with potentially different market forces. In this respect, some industry-specific characteristics can also have a considerable impact on export marketing

strategies (Zou and Stan, 1998). As a result, further research could investigate the effect of some key industry characteristics on EMO.

3.6 EXPORT PERFORMANCE AS A CONSEQUENCE OF EXPORT MARKET ORIENTATION (EMO)

A number of scholars (e.g., Evangelista, 1994; Zou and Stan, 1998; Katsikeas et al., 2000; Leonidou et al., 2002) identified several competencies that led to a superior export performance. These competencies include export market knowledge, managerial systems for monitoring and controlling export activities, and a formal strategy for planning, identifying, and pursuing export opportunities. Many of these competencies are conceptually related to the activities of an export market-oriented firm (Rosé and Shoham, 2002). In this context, identifying relevant export market information and detecting market opportunities are associated with intelligence generation. In addition, intelligence dissemination and responsiveness, respectively, measure a firm's ability to distribute, react, and plan for export market information. In short, previous export performance research identified a number of informationoriented and customer-focused activities that are related to the intelligence gathering, information disseminating, and responsive behaviours of an export market-oriented firm (Jaworski and Kohli, 1993; Cadogan et al., 2002). In other words, Rosé and Shoham (2002) argued that these information-oriented and customer-focused activities stem from a fundamental core competency (i.e., EMO). As a result, developing an EMO promotes successful exporting behaviour (Hooley and Newcomb, 1983; Cadogan et al., 1999).

The significant effect of EMO on a firm's export success can be explained by both an information-based perspective and the customer focus of EMO. With regard to the information-oriented activities, a number of studies found that the gathering and use of market information (key elements of EMO) are positively associated with export performance (e.g., Hart and Tzokas, 1999; Rosé and Shoham, 2002). The positive influence of market information on export performance is justified by the need for relevant marketing information in the case of an exporting firm that extends its business to a foreign and unfamiliar market characterised by a substantial amount of uncertainty (Douglas and Craig, 1983). In this respect, export marketing research activity remains a key element of the collection of market information (Hart and Tzokas, 1999) as well as a formal means of export market generation (Cadogan et al., 1999). After collecting relevant information, this information needs to be acted upon before this information can have an effect on decisions and their outcomes (i.e., performance) (Kohli and Jaworski, 1990; Sinkula, 1994). Baker and Abou-Zeid (1982) also reported a positive relationship between the use of export market research and export performance.

Another argument that supports EMO as a driver of a firm's export success is a firm's customer focus. Hart and Tzokas (1999) emphasised the importance of knowing and understanding the customer to the export operation. Consistently, Roberts *et al.* (1996) found that firms which aggressively and proactively pursue overseas markets with the aim of getting closer to the customer (Lumpkin and Dess, 1996) achieve higher degrees of export intensity. Francis and Collins-Dodd (2000) found that a proactive EMO is positively related to export performance.

In short, EMO activities are predictors of different aspects of export performance (export profits, export market share, rate of new market entry) (Cadogan *et al.*, 2002). It is noticed that these studies support a direct effect of marketing activities on performance. Yet, some researchers argue that in seeking a direct relationship, the mechanism of how market research information is used and thus impacts on performance is over-simplified (Han *et al.*, 1998). Accordingly, the variable(s) explaining the effect of EMO on export performance need to be investigated.

3.7 GAPS IN THE EXPORT MARKETING LITERATURE

In spite of the maturity of EMO research, this is biased towards the traditional physical goods and manufacturing sectors. Hence, researchers have yet to examine the nature of EMO from the perspective of some other international entities operating in different sectors (e.g., not-for-profit organisations, non-traditional organisations, organisations in the public sector) (Cadogan *et al.*, 2000).

Subsequent discussion reveals the absence of a definitive conceptualisation and operationalisation of export performance. A multidimensional approach including both financial and non-financial indicators is thereby advised. Yet, export performance needs to consider the context within which the organisation operates (Robertson and Chetty, 2000; Katsikeas *et al.*, 2000).

In addition, the literature revealed that some export-specific antecedents influence the degree to which an organisation is export market oriented. However, there is still a lack of empirical evidence to support the influence of some key industry characteristics on export market-oriented behaviours.

With respect to the determinants of export performance, the discussion concluded that EMO is a core competency for the enhancement of an organisation's export performance (Cadogan *et al.*, 2002; Rose and Shoham, 2002). Nevertheless, research into how the "EMO-export performance" relationship is manifested has yet to be addressed.

3.8 SUMMARY

This chapter starts with the development of the theories on MO which led to the development of the EMO model (Cadogan and Diamantopoulos, 1995). In addition, the literature on the antecedents and consequence of EMO is reviewed. Addressing the gaps mentioned in sections 2.6 and 3.7 will form the focus of the next chapter. In this context, the following chapter will address the conceptualisation of EMO and export performance in universities. The model development and hypotheses will also be discussed in the same chapter.

Chapter 4

Model development and hypotheses

4.1 INTRODUCTION

In the second and third chapters, the literature review points out some opportunities for further research. Essentially, there is a dearth of research examining the implementation of export marketing (i.e., export market orientation) in the higher education context despite the importance of the export market in shaping the direction of higher education marketing. Therefore, this chapter presents a model of EMO in universities based on the theory of EMO as well as a combination of the international business and higher education literature. This is an attempt to bridge the gap by incorporating the exporting perspective into higher education marketing research.

Extending the concept of EMO within the higher education context requires consideration of some of the peculiarities of this industry. In this respect, the adoption of this strategic orientation is argued to be contingent upon various situational factors related to the nature of the environment to which the organisation (university) relates. The model reveals the different higher education export-specific factors that influence the level of EMO adopted in a university, as well as the outcomes of this orientation. This chapter is divided into six sections. After this brief introduction, section 4.2 presents a conceptualisation of EMO in the higher education setting. Section 4.3 outlines the concept of export performance of educational institutions actively engaged in the export activity. A conceptual framework revealing the relationship between EMO, export performance and other variables is then developed in section 4.4. Hypotheses are presented after the discussion of each component of the framework. Finally, section 4.5 offers a summary of the conclusions.

4.2 EXPORT MARKET ORIENTATION (EMO) IN HIGHER EDUCATION

4.2.1 Scope of exporting activity in universities

The second chapter described different modes by which universities export their educational services to international students. This includes the following:

- 1. Cross-border delivery (i.e., distance education)
- 2. Outbound delivery (e.g., branch campuses set overseas)
- 3. Inbound delivery (consumption abroad)

However, the most expanded mode of exporting involves overseas students moving to the country of the provider in order to receive higher education (Mazzarol and Soutar, 2002). Most, if not all, universities in the major exporting countries do carry out an inbound delivery of different programmes and programmes to international students (Binsardi and Ekwulugo, 2003). Therefore, the scope of export in the present study specifically entails the traditional mode of exporting educational programmes to international students. From this perspective, international students are the export customers. Both current and prospective international students are universities' export customers, given that they enter into a process of interaction (Cowell, 1984) with the university, as mentioned in the second chapter. In addition, universities direct their export marketing efforts to both current and prospective international students. Correspondingly, export competitors are universities operating in the same export market.

Table 4.1 summarises the scope of the export activity in universities relevant to this study.

Table 4.1: Scope of the export activity in universities

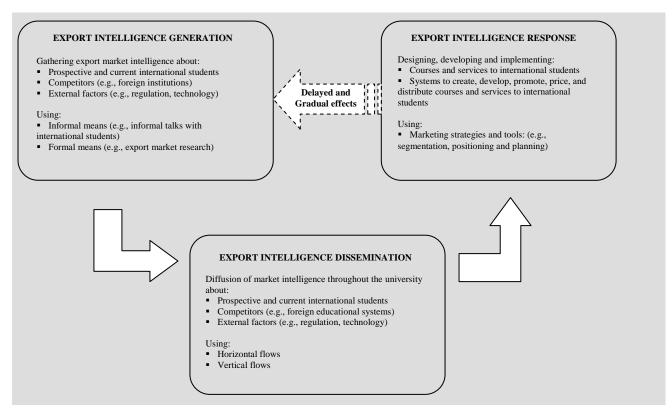
Elements	Application in	Supportive literature
	universities	
Export mode	Inbound delivery of	Mazzarol and Soutar
	education	(2002); Mazzarol (2003)
Export customers	International students	Cowell (1984); Binsardi
		and Ekwulugo (2003)
Export competitors	Universities operating in	Based on Cadogan et al.
	the same export market	(1999); Cadogan <i>et al.</i>
		(2001)

Source: Developed by the author from the literature review

4.2.2 Conceptualisation of export market orientation (EMO) in universities

Building on the existing literature on EMO and higher education marketing, a framework of EMO components is proposed from a higher education management perspective. Figure 4.1 depicts a conceptualisation of EMO (Cadogan *et al.*, 1999) in universities.

Figure 4.1: EMO conceptualisation in universities



Source: Developed by the author from the literature review and categorisation by Cadogan et al., (1999)

The starting point of an export market-oriented university is export market information generation by formal (e.g., in-house export market research, planned meetings with international students) and informal means. This activity involves searching for export market intelligence pertaining to different stakeholders taking part in the foreign higher education market. This includes principally export customers: prospective and current international students. Moreover, monitoring export marketing activities (e.g., new courses developed by foreign universities) implemented by foreign universities seems necessary. In addition, detecting fundamental shifts in the global higher education environment (e.g., regulation, technology) should not be overlooked.

The intelligence generated by the previous phase needs to be disseminated throughout the university both hierarchically and horizontally. In order to realise a successful diffusion of seminal export market information, interdepartmental meetings can be scheduled on a regular basis.

Subsequent to the information dissemination stage, universities' design and implementation of responses to the intelligence generated and disseminated is achievable. The use of different marketing strategies (e.g., segmentation, positioning, planning) will enable marketing operatives to develop new programmes and also to implement systems to market different educational services internationally.

Responding to changes taking place in the higher education environment will invariably have an effect on generating further information. Among the outcomes expected from responding to the wants and preferences of international students is their satisfaction. Thus, in order to know whether the responsive actions taken had a positive or negative effect on the students, continuous monitoring of the students' reactions is necessary. However, the effect of the responsiveness stage on generating further market information is gradual, as it will take a period of time for students to realise the changes carried out, to experience them, and to subsequently express their thoughts regarding the quality of these changes. From the above, it is concluded that export market-oriented activities represent a continuous and cyclical process.

4.3 EXPORT PERFORMANCE IN HIGHER EDUCATION

Export performance is related to performance indicators of organisations operating in an export market (Rosé and Shoham, 2002). In an educational context however, it is widely recognised that the appropriate measure of performance is not clear (Wright, 1996). There exist different approaches to measuring universities' performance (Lucier, 1992). Nevertheless, the focus of this research is far from covering different output indicators associated with the various aspects of work of the university. Rather, this study's interest is to examine performance indicators in the context of an export market-oriented university.

Previous studies (e.g., Caruana *et al.*, 1998a) investigated the overall performance achieved by universities. Yet, there is no theoretical foundation for the combination of the different dimensions of performance in a single aggregated measure (Jaworski and Kohli, 1996). This implies the possibility of focusing on different dimensions of performance separately. Hence, the multiple dimensions approach (Venkatraman and Ramanujam, 1986) can be considered for the educational setting in order to acquire the full picture about both financial and non-financial performance aspects.

In accordance with the literature review of export performance addressed in the previous chapter, financial measures of export performance encompass "profit", and "sales" dimensions. Nevertheless, the "profit" dimension is argued to be inappropriate in the educational setting.

In this respect, being a non-for-profit organisation, the 'raison-d'être' of public higher education institutions does not involve profit-maximisation which characterise most businesses (Davies and Glaister, 1996; Patterson, 2001). Nevertheless, institutions do seek a surplus of revenues over their costs. The profit-maximising assumption of business is replaced by "funds surplus to costs" wisdom in the higher education context (Lynch and Baines, 2004, p.177). These funds are retained by higher education institutions and reinvested in future growth (e.g., in financing expansion programmes). In summary, it can be inferred that profitability indicators of performance are unsuitable for the educational context.

In the same line of arguments, "sales" as a common measure of performance cannot be used for universities. This is in accordance with Caruana's *et al.* (1998a) following statement:

As a result, Wood and Bhuian (1993) advocate substituting the "sales" dimension in not-for-profit organisations with indicators in term of "revenues". However, performance measurements used in not-for-profit organisations are highly organisational specific (Wolf, 1984). Measures associated with "revenues" have been widely used in gauging the business performance of universities (King, 1995). In an export setting, export revenues volume is an important measure of the success of the export operations of universities. Thus, the revenues volume from international students is argued to represent a quantitative indicator of the export performance of exporting institutions. Correspondingly, the enrolment volume of international students is also a widely used indicator of the export performance of educational institutions (Binsardi and Ekwulugo, 2003). This is consistent with Zajac and Kraatz (1993), who maintain that university performance consists of two focal aspects: enrolment and revenues.

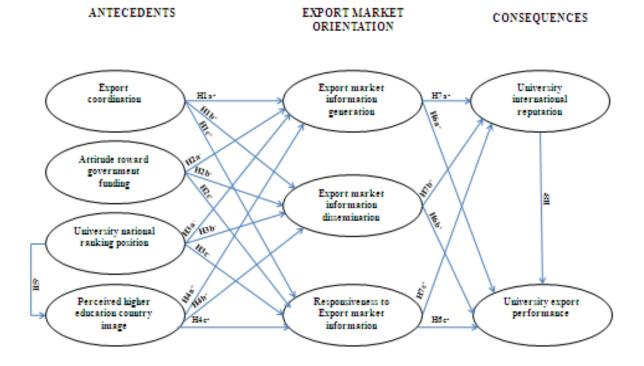
In addition to financial measures of performance, the use of non-financial measures is also valuable (Shoham, 1998; Leonidou *et al.*, 2002). The choice of suitable nonfinancial export performance depends on contextual factors as recommended by Katsikeas *et al.* (2000). In view of this study's focus, the parties interested in export performance evaluation are the international marketing managers at universities. Therefore managers' perceptions are important. Managerial perceptions of a university's export performance need to be considered given that export performance is a consequence of their decision to pursue an EMO. Based on previous studies (Shoham, 1998; Rosé and Shoham, 2002) advocating the use of the "satisfaction" and "goal achievement" dimensions in gauging export performance, this study includes managers' satisfaction as well as managers' evaluation of export performance compared to objectives in the measurement of export performance in universities.

4.4 CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

Figure 4.2 represents the conceptual framework and the related research hypotheses

for the present study.

Figure 4.2: Conceptual framework



4.4.1 Antecedents to export market orientation in universities

The broad MO and EMO literature identified several antecedent factors (e.g., senior management characteristics, organisational features and structure). However, the researcher's interest lies in the factors likely to influence EMO activities specifically in exporting universities. As a response to the call to investigate the influence of key industry characteristics on EMO, the following sections present an extension to export-specific factors introduced by Cadogan *et al.* (2002) to a higher education setting.

4.4.1.1 Export coordination

Several scholars (e.g., Karol and Ginsburg, 1990; De Boer *et al.*, 2007) perceive universities as organisations with mission statements, employees and management systems. Universities are social units with potentially a number of organisational phenomena such as communication channels, cooperation, interfunctional conflict and shared work-related goals (based on Etzioni, 1964; Cadogan *et al.*, 1999). The presence or lack of these organisational themes shapes export coordination as recalled earlier (section 3.5.2.3). Export coordination in universities largely consists of the coordination between the international marketing office and the university's schools/departments. Export coordination in universities is necessary since information-based export marketing activities cannot be carried out solely by the international marketing office (based on Grönroos, 1999).

An important aspect of export coordination is sharing the same work-related goals (Cadogan *et al.*, 1999). A university characterised by a common drive to implement

export marketing is less likely to witness dysfunctional conflict mainly between the schools and the international marketing office. Divergence in work-related goals features some regional and internally oriented universities which prioritise the expansion of academic programmes rather than market needs (Bartell, 2003). In addition, a lack of dysfunctional conflict and effective communication among different university departments are both required for a fluid dissemination of relevant export market information. Furthermore, the presence of a sense of responsibility and cooperation within a university would increase the sensitivity of university members - both academics and administrators - to relevant information and facilitate effective responsibilityeness.

Given the potential effect of different aspects of export coordination on informationbased EMO activities in universities, it can be hypothesised that:

H1: The more coordinated the university is in relation to its foreign business, the more export market-oriented the university is.

H1a: The more coordinated the university is in relation to its foreign business, the more export market information the university generates.

H1b: The more coordinated the university is in relation to its foreign business, the more export market information the university disseminates.

H1c: The more coordinated the university is in relation to its foreign business, the more responsive the university is to its foreign markets.

4.4.1.2 University attitude toward government funding

Higher education systems in many OECD countries (e.g., the UK and Australia) have witnessed an irrevocable transformation through radical cuts in government funding (Greenaway and Haynes, 2003). Different reforms (e.g., the 1988 Education Reform Act, the 2003 White Paper) encouraged the financial independence of universities from government funding, forcing universities to find private sources of funding (Albatch and Knight, 2007). As a result, universities are increasingly opting for international ventures within the growing international mass higher education sector (Bennell and Pearce, 2003; Enders, 2004).

According to Wasmer and Bruner (2000), an institution's primary source of funding is related to the implementation of marketing such that private institutions were found to exhibit higher levels of market orientation than publicly supported ones. Consistently, Anheier *et al.* (1997) found that organisations that are less dependent on public funds and more dependent on private/commercial income appear to be more market oriented. It is implied that unfavourable attitudes toward government funding leads to a more market-oriented approach in universities.

As discussed in section 3.5.2.2, Cadogan *et al.* (2002) maintained that export dependence is a significant driver of EMO. This also pertains to higher education, where universities with unfavourable attitudes toward government funding tend to be more export dependent. Lack in the public funding of universities is an expected motive for universities to search for alternative sources of revenue (Lindsay and Rodgers, 1998; Albatch and Knight, 2007). Given that the funds originating from international students are important sources of funding for universities, managers

will perceive the university's success to be tied to its export operations. Thus, managers are likely to perceive the importance of generating, disseminating and responding to export market information. This is confirmed by the experience of some exporters of higher education services (e.g., Australia and the UK, Mazzarol and Hosie, 1996), which have opted for an export market approach, and have become even more involved recently in an effort to increase their export revenues (Mazzarol, 1998; Marginson, 2007).

To sum up, the relationship between source of funding and the implementation of the marketing concept holds true in the export context as suggested by the following hypotheses:

H2: The less favourable the university attitude is toward government funding, the more export market oriented the university is.

H2a: The less favourable the university attitude is toward government funding, the more export market information the university generates.

H2b: The less favourable the university attitude is toward government funding, the more export market information the university disseminates.

H2c: The less favourable the university attitude is toward government funding, the more responsive the university is to its foreign markets.

4.4.1.3 University national ranking position

According to Usher and Savino (2006), university rankings are "lists of certain groupings of institutions comparatively ranked according to a common set of indicators in descending order" (Usher and Savino, 2006, p.5). The indicators used

attempt to measure academic quality (Hazelkorn, 2008). University rankings or "league tables" are increasingly an important part of the higher education sector, which is characterised nowadays by growing global competition (Thakur, 2007). In the 1980s, Bob Morse pioneered the use of university rankings at the *US News and World Report* to provide more transparent information about universities (Usher and Savino, 2006; Bastedo and Bowman, 2010). Specifically, national ranking systems are predominant in a number of countries such as the USA, Canada, China, Germany and the UK (Dill and Soo, 2005).

University national ranking position is closely tied to the concept of export experience. Older and well-established universities with longer export experiences consistently rank higher than the new universities (i.e., post-1992 universities) with generally a relatively emergent exporting activity (Hazelkorn, 2008). This is due to the fact that the ranking measures used favour the strengths of well-established universities with an emphasis on their research and postgraduate strengths; while the teaching-focused new universities are in a relatively disadvantaged position (Eccles, 2002).

Cadogan *et al.* (2002) found that export experience (i.e., the number of years the firm has been exporting) negatively correlates with EMO. Similarly, higher ranked and well-established exporting universities are expected to be less export market oriented given that they can rely solely on their prestige to attract international students. Conversely, new exporting universities that are usually lower ranked tend to be more aggressive in their marketing activities towards their foreign markets (Marginson, 2006).

Furthermore, in contrast with older and more prestigious universities, new universities tend to favour a market-driven model of higher education which is aligned to industry requirements and makes reference to the social and economic arena in which universities operate.

In the particular case of lower-ranked universities, adopting the business approach and implementing marketing efforts are needed as formal ways of communicating the universities' qualities given that ranking position does not always depict academic quality (Dill and Soo, 2005). In addition, new universities are more involved in entering foreign markets, in particular the markets that are less ranking conscious, taking into consideration that the domestic market is usually more perceptive of national ranking systems.

In summary, it is concluded that:

H3: The better the university national ranking position is, the less export market oriented the university is expected to be.

H3a: The better the university national ranking position is, the less export market information the university generates.

H3b: The better the university national ranking position is, the less export market information the university disseminates.

H3c: The better the university national ranking position is, the less responsive the university is to its foreign markets.

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4.4.1.4 Perceived higher education country image

Higher education country image stems from a more general concept that is productcountry image. Papadopoulos and Heslop (1993) defined product-country image as consumers' perception of a particular product made in a specific country. Similarly, higher education country image refers to students' perception of higher education in a specific country (Li, 2008). Product-country image is an important extrinsic cue that influences product evaluation mainly in the case of unfamiliar products (Agarwal and Sikri, 1996), where it is difficult to experience the product prior to purchase. Higher education is an unfamiliar service for most international students because of the intangible nature of educational services (Srikatanyoo and Gnoth, 2002). Due to the intangible nature of higher education, it is difficult for students to appraise its quality. A number of scholars (Mazzarol *et al.*, 1997; Webb and Po, 2000; Mazzarol and Soutar, 2002; Cubillo *et al.*, 2006) agree on the important role that higher education country image plays in international students' destination choice.

Given the importance of product-country image in influencing consumers' evaluation of products, marketers should ascertain the images that consumers hold about the origin country. In seeking to manage this image, marketers' perceptions of product-country image would then shape their export marketing strategy (Kleppe *et al.*, 2002). Marketers can use product-country cues to add value to their products and differentiate them by means of different marketing activities (e.g., positioning, advertising, branding) (Baker and Ballington, 2002). Thus, marketers' perceptions of product-country image influence the implementation of export marketing (i.e., EMO).

In addition, country images can act as facilitators or inhibitors of entry into foreign markets. A favourable country image can be used as a marketing tool in the export marketing activities of products and services originating from that country (Niss, 1995). In a higher education context, some countries are more export market oriented than others in view of their favourable higher education country image (Larsen and Vincent-Lancrin, 2002). For example, the higher education country image of the UK is more favourable than that of Canada or Germany (Bourke, 2000; Li, 2008), which explains the growing marketing efforts by UK universities. In other words, positive perceptions that universities' managers hold about higher education country image are expected to influence their managerial decision into entering and actively serving foreign markets. Therefore,

H4: The more favourable the higher education country image as perceived by managers, the more export market oriented the university is.

H4a: The more favourable the higher education country image as perceived by managers, the more export market information the university generates.

H4b: The more favourable the higher education country image as perceived by managers, the more export market information the university disseminates.

H4c: The more favourable the higher education country image as perceived by managers, the more responsive the university is to its foreign markets.

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4.4.1.5 The relationship between university national ranking position and perceived higher education country image

In a manufacturing setting, the success of individual institutions may affect consumers' perceptions of a country. Similarly, students' favourable (unfavourable) beliefs of educational institutions and their programmes can enhance (diminish) country image. In other words, a higher education institution's image is likely to influence country image (Srikatanyoo and Gnoth, 2002; Li, 2008).

Han (1989) introduced the "Summary effect" concept which suggests that consumers' attitude (positive or negative) towards a specific product from a foreign country can lead to positive or negative perceptions of that country. In this respect, product-country image would influence country image (Li, 2008).

Based on Srikatanyoo and Gnoth's (2002) and Han's (1989) model, it can be inferred that institution image can influence product-country image. In particular, university image impacts on higher education country image. It is very difficult to isolate individual universities from the general national image of higher education (Gray *et al.*, 2003). Given that an institution's ranking position reflects its image (Lowry and Owens, 2002), Cubillo *et al.*, (2006) operationalised institution image as institution ranking position. Therefore, university ranking position impacts on higher education country image. Evidence for this implication is found for instance in the history of UK higher education image, shaped from the prestigious image of top-ranked universities (e.g., Oxford, Cambridge, and London) (Warner and Palfreyman, 2001).

In the same line of arguments, stakeholders (e.g., students, academics, leaders) of prestigious universities believe that their universities contribute the most to a favourable country image relatively to lower ranked institutions (Hazelkorn, 2008). In particular, managers of higher ranked universities would perceive a more favourable higher education country image. Hence,

H5: University national ranking position has a positive influence on higher education country image as perceived by managers.

4.4.2 Consequences of export market orientation (EMO) in higher education

4.4.2.1 Export performance

A number of scholars (Aaby and Slater, 1989; Cavusgil and Zou, 1994; Axinn *et al.*, 1996) identified several characteristics intrinsic to the organisation as factors influencing export performance. These characteristics include: export market knowledge, export planning, pursuing and controlling export activities. These competencies are conceptually similar to the activities of an export market-oriented organisation. From this perspective, Cadogan *et al.* (2001) and (2002a) and Rosé and Shoham (2002) maintained that export performance is the result of the adoption of EMO.

If a firm is close to its customers and consistently identifies customers' expectations, it is likely that the firm would satisfy its customers and thereby outperform competitors. Research suggests that market-oriented organisations perform better in the market place (Hooley *et al.*, 1998). Export success is dependent upon the degree of the firm's EMO (Hooley and Newcomb, 1983; Cadogan *et al.*, 1999). Previous studies (Yeoh, 2000; Rose and Shoham, 2002) found that the collection and use of

market information (key components of an MO) are positively related to export performance.

Similarly, Caruana's et al. (1998b) study provides empirical evidence in support of a positive relationship between MO and universities' performance. Stewart (1991) stated that adopting a market-oriented approach allows universities to attract and retain students (Stewart, 1991). In an export context, the need for generating functional information becomes greater given the diversity of markets with several competitors. While information on overseas students studying in some of the major exporting countries is easily accessible, most institutions lack knowledge about their competitors in other countries (Caruana et al., 1998a). EMO activities will enable international marketing managers of universities to become well-informed as well as to monitor any changes that the export market undergoes. Likewise, Mazzarol and Hosie (1996) highlighted the significance of information gathering, dissemination and responsiveness by universities in developing a quality image and therefore in achieving a sustainable competitive advantage in international education. As a result, a high level of EMO is expected to enhance the enrolment volume of international students and thereby boost universities' revenue from international students. Since EMO is a purposeful set of activities based on managerial decisions, both managers' satisfaction and evaluation of universities' export performance as compared to targets are desired outcomes of the adoption of this orientation.

Taken together, the suitability of an EMO for universities is relevant, yet it did not receive consideration from the literature. Therefore, the present study suggests the following hypotheses to test:

H6: Export market orientation in a university will enhance its export performance.

H6a: Export market information generation in a university will enhance its export performance.

H6b: Export market information dissemination in a university will enhance its export performance.

H6c: University responsiveness to export market information will enhance its export performance.

4.4.2.2 University international reputation

Researchers in different fields such as economics (e.g., Shapiro, 1983), psychology (e.g., Scott, 1991) and marketing (e.g., Gray and Balmer, 1998; Gotsi and Wilson, 2001; Barnett *et al.*, 2006) studied the concept of institutional reputation. Authors in marketing describe reputation as an accumulated impression that stakeholders build of an organisation. Fombrun and Van Riel (1997, p.10) defined institution reputation as:

A collective representation of a firm's past actions and results that describes the firm's ability to deliver valued outcomes to multiple stakeholders. It gauges an organisation's relative standing with its stakeholders, in both the competitive and institutional environments.

In an international context, an institution's international reputation refers to accumulated collective representations that stakeholders in the international market

hold about the institution (Moizer, 1997). Based on Alessandri *et al.* (2006), a university's international reputation is the collective representations that the university's multiple stakeholders in international markets, including the media, hold about the university over time.

Gainer and Padanyi (2002) support the positive effect that MO has on an organisation's reputation. MO would enhance an organisation's reputation. An organisation with high level of MO regularly and consistently interacts with the market. This is expected to stimulate favourable word-of-mouth and dissipate unfavourable word of mouth (Haywood, 1989), and therefore improve reputation. A number of studies revealed that marketing communications can lead to a strong reputation (Weiss *et al.*, 1999; Wiedmann and Prauschke, 2006). Likewise, Alessandri *et al.*, (2006) stated that marketing communications lead to the development of an university's reputation. In the same line of argument, Vlastelica (2006) highlighted the importance of strategic marketing activities being the core of MO in building a strong reputation.

The relationship between MO and reputation can be extended to an export context where the need for marketing activities is more crucial (Cadogan and Diamantopoulos, 1995). Information requirements and the need for marketing communications may increase rapidly for organisations operating at an international level (Darling and Postnikotf, 1985). Derived from Weiss *et al.*, (1999), international reputation results from the organisation's communications with multiple stakeholders in different international markets (Moizer, 1997). As a result, the implementation of marketing in universities when targeting foreign markets would enhance a university's international reputation. Thus,

H7: Export market orientation in a university will enhance its international reputation.

H7a: Export market information generation in a university will enhance its international reputation.

H7b: Export market information dissemination in a university will enhance its international reputation.

H7c: University responsiveness to export market information will enhance its international reputation.

4.4.2.3 The link between university international reputation and export performance

Roberts and Dowling (2002) found a positive correlation between reputation and financial performance. Gainer and Padanyi (2002) also showed that a positive reputation will have a direct impact on an organisation's revenues.

Concepts such as reputation and prestige are significant in the higher education context where an institution's reputation may affect its graduates' prospects and social status. Reputation is particularly relevant to universities targeting foreign markets. Higher education is a high involvement service specifically for full-fee paying overseas students (Li, 2008). Overseas students do not necessarily have the opportunity to intrinsically evaluate educational services before enrolment due to geographical distance or strict immigration regulations (Altbach and Knight, 2007). Therefore, university international reputation is an important extrinsic cue influencing overseas students' choice of an institution (Weissman, 1990; Nguyen and LeBlanc, 2001; Sung and Yang, 2008). The supported effect of university international reputation on international students' choice of study destination would in turn impact on a university's enrolment volume, market share and revenues. Hence, favourable university international reputation is positively associated with its export performance. It is hypothesised that:

H8: University international reputation has a positive influence on its export performance.

A summary of the hypothesised relationships is provided in table 4.2.

Table 4.2: List of research hypotheses

H1	The more coordinated the university is in relation to its foreign business, the more export market oriented the university is.
H1a	The more coordinated the university is in relation to its foreign business, the more export market information the university generates.
H1b	The more coordinated the university is in relation to its foreign business, the more export market information the university disseminates.
H1c	The more coordinated the university is in relation to its foreign business, the more responsive the university is to its foreign markets.
H2	The less favourable the university attitude is toward government funding, the more export market oriented the university is.
H2a	The less favourable the university attitude is toward government funding, the more export market information the university generates.
H2b	The less favourable the university attitude is toward government funding, the more export market information the university disseminates.
H2c	The less favourable the university attitude is toward government funding, the more responsive the university is to its foreign markets.
НЗ	The better the university national ranking position is, the less export market oriented the university is expected to be.
НЗа	The better the university national ranking position is, the less export market information the university generates.
H3b	The better the university national ranking position is, the less export market information the university disseminates.
НЗс	The better the university national ranking position is, the less responsive the university is to its foreign markets.
H4	The more favourable the higher education country image as perceived by managers, the more export market oriented the university is.
H4a	The more favourable the higher education country image as perceived by managers, the more export market information the university generates.
H4b	The more favourable the higher education country image as perceived by managers, the more export market information the university disseminates.
H4c	The more favourable the higher education country image as perceived by managers, the more responsive the university is to its foreign markets.

Н5	University national ranking position has a positive influence on higher education country image as perceived by managers.
H6	H6: Export market orientation in a university will enhance its export performance.
Нба	Export market information generation in a university will enhance its export performance.
H6b	Export market information dissemination in a university will enhance its export performance.
Нбс	University responsiveness to export market information will enhance its export performance.
H7	Export market orientation in a university will enhance its international
	reputation.
H7a	Export market information generation in a university will enhance its international reputation.
H7b	Export market information dissemination in a university will enhance its international reputation.
H7c	University responsiveness to export market information will enhance its international reputation.
H8	University international reputation has a positive influence on its export performance.

4.5 SUMMARY

This chapter opens with a conceptualisation of EMO in the higher education context. EMO in universities is a continuous process of generating, disseminating and responding to relevant export market intelligence. On the other hand, the export performance of universities consists of both financial and non-financial indicators which are used to fit universities' specific context. Developing export performance in universities was based upon the literature examining the conceptualisation and measurement of export performance as well as the literature addressing performance in higher education.

Subsequently, the research framework is presented along with a discussion of each hypothesis. The research framework revealed that some higher education export-specific factors affect the level to which a university is export market oriented. In turn, both a university's international reputation and export performance are significant outcomes to EMO. The methodology for testing the hypotheses is presented in the next chapter (chapter 5).

Chapter 5

Research methodology and methods

5.1 INTRODUCTION

The literature review and the emergence of a conceptual model in previous chapters represent initial steps in the development of the theory and testing of export market orientation research in universities. The present chapter attempts to explain the rationale for the research methodology and methods to be adopted. The chapter starts by outlining the research questions that express the main objectives of the research. The second section presents the philosophical underpinning of the research. The presentation of philosophical assumptions is fundamental as they represent a solid foundation on which the research is built. In other words, a clear research philosophy enables the researcher to justify particular methodology and methods. This is followed by a justification of both the research strategy and the research design. The motivation for choosing methodological triangulation is highlighted. The subsequent sections explain the choices made in the data collection and analysis methods used in the two main stages of the study: qualitative and quantitative.

5.2 RESEARCH QUESTIONS

Based on the gaps in the literature identified in chapters 2 and 3, this research's key objective is to investigate how universities manage and perceive MO in their export

operations of educational services to international students (i.e., EMO). Hence, the study aims to answer six questions. The first is an introductory question, whose answer serves as an opening to the main research questions, as well as to better explain the research problem. This question has to be asked in advance given that the concept of export and the related principles of export marketing are new themes within the educational setting. The succeeding questions are the main research questions of this study. These questions should provide answers to the research objective. Finally, the last main research question is divided into two sub-research questions.

5.2.1 Introductory question

Question one (IQ1): How do universities perceive and practice export activity?

This question aims to explore universities' perception and practice of export activity given that the concept of export is a newly adopted wisdom in the higher education context. This preliminary question is essential in determining the scope of the exporting activities in universities. Clarifying both the conceptualisation and practice of the exporting activities in universities enables the research to proceed and explore the related concept of export market orientation in universities.

5.2.2 Main research questions

Question two (MQ2): What elements constitute EMO in universities?

Recent developments in export marketing theory have resulted in the conceptualisation of the EMO construct in the manufacturing industry. However, there is little research investigating the applicability of export market orientation

within the higher education context, despite the importance of the export market in shaping the direction of higher education marketing. As a result, this question addresses the core theme of the study, which is exploring the concept of EMO in universities. This question is associated with the conceptualisation (i.e., defining the construct) and operationalisation (i.e., developing the measurement scales) of EMO in universities (i.e., focal construct).

Question three (MQ3): What factors specific to exporting universities determine EMO in universities?

This question explores higher education export-specific factors promoting or hindering the level of EMO adopted by the university. It aims to better understand which factors can shape the implementation of export marketing in universities.

Question four (MQ4): What are the consequences of adopting EMO as perceived by universities?

This question examines the perceived outcomes of implementing export marketing in universities. This question is divided into the following two sub-questions:

5.2.3 Sub-research questions

Question five (SQ5): What is the effect of EMO in universities on their export performance?

Given that export performance is a key outcome of the adoption of EMO (Cadogan *et al.*, 2002a), this question seeks to examine the impact of implementing export marketing on universities' export performance.

Question six (SQ6): What is the mechanism by which export market orientation influences export performance of universities?

Despite studies supporting the link between marketing orientation and performance, some scholars argued that a direct relationship between marketing and performance is too simplistic and that future research should investigate how market research information is used in organisations to influence performance (Han *et al.*, 1998). Accordingly, this question tries to investigate the mechanism by which export market orientation enhances export performance in universities. In other words, mediating variable(s) influencing this relationship need to be uncovered.

5.3. RESEARCH PHILOSOPHY AND APPROACH

In this section, philosophical assumptions underlying the study are highlighted. This includes delineating both the epistemological and ontological basis of the study, as well as the research approach.

5.3.1 Epistemological basis of the study

Epistemology is derived from two Greek words: "episteme" which means "knowledge" or "science", and "logos" referring to "theory" or "account". From this perspective, Goldman (1993, 1999) perceived epistemology as the "theory of knowledge". Heylighen (1993, p.525) and Pollock and Cruz (1999) defined epistemology as "the branch of philosophy that studies knowledge".

Delineating the epistemological paradigm of the study is essential as it represents the philosophical basis of knowledge that the researcher is seeking to reach in order to answer the research questions. Moreover, suitable research methods emerged from defining the bigger picture (i.e., epistemological paradigm). In social research, the two dominant epistemological assumptions are "positivism" and "interpretivism" (e.g., Bernard, 2000, p.18; Corbetta, 2003, p.12).

Positivism refers to the philosophical stance that regards the world as external to a researcher and consisting of phenomena that can be observed (Corbetta, 2003, p.14). Based on the viewpoint of a natural scientist, the researcher constructs theories that explain an observable social reality and engender law-like generalisations (Blaikie, 2007). This rigorous methodology aims to measure various components of a phenomenon so that they can be compared for their relative frequency, and thereby become subject to replication (Gill and Johnson, 2005). In other words, the positivistic approach looks for law like generalisations and regularities between elements of the social world (Burrell and Morgan, 1979) from an outsider's point of view (Remenyi *et al.*, 1998).

Conversely, in criticising positivism, proponents of interpretivism (Bryman, 2001; Blaikie, 2007) argued that social reality is not objectively determined, but is socially constructed (Husserl, 1969). Hence, the statistical patterns found in the positivistic paradigm are not comprehensible on their own. It is essential to uncover the meanings that people attribute to these patterns. According to Hussey and Hussey (1997), Bryman (2001) and Corbetta (2003), interpretivism is concerned with placing people in their social contexts and with making sense of causal relationships via individual interaction and interpretation. Interpretivism in essence provides the researcher with contextual depth to a particular social phenomenon (Myers, 1997) and is concerned with the uniqueness of a specific situation emphasising the significance of qualitative data (Kaplan and Maxwell, 1994). However, although interpretivism is documented for providing rich and in-depth qualitative data, results are often criticised for a lack of generalisability, reliability and validity.

It can be concluded that each paradigm has its own merits and critics. Yet, choosing the appropriate epistemology is essentially directed by the nature of the research (Saunders *et al.*, 2005) (i.e., research questions and objectives). In this study, the researcher's epistemological beliefs are summarised in table 5.1:

Epistemological principles	Application to the present research
The world is external to the researcher	The determinants and effects of EMO in
and consists of phenomena that can be	universities are perceived as observable
observed.	external realities.
Search for regularities and causal	This research attempts to understand the
relationships between elements of the	relationships between EMO in
phenomenon under study.	universities and its antecedents and
	consequences.
The process of understanding what is	The research is grounded on existing
happening can and should include a look	theories of EMO as a starting point to
for causality and fundamental laws.	investigating the same construct in the
	higher education context.

Source: Developed by the author from the literature

From the table above, it can be inferred that the present research is based on principles of positivism. What the researcher thinks can be known about social reality (epistemology) is influenced by the way the researcher regards the nature and form of social reality (ontology) (Fleetwood, 2005). Therefore, examining the ontological assumptions of the study is necessary.

5.3.2 Ontological basis of the study

The ontological assumption consists of two major perspectives: "realism" and "constructivism". A key premise of realism involves the existence of an external reality which includes: material objectives, laws and figures (Archer *et al.*, 1998).

Realism is divided into two sub-groups, namely "naïve realism" and "critical realism". Unlike naïve realism, which simply asserts that reality can be understood through the use of appropriate methods, critical realists accept that there is no theory-neutral observation or interpretation (Danemark, 2002). From this perspective, reality is not neutral. It is both influenced and has an influence on behaviours. Reality is influenced by a person's pre-existing ideas and knowledge. The observer uses his senses and knowledge to observe, describe, interpret, make sense and assimilate this reality. This will eventually enable the observer to take appropriate actions. Thereby, reality has some consequences. Critical realists believe that an entity is real if:

It has causal efficacy, has an effect on behaviour, and makes a difference. (Fleetwood, 2005, p.199).

Another key principle of the critical realism paradigm is that an entity can exist independently of our knowledge of it (Fleetwood, 2005).

Contrary to the existence of a prescribed reality advocated by realism proponents, constructivists believe that theory is an act of generation, rather than a formalisation of underlying reality. In this respect, constructivists argued that reality is socially constructed (Guba and Lincoln, 1994). The main differences between the two ontological assumptions are summarised in table 5.2.

Table 5.2: Realism and constructivism contrasted

	Realism	Constructivism
Nature of observed reality	Partial but immutable	Socially constructed
Role of manager	Reactor, information	Actor, generator of
	processor.	contexts.
Nature of strategic choice	Rational, response to	Ideological actions of sub-
	contingencies.	organisational interest
		groups.
Organisational identity	Overt, singular.	Multiple, fragmented.
Theories of measurement	Replication as key to	Context as key to
	accuracy.	perspective.

Source: Mir and Watson (2001)

As shown in the table, the key distinction between realism and constructivism revolves around the nature of reality.

Subsequent to outlining the key principles of each ontological assumption, the researcher's ontological beliefs for the present study are summarised in table 5.3.

Ontological principles	Application to the present research
Reality consists of social phenomena that can be understood (Danemark, 2002).	Investigating EMO in universities involves not only studying the causes- effects relationships, but also making sense of the phenomenon as a whole.
Theory has an effect on behaviour, and makes a difference (Fleetwood, 2005).	Examining the theory of EMO in universities would have some implications on a university's management as well as on academics and curricula.
An entity can exist independently of our knowledge of it (Bhaskar, 1978; Patomaki and Wight, 2000).	EMO is argued to represent an "underlying reality" although it is not yet conceptualised or theoretically known in the context of universities.

Table 5.3: Ontological basis of the study

Source: Developed by the author from the literature review

In the present study, EMO is an external reality that exists in a social world composed of different realities, laws and propositions. These realities can be perceived as drivers and consequences of the main phenomenon under study (i.e. EMO). This research attempts to understand the relationships between EMO in universities and its antecedents and consequences, and the generative mechanism underlying these relationships. This takes into account making sense of this phenomenon (EMO in universities). In summary, the underlying ontological assumption of this study is critical realism.

5.3.3 Research approach

Founded upon different research philosophies, research approaches provide an informed choice and a more practical guide for the overall configuration of the research (Saunders *et al.*, 2005). The extent to which the researcher is clear about the theory at the beginning of the research is a key distinction between the deductive and inductive approaches. In the deductive approach, research involves the development of a theory that is subjected to a rigorous test. Conversely, followers of the inductive approach build theory in an inductive way: theory follows the data rather than the contrary, as in the deductive approach (Collis and Hussey, 2003). The main differences between the two approaches are grouped in table 5.4.

Table 5 1: Major differences between	doductive and inductive enproaches
Table 5.4: Major differences between	deductive and inductive approaches

Deductive approach	Inductive approach
-Scientific principles -Moving from theory to data	Gaining an understanding of the meanings humans attach to events.
The need to explain causal relationships between variables.	A close understanding of the research context.
The collection of quantitative data.	The collection of qualitative data.
 -A highly structured approach -The operationalisation of concepts to ensure clarity of definition -The application of controls to ensure valid data 	A more flexible structure to permit changes of research emphasis as the research progresses.
Researcher independence to what is being researched.	The researcher is part of the research process.
The necessity to select samples of sufficient size in order to generalise conclusions.	Less concern with the need to generalise.

Source: Adapted from Saunders et al. (2005)

Although there is a clear distinction between the deductive and inductive approaches (Bryman and Bell, 2007) in the literature, combining the two approaches is not only achievable, but frequent (Saunders *et al.*, 2005). With its different and successive stages, research is a cyclical process of theory development and review of the theory through gathering, analysing and interpreting the data. This data interpretation, in turn, contributes to the development of theory. At the same time, data is rarely collected from scratch (Kaplan, 1964). Generally, data is collected based upon some theoretical foundation, although this theoretical basis is sometimes embryonic. Therefore, research involves a process of recurring data gathering and theory

building. This supports the argument in favour of combining deductive and inductive approaches. In this study, the researcher's approach beliefs are summarised in table 5.5.

Research approach principles	Application for the present research
The search to explain relationships	This study seeks to explain cause-effects relationships associated with EMO in universities.
A highly structured approach	This involves the development of a theory and hypotheses and the design of a rigorous research strategy (section 5.4) to test the hypotheses.
Operationalisation of concepts so that facts can be measured quantitatively.	EMO in universities is operationalised based on the work of Cadogan <i>et al.</i> (1999) and the outcome of the qualitative study. This is to allow quantitative measurement of the level to which a university is export market oriented.
A close understanding of the context	This study is particularly concerned with the implementation of export marketing in a specific context (i.e., higher education).

Table 5.5: Research approach of the study

Source: Developed by the author from the literature review and based on categorisations by Saunders *et al.* (2005)

This study is predominantly based on a deductive approach, given that the concept of EMO is theoretically grounded in the literature (Cadogan *et al.*, 1999; 2001). Based on the existing theory of EMO, this study aims to examine the application of the same concept within the context of universities. Therefore, theory preceded the collection of data in the initial stage of the research. Moreover, as developed in table 5.5, the distinctive characteristics of deduction do apply to the present study. However, even if EMO is a well-established construct, it is newly applied to the

higher education context. In this respect, qualitative data (through semi-structured interviews) was collected in a subsequent stage of the research to get the feel of what is going on within the context of universities. In this stage, developing the theory of EMO in universities was based on the qualitative data collected (induction characteristic). In turn, the theory developed was subjected to a quantitative test, given that the present study followed a rigorous and highly structured research design.

In summary, it can be concluded that this study involved a process of cyclical data gathering and theory building during different stages of the research. While deduction is the main approach of the study, a close understanding of the context of universities through qualitative research is essential, in view of the specificities of this context.

5.4 RESEARCH DESIGN

Research design is a general plan of how the researcher intends to answer the research questions set (Saunders *et al.*, 2003). Research design entails defining the nature of the methodology to be implemented, as well as the spatial location, industry and unit of analysis selected.

5.4.1 Methodological triangulation

Methodological triangulation, as the term indicates, involves triangulating or employing more than one type of methodology (Bryman, 2006). The underlying principle of the main categories of methodologies is explained and the rationale for methodological triangulation is also presented.

5.4.1.1 The qualitative/quantitative divide

Quantitative studies seek to explain statistical patterns which describe regularities in human lives (Collis and Hussey, 2003). According to Payne and Payne (2004), quantitative methods search for:

Regularities in human lives by separating the social world into empirical components called variables which can be represented numerically as frequencies or rate, whose associations with each other can be explored by statistical techniques, and accessed through researcher-introduced stimuli and systematic measurement

(Payne and Payne, 2004, p. 180).

Quantitative studies focus on testing hypotheses and generalise the findings to a broader population (Saunders *et al.*, 2005). On the other hand, qualitative studies give emphasis to the social world and the details of reality which people - as social actors - produce (Corbetta, 2003). Therefore, qualitative studies aim to understand the meanings that people attribute to different aspects of their lives (Silverman, 1993).

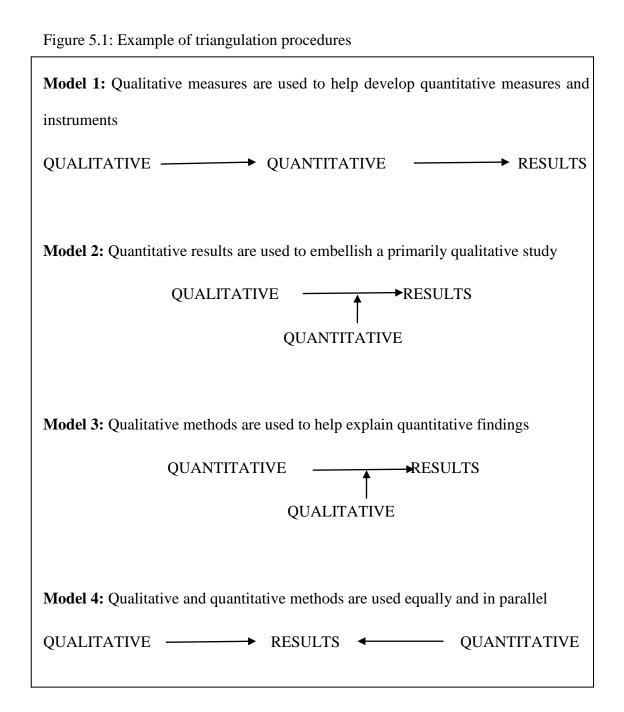
Both perspectives have merits and limitations. While Payne and Payne (2004) criticised qualitative studies for their lack of generalisability, validity and reliability; Schwandt (1994) described the quantitative logic as mechanistic and degrading to the human nature, which contradicts the principles of social sciences.

5.4.1.2 The argument for methodological triangulation

Given the abovementioned limitations of each approach, combining both qualitative and quantitative approaches can strengthen a study (Greene and Caracelli, 1997), as it neutralises some of the weaknesses of other methods (Jick, 1979; Lyon *et al.*, 2000; Tashakkori and Teddlie, 2003). In combining qualitative and quantitative methods, the researcher uses a number of methods to study the same phenomenon. This is termed "methodological triangulation" (Denzin, 1978; Olsen, 2004). Triangulation can be used when approaching a phenomenon from different perspectives and thereby allows conclusive understanding of the research problem (Jick, 1979; Deshpandé, 1983; Lyon *et al.*, 2000).

The procedure of implementing methodological triangulation can take different forms, although the principle of combining both qualitative and quantitative methods is the same. Different triangulation procedures are grouped in figure 5.1.

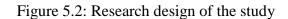
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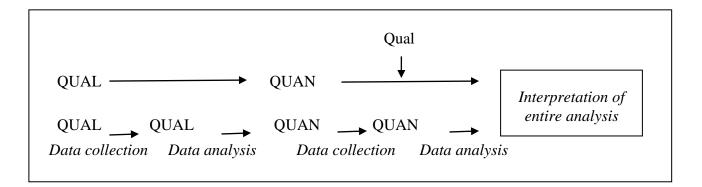


Source: Adapted from Steckler, McLeroy, Goodman, Bird, and McCormick (1994)

The choice of a particular procedure depends on the research approach and questions (Tashakkori and Teddlie, 2003). Based on the research approach, this study adopted a combination of model1 and model3 of triangulation (figure 5.1). The study was

conducted in two main phases. The study predominantly employed a quantitative method, in particular, a self-administered questionnaire survey, to investigate the antecedents and consequences of EMO in universities. A qualitative method (i.e., semi-structured interviews) was initially used to validate the measurement scales before the main survey was undertaken. In other words, the research adopted an initial phase of qualitative data collection and analysis, followed by a phase of quantitative data collection and analysis (Creswell *et al.*, 2003). The researcher included a supplementary qualitative phase (i.e. follow-up interviews) to help explain quantitative findings. The findings of the three phases are then integrated during the interpretation stage (see figure 5.2). The adoption of this sequential design enabled the researcher to explore the concept of EMO in a new setting (i.e., universities). Qualitative results then formed the scales framework for the explanatory phase of the study aiming to test the different relationships. Follow-up interviews helped the researcher in explaining the quantitative results. The findings from the three phases were used to interpret the entire analysis.





Source: Developed from literature

5.4.2 Research setting: industry and spatial location

It is sensible to choose a setting in which EMO can be observed and measured. Parallel to the general expansion of services exports (Chadee and Mattsson, 1998; Daniels, 2000), higher education has witnessed a global increase in the export of its services (Marginson, 2006; Martens and Starke, 2008). The rise in educational exports saw a growing interest by higher education institutions in the implementation and pursuit of export marketing (i.e., EMO). In spite of the presence and importance of export marketing, EMO has yet to be conceptualised in the higher education context. The conceptualisation of EMO in higher education enabled the concept to be clearly observed and easily measured. Hence, higher education represented a rich context in which to carry out the present study.

In the higher education environment, universities are relatively large and developed institutions with different functions and departments (De Boer *et al.*, 2007). Generally, universities have an independent international office and, more specifically, an international marketing unit responsible for managing the marketing activities to export markets (Ayoubi and Massoud, 2007). Therefore, universities are a suitable setting in which to examine the implementation of export marketing.

According to past literature (e.g., Karol and Ginsburg, 1980; Walford, 1996; Maringe, 2005), universities operate in a highly competitive environment. This has led a number of higher education systems to exploit exporting opportunities. The export of educational services has increased considerably worldwide in the last decade (Martens and Starke, 2008). Parallel to that, government funding has declined

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considerably in various countries (e.g., the UK, Australia) since the mid-1980s (Lindsay and Rodgers, 1998). It can be inferred that EMO in universities is expected to be clearly examined and measured in the context of exporting universities. On the other hand, the relationship between some factors specific to the educational setting and EMO in universities can also be investigated.

With the increased accountability sought from universities vis-à-vis the state (Peters, 1992), governments place a significant emphasis on performance measures in higher education as key modes of accountability (Berdahl, 1990). In particular, export performance represents an important indicator of performance measuring the success of universities in their export operations. Therefore, investigating export performance as an outcome of EMO in universities is important.

The suitable spatial location for this study relates to countries with both high exporting profiles and considerable export marketing implementation, in order for the concept of EMO to be observed.

The higher education industry is identified by many governments as one of the strategic sectors that can attract more foreign customers (i.e., international students) (Bolsmann and Miller, 2008). With the English language comprising a significant competitive advantage, the UK is one of the largest exporters of higher education services in the world (OECD 2004, pp.284-286; Bolsmann and Miller, 2008). By 1997, education exports from the UK accounted for over £9 billion (Bennell and Pearce, 2003). The UK, with a well-established history of higher education, has built an international reputation for considerable expertise in different areas (Ayoubi and

Massoud, 2007). Therefore, the UK became a popular international destination for several courses and programmes (Larsen and Vincent-Lancrin, 2002).

In line with the increase in educational exports from the UK, export marketing activities have expanded widely in British higher education. In trying to be close to foreign markets, a number of UK universities have established various branch campuses overseas (Van Der Wende, 2001). In this context, UK universities are some of the most proactive universities in the field of creating effective international strategies (Toyoshima, 2007). With the implementation of export marketing as a central issue in the international strategic planning of universities, UK universities represent a suitable setting in which to conduct the present research.

5.4.3 Unit of analysis

Collis and Hussey (2003) defined the unit of analysis as:

The kind of case to which the variables or phenomena under study and the research problem refer, and about which data is collected and analysed (Collis and Hussey, 2003, p. 68).

The unit of analysis can be an individual, dyad, event, object, group, and organisation or even aggregated to a larger level (e.g., country) (Kervin, 1992). The choice of unit of analysis is guided by the research focus (Sekeran, 2003). The present study's focus is the university with an emphasis on organisational (university) constructs and their hypothesised relationships in the conceptual model (figure 4.2). Therefore, the analysis was carried out on the university level. More specifically, the focus of the present research is the international office. Hence, the

appropriate unit of analysis in both the qualitative and quantitative studies of this research is the international office of university. Furthermore, the data collection has to be completed at the individual level. Questionnaires were distributed to senior managers in the international office in order to measure EMO in universities and its relationship with other constructs. Further details about data collection procedure will be presented later in this chapter.

5.5 FIRST PHASE: QUALITATIVE RESEARCH

As mentioned in the research design (section 5.4.1), the first stage of the empirical study involved the conduct of qualitative research.

Qualitative research is a recognised method of research in the social sciences. Its value in generating valuable contextualised information is widely recognised (Creswell *et al.*, 2003). As the present study puts considerable emphasis on the industrial context (i.e., higher education), qualitative enquiry is considered to be valuable.

In addition, the researcher employed the qualitative research to achieve the following objectives:

- Clarification of domain of constructs
- Addressing the research questions and assessment of proposed causal relationships
- Item generation and scale development

5.5.1 Qualitative data collection methods

5.5.1.1 Why the personal interview technique?

According to Saunders *et al.* (2003), interviews are most advantageous when the study includes both exploratory and explanatory elements. The researcher favoured the interview technique for the first stage of the data collection because of the exploratory nature of this stage of the study. Moreover, the explanatory element of this study makes the use of interviews appropriate given that interviews enable the inference of causal relationships between variables (EMO, its antecedents and consequences) (Cooper and Schindler, 1998).

With qualitative interviews, the researcher is mainly interested in the interviewee's viewpoint (Bryman and Bell, 2007). Interviews provided the researcher with some flexibility in asking more detailed, open-ended and follow-up questions, which is not possible with some other forms of data collection (i.e., questionnaires). Thus further information can be obtained. This is important in gaining rich and detailed information on how universities manage and perceive the concept of EMO.

In addition, personal interviews take account of the social atmosphere of the setting being investigated as well as non-verbal communications such as the attitude and behaviour of the interviewee (Collis and Hussey 2003). This enabled the researcher to "get the feel" of the context under study (i.e., higher education). Through personal interviews the researcher aimed to explore how interviewees responded to a newly applied concept in universities (i.e., EMO). This formed a basis for the investigation of the implementation of export marketing in universities.

5.5.1.2 Why specifically key informant semi-structured interviews?

With regard to key informant interviews, respondents were selected on the basis of their distinctive and specialised knowledge rather than being randomly chosen to sample the range of issues investigated (Jankowicz, 2000). This technique is especially useful when the study aims to define the essential characteristics of key concepts, by drawing on the personal experience and understanding of the people involved (Tremblay, 1982). The way in which such a concept as "EMO" is understood and interpreted in practice within the particular organisation (i.e., a university) needs to be investigated from the perspective of the key informant (i.e., head of international office) who is believed to have conclusive knowledge of the different export marketing operations carried out by the university.

Specifically, key informant semi-structured interviews are appropriate for this study. From this perspective, the researcher started the investigation with a fairly clear focus, so that more specific issues can be addressed (Bryman and Bell, 2007). In this context, a list of questions on quite specific topics to be covered (i.e., export marketing activities) was prepared. This is referred to as an interview guide as shown in appendix 1.

5.5.2 Sampling (respondents)

Generally, qualitative researchers are clear that their samples are often purposive (Collis and Hussey, 2003; Bryman and Bell, 2007). More specifically, the use of purposeful sampling is apposite to key informant interviews (Jankowicz, 2000). Because qualitative studies aim to generate an in-depth analysis rather than emphasising generalisability, issues of in-depth understanding of the theme under investigation are far more important than issues of representativeness (Bryman and Bell, 2007). Thus, purposeful sampling is favoured over probability sampling in qualitative studies.

Regarding the use of key informant interviews in the present study, drawing on purposeful sampling is suitable for this study. When choosing a purposive sampling method, the researcher actively selected information-rich cases which represent the most productive sample to answer the research question (Marshall, 1996).

Among different strategies of purposeful sampling (Patton, 1990; Coyne, 1997), this study adopted theoretical sampling. This is because theoretical sampling is the core of qualitative research, while it also enables a theoretical coverage of the research conceptual framework (Boeije, 2002).

From this definition, it is comprehensible that samples are selected progressively in the course of theory building. Primary data is collected and analysed which shapes the development of theory. Subsequently, the outcome of this analysis will lead to the collection of additional data through the selection of new samples and therefore further elaboration of theory (Marshall, 1996).

Based on the sequential design adopted as shown in section 5.4.1, the qualitative study is principally an introductory phase to the main study (quantitative). This phase is concerned with the refinement of ideas, rather than boosting sample size (Coyne, 1997; Charmaz, 2000). Therefore, a representative sample size is not a necessity for the qualitative stage of this study. This is consistent with Saunders *et al.* (2003) stating that sample sizes in qualitative research are typically much smaller than sample sizes in qualitative research. In addition, there are no rules informing the sample size in qualitative studies (Coyne, 1997).

For the present study, adopting theoretical sampling aims to generate data covering every aspect of the research framework. Thereby, the number of required participants became evident as the study progressed, as new themes stopped emerging from the data, and as concepts originating from the predetermined conceptual framework were saturated in the data (Marshall, 1996). This is what Bryman and Bell (2007) described as theoretical saturation and defined as the following:

The researcher carries on collecting data until a category has been saturated with data

(Bryman and Bell, 2007, p.460).

Accordingly, the use of theoretical sampling determined the sample size.

The UK was chosen to be the context for the qualitative study. In particular, the new generation of universities were created in or after 1992 from polytechnics and colleges of higher education are targeted. These universities are generally commercial teaching-focused export institutions serving foreign markets at a lower cost/lower quality level (Marginson, 2006). The new generation of universities has often witnessed the biggest increase in diversity of students in terms of ethnic backgrounds (Read *et al.*, 2003). This reveals that these universities are actively engaged in internationalisation and exporting activities. The strategic choices of new universities are fairly income-driven. Therefore, export marketing has become increasingly important given the keenness of universities to enhance their brands overseas (Rolfe, 2003) given that:

Such universities do not have the luxury of the older, established universities who can fall back on their reputations

(Rolfe, 2003, p.40).

More specifically, universities in London can capitalise on their location in a city popular with foreign visitors and overseas students (Rolfe, 2003). Thus, post-1992 universities in London were a departing point for the theoretical sampling in this study. As the study progressed, theoretical sampling informed the researcher the number of required subjects and where to find them to reach theoretical saturation. In line with previous studies investigating international strategies in UK universities (Rolfe, 2003; Toyoshima, 2007) and targeting directors of international marketing units of international offices, it is considered that the same respondents are suitable interviewees for the present study. Given that international policies are strongly influenced by the international office (Toyoshima, 2007), directors of international marketing units of international offices are believed to have the expertise and necessary knowledge of export marketing and therefore represent a key informant sample.

Respondents	Due to their special expertise in export marketing, post-1992 universities represent the focus of the qualitative study. In addition, the researcher chose to focus on the testimony and remarks of directors of international marketing units of each university selected. This analytic choice was made because this party represents the main group knowledgeable and involved in the enquiry.
Key issues	The literature review of the theories of EMO and higher education marketing resulted in developing a conceptual framework of EMO in universities. This framework represents the theoretical foundation to be elaborated through the analysis of a theoretical sample of semi- structured interviews.
Limits	Constraints on time and financial resources limited the qualitative study to those universities that approved participation within the allocated period (5 months).

In summary, sampling was determined by three main considerations:

Source: Developed by the author

5.5.3 Analysis and interpretation

Together with theoretical sampling, the constant comparative method constitutes the core of the qualitative analysis (Boeije, 2002). Comparison is the dominant principle of the analysis process in qualitative research. From this perspective, this study analysed the informants' responses using the constant comparative method suggested

by Strauss and Corbin (1990) and Spiggle (1994). This method was performed with Nvivo which is software for analysing qualitative data (Bryman and Bell, 2007).

Given that the phase of data collection was conducted subsequent to the development of the theoretical framework, the researcher followed an explanation building approach for the qualitative analysis (Yin, 1994). The use of literature and the theory was a departing point of the concurrent collection and analysis. Following this method, relevant themes were extracted from interviews and constantly compared with themes preconceived from the conceptual framework and hypotheses (Glaser and Strauss, 1967; Erlandson *et al.*, 1993).

The process of data analysis involved first disaggregating the qualitative data collected into significant and related groups through open coding. Categories were coded. Each code represents a particular aspect of the phenomenon under study. The synthesis and reorganisation of coded categories led to the development of themes and patterns which can be confronted by existing theories (Collis and Hussey, 2003). Subsequently, the researcher used selective coding to specify relationships between the constructs. The interpretation of these reviews enabled the researcher to reveal the dimensions of EMO in universities as well as find out its major causes and outcomes.

In opposite to quantitative studies which rely on validity and reliability measures to assess the quality of outcomes, an important criterion measuring the quality of qualitative results is trustworthiness (Marshall, 1996). Trustworthiness can be achieved by the use of theoretical sample which enables the researcher to cover every aspect of the research questions. Moreover, repeating the coding process more than once - as the study was carried out by one researcher - enhanced the findings' trustworthiness (Boeije, 2002).

5.6 SECOND PHASE: QUANTITATIVE RESEARCH

Bryman and Bell (2007) described quantitative research as:

Entailing the collection of numerical data and as exhibiting a view of the relationship between theory and research as deductive ... and as having an objectivist conception of social reality

(Bryman and Bell, 2007, p.154).

In light of this definition, the researcher seeks to develop valid and reliable measures of the theoretical constructs based on a synthesis of ideas from the literature and qualitative study. The first phase resulted in generating several items. The researcher excluded identical or equivalent items to produce a parsimonious scale. Face validity was performed by a number of academics who assessed the items generated from the qualitative study as only items that are representative of the scale's domain were kept. This process followed Churchill (1979) approach of systematic scale development procedures. The process of scale development followed is shown in figure 5.3.

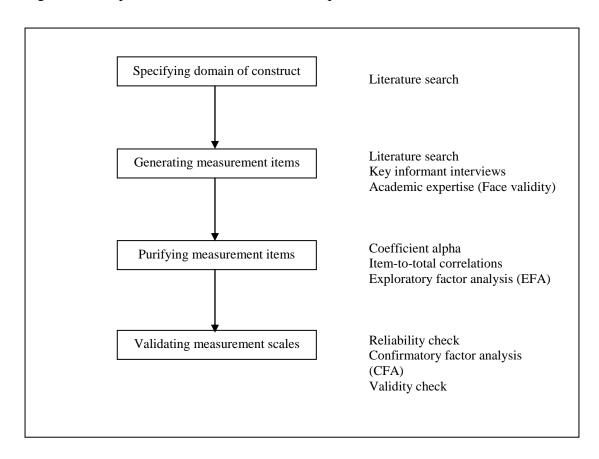


Figure 5.3: Steps in measurement scales development

Source: Adapted from Churchill (1979)

5.6.1 Domain of constructs and measurement scales from literature

According to Churchill (1979), it is important to consult the literature in the first step of the scale development procedure. Therefore, the literature search represented a preliminary stage to uncovering the dimensions of the theoretical constructs: i.e., specifying domain and items of constructs.

5.6.1.1 Export coordination in university

Derived from Slater and Narver (1990), Kohli and Jaworski (1990), Cadogan and Diamantopoulos (1995) and Cadogan *et al.* (1999), export coordination in an

university largely consists of a coordinated effort between the international marketing office and the university's schools/departments to carry out effective export market-oriented activities. To measure this construct, the present thesis used an adapted/reworded version of Cadogan's *et al.* (1999) scale of export coordination to suit the higher education context.

5.6.1.2 University attitude toward governmental funding

Based on Ebaugh *et al.* (2005) and (2006), "university attitude towards government funding" refers to the university's assessment of government funding as a funding source. The current research used an adapted version of Ebaugh's *et al.* (2005) scale of attitude toward funding sources.

5.6.1.3 University national ranking position

University national ranking position refers to the evaluation of the rank assigned to a university according to a specific league table comparing universities within national boundaries (Dill and Soo, 2005; Usher and Savino, 2006; Thakur, 2007). No study, to the best of the author's knowledge, has so far produced a valid, reliable reflective scale to assess universities' national ranking positions. According to Dill and Soo (2005), the researcher used a "proxy measure" related to the academic performance indicators in the UK *Times* league table. These indicators determine the rank attributed to each university.

5.6.1.4 Perceived higher education country image

Based on Papadopoulos and Heslop's (1993) product-country image and Li's (2008) definition of higher education country image, perceived higher education country

image denotes managers' perceptions of the image of higher education in a specific country (Li, 2008). The current research used an adapted version of Li's (2008) scale of higher education country image based on Gray's *et al.* (2003) study on brand positioning in higher education.

5.6.1.5 Export market orientation (EMO) in a university

EMO in a university consists of various generic activities associated with the generation, dissemination, and response to export market intelligence and that are oriented towards export customers (i.e., international students), export competitors, and exogenous market influences (based on Cadogan *et al.*, 1999) in the context of international students' recruitment.

Export market information generation in universities involves the search for export market intelligence pertaining to different stakeholders (e.g., prospective and international students, other universities) taking part in the foreign higher education market, by formal (e.g., in-house export market research, planned meetings with international students) and informal means in the context of international students' recruitment.

Export market information dissemination in university is the diffusion of seminal export market information throughout the university both hierarchically and horizontally through formal (e.g., regular interdepartmental meetings) and informal means in the context of international students' recruitment.

University responsiveness to export market information consists of the design and implementation of responses to the intelligence generated and disseminated through the use of different marketing strategies (e.g., segmentation, positioning, planning) in the context of international students' recruitment.

Export market-oriented activities in universities are measured using Cadogan's *et al.* (1999) EMO scale. Their original instrument was amended (reworded) to reflect the situation in universities rather than business units. The changes involved substituting school/department for business unit; higher education environment for industry; courses for products; and international students for export customers. The adaptation of the initial EMO scale to the higher education context is based on Caruana *et al.* (1998a) and Wasmer and Bruner's (2000) studies on MO in universities.

5.6.1.6 University export performance

University export performance is related to the business performance indicators of universities operating in an export market in the context of international students' recruitment (based on Rosé and Shoham, 2002). University export performance was measured based on Rosé and Shoham (2002) scale of export performance. Once again, their original instrument was amended to reflect the situation in universities based on Zajac's and Kraatz (1993) scale of university business performance. The researcher adopted aspects related to enrolment, revenues, managers' satisfaction and goal achievement. These aspects are the most suitable for the higher context as detailed in the previous chapter (section 4.3).

5.6.1.7 University international reputation

Based on Moizer (1997) and Alessandri *et al.* (2006), a university's international reputation is the collective representations that the university's multiple stakeholders in the international market, including the media, hold about the university over time. This research adapted Gray's *et al.* (2003) scale of university reputation and Nguyen's and LeBlanc (2001) scale of institutional reputation to measure university international reputation.

The unit of analysis of this research is the university, with a focus on the managerial perspective. Therefore, university international reputation was measured from the managers' perspective. According to Dutton et *al.* (1994), an organisation's reputation is highly correlated with the external reputation of the organisation as perceived by insiders (e.g. managers). In other words, an organisation's reputation from the viewpoint of customers is highly correlated with reputation as perceived by managers. This supports the adequacy of measuring this construct from the managers' viewpoint.

5.6.2 Initial pool of items

The second step of developing measurement scales was to generate an initial pool of items which represent the domains of the constructs. The researcher initially examined items from the literature and refined them against the qualitative study. The researcher identified relevant items for each construct. Items were kept to a minimum to achieve parsimony (Devillis, 2003). The initial item generation produced 73 items. The following table reveals the constructs/dimensions and their measurements from the literature and the qualitative study.

Construct	Measurement items	Sources
1. Export coordination in university	1.1 Key players from other departments (e.g., different schools/faculties and departments) in our university are supportive of the international office activities.1.2 Departments in our university work together as a team in relation to our foreign business.	Adapted from Cadogan, Diamantopoulos, and De Mortanges (1999) Adapted from Cadogan, Diamantopoulos, and De Mortanges (1999)
	1.3 The head of the international office has a very strong working relationship with all the deans/heads of faculties/schools in the university.	The qualitative study
	1.4 All faculties/schools and departments in our university are brought into the international strategy of the university.	The qualitative study
	1.5 Personnel from the international office share resources with other departments in our university.	Adapted from Cadogan, Diamantopoulos, and De Mortanges (1999)
	1.6 Certain key players in our university attach little importance to our export activities (i.e., international recruitment).	Adapted from Cadogan, Diamantopoulos, and De Mortanges (1999)
	1.7 In our university there is "interdepartmental" conflict.	Adapted from Cadogan, Diamantopoulos, and De Mortanges (1999)
	1.8 We resolve issues and conflicts through communication and group problem-solving.	Adapted from Cadogan, Diamantopoulos, and De Mortanges (1999)
2.University attitude toward government	2.1 We are receiving a small amount of funding for scholarships from the government.	The qualitative study
funding	2.2 Government funding is not difficult to obtain.	Adapted from Ebaugh, Chafetz and Pipes (2005)
	2.3 Government funding is a stable source of funding.	Adapted from Ebaugh, Chafetz and Pipes (2005)
	2.4 Government funding is the type of funding we prefer to rely on.	Adapted from Ebaugh, Chafetz and Pipes (2005)
	2.5 The share of public revenues is modest compared to other sources.	The qualitative study
	2.6 The amount of money from public sources is small.	The qualitative study

Table 5.6: Measurement items for the constructs of the study

		ı
3.University	3.1 Entry standards	Dill and Soo (2005)
national ranking position	3.2 Student/staff ratio	Dill and Soo (2005)
	3.3 Teaching quality	Dill and Soo (2005)
	3.4 Graduation rates	Dill and Soo (2005)
	3.5 Graduation prospects	Dill and Soo (2005)
	3.6 Research quality	Dill and Soo (2005)
4.Perceived higher education country image	We perceive UK higher education to have the image of:	Based on Gray, Fam and Llanes' (2003) study on brand
country mage	4.1 Good student support system.	positioning in higher education,
	4.2 Reasonable tuition fee.	Li's (2008) study on
	4.3 Low standard of education.	higher education image,
	4.4 High quality of courses.	and also supported and improved by the
	4.5 High level of resource allocation for research.	qualitative study
	4.6 High quality of teaching staff.	
	4.7 A positive view of graduates by employers.	
	4.8 High employment rate for graduates.	
	4.9 Highly recognised degrees worldwide.	
5.Export market information generation in university	 5.1 We work with various higher education bodies and organisations which provide us with relevant marketing information concerning our foreign markets. 5.2 We get lots of marketing information in terms of changes in demand and prospective students' requirements from our education partners and agents overseas. 5.3 We regularly run focus groups with current international students in order to learn how to serve them better. 5.4 We regularly participate in international fairs overseas so that we can track the different needs of students from different countries. 5.5 We survey international students at least once a year to assess the quality of our courses and services. 	Based on Cadogan, Diamantopoulos, and De Mortanges' (1999) scale of export market orientation, Caruana, Ramaseshan and Ewing's (1998) scale of market orientation in universities. Wasmer and Bruner's (2000) study on market orientation in universities, and also enhanced and validated by the qualitative study

	 5.6 In this department (international office), we do a lot of secondary market research concerning trends (e.g., competitors, regulation, political, economical, technological developments) in our foreign markets. 5.7 We generate enough relevant information concerning our competitors' activities in our foreign markets. 5.8 We periodically review the likely effect of changes in our foreign business environment (e.g., technology, regulation). 5.9 We analyse our own data through the university's main database, to observe the trends of courses that international students are interested in. 	
6.Export market information dissemination in university	 6.1 Our international office liaises with our university departments so that they have enough understanding of their key markets. 6.2 We have regular formal meetings with our university departments/schools/faculties to discuss foreign markets trends and developments. 6.3 We regularly disseminate to the deans/heads of faculties/schools a report providing information on our foreign markets. 6.4 We use the university portal as the key tool for disseminating information on our foreign markets. 6.5 We feed back to the schools/faculties about their recruitment process through informal conversations as part of everyday communication. 6.6 As an international office, we feed information that we get from current international students back to the relevant institution department in order to take action. 6.7 When designing a new course, we advise schools/faculties on what we think their foreign markets are likely to be in order to meet the needs and wants of their foreign markets. 6.8 Personnel from the international office frequently discuss competitors' activities with personnel from other departments of the university. 	Based on Cadogan, Diamantopoulos, and De Mortanges' (1999) scale of export market orientation, Caruana, Ramaseshan and Ewing's (1998) scale of market orientation in universities, Wasmer and Bruner's (2000) study on market orientation in universities, and also enhanced and validated by the qualitative study
7. University responsiveness to export market information	7.1 We have good support for international students (e.g., accommodation, obtaining visas, orientation, and airport pickups) in order to improve their experience.7.2 The information we give out to international students is accurate, clear and understandable.	Based on Cadogan, Diamantopoulos, and De Mortanges' (1999) scale of export market orientation,

	 7.3 If we sense a need for a particular course, we implement it in a timely fashion in order to respond to foreign market trends. 7.4 When we find out that international students are unhappy with the quality of our services, we put a taskforce into place to try to satisfy them. 7.5 We are slow to decide how to respond to significant changes in our competitors' fees structures in foreign markets. 7.6 We are quick to respond to important changes taking place in the global environment within which our institution operates (e.g., regulatory, technology, economy). 7.7 International students' complaints fall on deaf ears in this university. 7.8 We rapidly respond to competitive actions that threaten us in our foreign markets. 7.9 We periodically review our courses' development to ensure that the courses are in line with what international students want. 7.10 The educational services we provide to our foreign markets depend more on internal politics than real market needs. 7.11 All departments in our institution are involved in implementing our marketing strategy for international recruitment. 	Caruana, Ramaseshan and Ewing's (1998) scale of market orientation in universities, Wasmer and Bruner's (2000) study on market orientation in universities, and also enhanced and validated by the qualitative study
8.University export performance	 8.1 Enrolment volume of international students (non-EU). 8.2 University position in terms of numbers of international students recruited relative to other UK universities. 8.3 Level of international students' satisfaction. 8.4 Revenues from international students as a percentage of university total revenues. 8.5 Number of international students recruited as a result of our alumni. 8.6 Managers' satisfaction with the enrolment volume of international students. 8 7 Managers' satisfaction with the university position 	Based on Rose and Shoham's (2002) scale of export performance, Zajac and Kraatz's (1993) scale of university performance, and also enhanced and supported by the qualitative study
	8.7 Managers' satisfaction with the university position in terms of numbers of international students recruited relative to other UK universities.	

	8.8 Managers' target related to the enrolment volume of international students (non-EU).8.9 Managers' target related to university position in terms of numbers of international students recruited relative to other UK universities.	
9.University international reputation	9.1 Our university has a good reputation worldwide.9.2 In general, I believe that our university always fulfils the promises it makes to its international students.	Adapted from Nguyen and LeBlanc (2001) Adapted from Nguyen and LeBlanc (2001)
	9.3 I believe that the reputation of our university is internationally better than other universities.9.4 The university offers a worldwide reputable degree.	Adapted from Nguyen and LeBlanc (2001) and qualitative study The qualitative study
	9.5 The university offers worldwide high quality courses.	Adapted from Gray, Fam and Llanes (2003)
	9.6 The university offers high standard of education internationally.	Adapted from Gray, Fam and Llanes (2003)
	9.7 The university has a strong brand name internationally.	Adapted from Gray, Fam and Llanes (2003)

Source: Developed for the current study by the researcher

5.6.3 Content adequacy assessment

The initial pool of items was subjected to face validity. Although face validity is subjective in nature, it provides an indication of the appropriateness of the questionnaire.

In order to establish the face validity, the researcher asked two panels of experts for feedback. The first panel included six academics in the business school; the second group included three international marketing officers in the international office of UK universities. The panel members were provided with the questionnaire to evaluate the items' representation of the construct domain. The researcher used the comments from the panel members to make the necessary modifications to the scale (i.e., paraphrasing, deleting or adding items). This process is detailed in the following paragraphs.

Most academics commented on item 4.3 (Low standard of education) as unenthusiastic and involving bias. Thus, this item was dropped. In addition, marketing officers judged item 2.2 (Government funding is not difficult to obtain) to contain double negation and therefore to be confusing and needing rephrasing (Government funding is easy to obtain). Two academics and all marketing officers commented on the following negatively worded items 2.1 (We are receiving a small amount of funding for scholarships from the government); 2.5 (The share of public revenues is modest compared to other sources); 2.6 (The amount of money from public sources is small) and 3.2 (student/staff ratio) as ambiguous. The researcher positively reworded these items respectively to: We are receiving a considerable amount of funding for scholarships from the government; the share of public revenues is significant compared to other sources; the amount of money from public sources is considerable; and staff/student ratio. This is consistent with Barnette (2000) advocating the use of positively or directly worded items, unless the use of negatively worded items is truly required. Most of the research into educational and psychological measurement (e.g., Schriesheim and Hill, 1981; Chamberlain and Cummings, 1984; Melnick and Gable, 1990) support the use of positively worded items.

Most academics and marketing officers commented on items 6.4, 8.2, 8.7 and 8.9 (see table 5.6) as not clear and difficult to understand. They were changed to: we use the intranet portal of the university as the key tool for disseminating information on our foreign markets; university market share of international students recruited relative to other UK universities; managers' satisfaction with the university market share of international students recruited relative to other UK university market share of international students recruited relative to other UK university market share of international students recruited relative to other UK university market share of international students recruited relative to other UK universities; and managers' targeted university market share of international students recruited relative to other UK universities.

Finally, although item 7.7 (international students' complaints fall on deaf ears in this university) is based on a previous study by Cadogan *et al.* (1999), this item was judged by some academics as odd and not academic, and thus was rephrased as: in the international office, we tend to ignore international students' complaints.

Based on the content adequacy assessment, items were modified (see 5.7). The researcher then submitted the items to the actual administration of the questionnaire.

Most items were measured on 7-point Likert-type scales, with anchors of 1=very strongly disagree and 7=very strongly agree. The use of the Likert scale is consistent with previous studies in export marketing (e.g., Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a) and higher education marketing (e.g., Caruana *et al.*, 1998a).

Construct	Items wording	Items
(Dimension)		codes
Export coordination in a university	Key players from other departments (e.g., different schools/faculties and departments) in our university are supportive of the international office activities.	COOR1
	Departments in our university work together as a team in relation to our foreign business.	COOR2
	The head of the international office has a very strong working relationship with all the deans/heads of faculties/schools in the university.	COOR3
	All faculties/schools and departments in our university are brought to the international strategy of the university.	COOR4
	Personnel from the international office share resources with other departments in our university.	COOR5
	Certain key players in our university attach little importance to our export activities (i.e., international recruitment).	COOR6
	In our university there is "interdepartmental" conflict.	COOR7
	We resolve issues and conflicts through communication and group problem-solving.	COOR8
University attitude	We are receiving considerable amount of funding for	UAGF1
toward government	scholarships from the government.	error r
funding	Government funding is easy to obtain.	UAGF2
B	Government funding is a stable source of funding.	UAGF3
	Government funding is the type of funding we prefer to rely	UAGF4
	on. The share of public revenues is significant compared to other sources.	UAGF5
	The amount of money from public sources is considerable.	UAGF6
University national	Entry standards.	UNRP1
ranking position	Staff/student ratio.	UNRP2
	Teaching quality.	UNRP3
	Graduation rates.	UNRP4
	Graduation prospects.	UNRP5
	Research quality.	UNRP6
Perceived higher	We perceive UK higher education to have the image of:	
education country	Good student support system.	PHECI1
image	Reasonable tuition fee.	PHECI2
-	High quality of courses.	PHECI3
	High level of resource allocation for research.	PHECI4
	High quality of teaching staff.	PHECI5
	A positive view of graduates by employers.	PHECI6
	High employment rate for graduates.	PHECI7

Table 5.7: Measurement iter	ms after face validity
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	Highly recognised degrees worldwide.	PHECI8
Export market information generation in a university	We work with various higher education bodies and organisations which provide us with relevant marketing information concerning our foreign markets. We get lots of marketing information in terms of changes in	IGen1 IGen2
	demand and prospective students' requirements from our education partners and agents overseas. We regularly run focus groups with current international students in order to learn how to serve them better.	IGen3
	We regularly participate in international fairs overseas so that we can track the different needs of students from different countries. We survey international students at least once a year to assess	IGen4 IGen5
	the quality of our courses and services. In this department (international office), we do a lot of secondary market research concerning trends (e.g., competitors, regulation, political, economical, technological developments) in our foreign markets.	IGen6
	We generate enough relevant information concerning our competitors' activities in our foreign markets.	IGen7
	We periodically review the likely effect of changes in our foreign business environment (e.g., technology, regulation). We analyse our own data through the institution's main database, to observe the trends of courses that international	IGen8 IGen9
	students are interested in.	
Export market information dissemination in a	Our international office liaises with our university departments so that they have enough understanding of their key markets.	IDiss1
university	We have regular formal meetings with our university departments/schools/faculties to discuss foreign markets trends and developments.	IDiss2
	We regularly disseminate to the deans/heads of faculties/schools a report providing information on our foreign markets.	IDiss3
	We use the intranet portal of the university as the key tool for disseminating information on our foreign markets. We feed back to the schools/faculties about their recruitment process through informal conversations as part of everyday	IDiss4 IDiss5
	communication. As an international office, we feed information that we get from current international students back to the relevant institution department in order to take action.	IDiss6
	When designing a new course, we advise schools/faculties on what we think their foreign markets are likely to be in order to meet the needs and wants of their foreign markets.	IDiss7
	Personnel from the international office frequently discuss competitors' activities with personnel from other departments of the university.	IDiss8
University responsiveness to export market	We have good support for international students (e.g., accommodation, obtaining visas, orientation, and airport pickups) in order to improve their experience.	Resp1
information	The information we give out to international students is accurate, clear and understandable.	Resp2
	If we sense a need for a particular course, we implement it in a timely fashion in order to respond to foreign market trends.	Resp3

with the quality of our services, we put a taskforce into place to try to satisfy them.ReWe are slow to decide how to respond to significant changes in our competitors' fees structures in foreign markets.ReWe are quick to respond to important changes taking place in the global environment within which our institution operates (e.g., regulatory, technology, economy).Re	esp4 esp5 esp6 esp7
We are slow to decide how to respond to significant changes in our competitors' fees structures in foreign markets.ReWe are quick to respond to important changes taking place in the global environment within which our institution operates (e.g., regulatory, technology, economy).Re	esp6
the global environment within which our institution operates (e.g., regulatory, technology, economy).	-
	esp7
students' complaints.	
1	esp8
	esp9
The educational services we provide to our foreign markets depend more on internal politics than real market needs.	esp10
	esp11
recruitment.	
University export Enrolment volume of international students (non-EU).	EP1
	EP2
	EP3
	EP4
university total revenues.	
	EP5
Managers' satisfaction with the enrolment volume of UE international students.	EP6
Managers' satisfaction with the university market share of international students recruited relative to other UK universities.	EP7
	EP8
	EP9
international students recruited relative to other UK universities.	
	10.1
international reputation In general, I believe that our university always fulfils the UI	IR1 IR2
1 5 5	IR3
better than other universities.	ID /
, i č	IR4 IR5
The university offers high standard of education	IR6
The university offers high standard of education UI internationally.	INU
	IR7

Source: Developed for the current study by the researcher

5.6.4 Survey

5.6.4.1 Population/targeted respondents

Bryman and Bell (2007) defined population as: "The full set of cases from which a sample is taken" (Saunders *et al.*, 2003, p.150). The population of this study is UK universities. Investigating rationales for recruiting international students in the UK reveals the central importance of the rationale of business competition and MO. University management has increasingly become influenced by the business philosophy (Bolsmann and Miller, 2008). Hence, these universities perceive export marketing as essential to attract international students (Rolfe, 2003). The population size - of which a complete directory was obtained from Wikipedia Encyclopaedia 2009 - is 130 UK universities.

The population was not subjected to any sampling since it is practical and financially feasible to collect data from such a small population within a specified period (six months). Therefore, all universities were included. A total of 130 questionnaires were e-mailed to the heads of the international offices of UK universities. Accordingly, 63 questionnaires were collected with a response rate achieved of 48%. This is consistent with some response rates recorded in past research into higher education marketing (e.g., Caruana *et al.* (1998a) attained a 46.2% response rate).

5.6.4.2 Data collection procedure

Online data collection methods have become increasingly attractive to researchers in international marketing (Schonlau *et al.*, 2001; Ilieva *et al.*, 2002; Bryman and Bell, 2007). Online surveys present several advantages explaining their growing use as shown in table 5.8. However, some authors (e.g. Miller, 2001) questioned the

validity and reliability of online data. Methodological triangulation as adopted in this study can effectively strengthen the credibility of the findings (Curasi, 2001). The study used a self-administered e-mail questionnaire to collect data for the survey from directors of international offices of targeted universities. E-mail surveys are a practical, cost-free and suitable data collection method as this study involves a probable wide geographical dispersion of respondents.

Main advantages	Authors
Unrestricted compass: wide geographical coverage.	Ilieva <i>et al.</i> , (2002); Bryman and Bell (2007).
Low cost of sending out e-mails and faster responses.	Mehta and Sivadas (1995); Schaefer and Dillman (1998); Kent and Lee (1999); Schuldt and Totten (1999); Sheehan and McMillan (1999).
Higher response rates over postal surveys.	Kiesler and Sproull (1986); Parker (1992); Schaefer and Dillman (1998) Wygant and Lindorf (1999); Cobanoglu <i>et al.</i> , (2001).
Convenience for the respondent.	Dommeyer and Moriarty (1999); Mullarkey (2004).

Table 5.8: Main advantages of online surveys

Source: Developed by the author from the literature on online surveys

The researcher first contacted the secretary of British Universities International Liaison Association (BUILA) to ask for support and more information about contacts in the international offices of UK universities. As a result, the BUILA secretary e-mailed an introduction to the project research as well as the questionnaire to all members (i.e., heads of international offices of UK universities and members of BUILA).

In order to increase participation by the universities in the survey, the researcher subsequently contacted the remaining universities that had not yet responded. The researcher had to browse each university's website for the contact details of its international office. The easy access to universities' websites provided the possibility of establishing contact with informants through personalised e-mails or telephone in order to inform them about this research project and confirm their current e-mail addresses. Later, an e-mail survey was sent to respondents.

5.6.4.3 Data analysis techniques

Prior to assessing the measurement scales, descriptive statistics was conducted with the assistance of SPSS 16.0. In order to reveal the central tendency and dispersions of the variables, the mean and the standard deviation were initially calculated. Skewness and Kurtosis was tested for normal data distribution.

Subsequently, the researcher conducted reliability tests and exploratory factor analysis (EFA) as preliminary tests to refine the measures (Churchill, 1979; Gerbing and Anderson, 1988). Refined measurement scales were then subjected to a validation phase through confirmation factor analysis (CFA) as a method to finalise the scales (Marsh *et al.*, 1988). Together with CFA, the present research used Partial Least Squares (PLS) as a technique to analyse the data. The study followed a two-step approach as recommended by Henseler *et al.* (2009. The first step was to develop an acceptable measurement model prior to assessing the structural model. The researcher employed a combined CFA and PLS approach to examine the properties of scales such as internal consistency reliability, convergent validity, discriminant validity, and unidimensionality for reflective scales (see table 5.9 for details). On the other hand, a two criteria assessment: significance of weights and multicollinearity were employed for the formative measure. At a later stage, the researcher examined the structural relationships among constructs. Tests based on the data from the survey were performed in AMOS .18 (for CFA) and SmartPLS 2.0 (Ringle *et al.*, 2005).

• Rationale for using PLS

PLS is one of the second-generation of multivariate analysis techniques (e.g. LISREL, AMOS are others) "that combine theoretical and empirical knowledge in order to maximise the variance explained (Fornell and Larcker, 1981)" (Ainuddin *et al.*, 2007, p. 56). A number of researchers (e.g. Herrmann *et al.*, 2006; Scholderer and Balderjahn, 2006) argue that there are two families of structural equation modelling (SEM) techniques: variance-based SEM (i.e. PLS) and covariance-based SEM (e.g. LISREL, AMOS). Table 5.9 summarises the differences between the two approaches.

Criterion	Variance-based SEM (PLS)	Covariance-based SEM (e.g. LISREL, AMOS)
Objective of overall analysis	Rejects a set of path- specific null hypotheses of no effect.	Shows that the null hypothesis of the entire proposed model is plausible, while rejecting path-specific null hypotheses of no effect.
Required theory base	Does not necessarily require sound theory base. Supports both exploratory and confirmatory research.	Requires sound theory base. Supports confirmatory research.
Assumed distribution	Relatively robust to deviations from a multivariate distribution.	Multivariate normal, if estimation is through maximum likelihood (ML). Deviations from multivariate normal are supported with other estimation techniques.
Required sample size	Small (min.30-100)	High (min.200-800)
Epistemic relationship between latent variables and measures	Formative and reflective indicators	Typically only with reflective indicators

Table 5.9: differences between variance-based SEM and covariance-based SEM

Source: developed by the author from literature

Based on the table, it is clear that PLS, being a variance-based SEM technique, provides a number of merits. This somewhat explains the increased use of PLS in the international marketing research as a method of analysis (Henseler *et al.*, 2009). Similarly, the researcher employed the PLS approach to structural equation modelling for the following reasons.

First, PLS is more rigorous at estimating the model presented in figure 4.2 compared with regression analyses (Mintu-Wimsatt and Graham, 2004). PLS enables the

simultaneous testing of the structural component and measurement component in one model (Vinzi *et al.*, 2009).

Second, PLS can accommodate small sample sizes (Wold, 1982; Chin and Newsted, 1999). This feature is crucial to the present research as only 63 respondents were available for model testing. Increasing the sample of respondents further was not only problematic but also impractical given population size and time constraints (see section 9.3.1). A number of studies (e.g. Chin *et al.*, 2003; Vilares *et al.*, 2010; Barraso *et al.*, 2010) show empirical support for the use of PLS over covariance structure analysis with maximum likelihood estimation (MLE) when one or more of the MLE assumptions are not met (particularly in situations involving small samples). In other words, when some assumptions for the application of covariance based SEM are violated, PLS provides strong approximations (Hulland et *al.*, 2010).

Third, because PLS deals effectively with formative scales (Nijssen and Douglas, 2008), the PLS path modelling algorithm allows the analysis of models that employ both reflective and formative measurement scales (Diamantopoulos and Winklhofer, 2001). This characteristic precludes other structural equation methods such as LISREL. PLS can therefore be applied when other methods cannot (Hermann *et al.*, 2006).

Fourth, Multivariate normality which is an important assumption of covariancebased SEM is violated in this study. Reported later (section 7.3.4.1), Mardia's coefficient (Mardia's coefficient = 54.34, CR = 3.46, p < .05) was found to be significant, which indicated violation of the assumption of multivariate normality. In

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case of violation of assumptions, PLS offers better estimations compared to covariance-based SEM (Henseler *et al.*, 2009). In this context, PLS is far less restrictive in its distributional assumptions (Fornell and Cha, 1994).

Fifth, models and measures in higher education marketing are at an early stage of development (Hemsley-Brown and Oplatka, 2006; De Wit, 2009), and in this situation the variance-based approach of PLS is considered more appropriate than covariance-based methods such as LISREL (Fornell and Bookstein, 1982; Venaik *et al.*, 2005). This is the case for the present study where the measures of EMO in universities and university export performance are new and the relationships between higher education export-specific factors and EMO in universities have not been previously tested.

Given its overall suitability to our modelling requirements, the researcher resorted to PLS path modelling algorithm.

• Assessment of the measurement model

For reflective measures, a number of psychometric properties were assessed. The researcher used composite reliability (Werts *et al.*, 1974) and Cronbach's alpha (1951) to assess the reliability of the scales. According to Hair *et al.* (2006), composite reliability is preferred over Cronbach's alpha because it provides a better estimate of variance shared by the respective indicators since it uses the item loadings obtained within the nomological network. Also, individual item reliability was examined by assessing the loadings of the measures with their respective constructs (Hulland, 1999).

In order to examine convergent validity, the researcher employed Fornell and Larcker's (1981) average variance extracted (AVE) with an AVE value of at least 0.5 indicating sufficient convergent validity. In addition, both the Fornell and Larcker criterion and the cross loadings were used to investigate discriminant validity (Chin, 1998a).

Given that PLS path modelling does not report any kind of fit indices like GFI or CFI, the researcher employed CFA in order to assess the unidimensionality of the scales (Peter and Churchill, 1986). Thus, a number of fit indices (i.e., Chi square, GFI and CFI) were assessed (detailed in section 7.5).

General psychometric properties (e.g., reliability, validity) are however irrelevant to formative scales. In order to check for the relevance of a formative measure indicators, the researcher used two criteria. First, estimated indicator weights of formative measurement models should be significant (Chin, 1998b; Tenenhaus *et al.*, 2005). Second, by calculating the variance inflation factor (VIF), the researcher assessed the degree of multicollinearity among the formative indicators (Diamantopoulos and Winklhofer, 2001; Grewal *et al.*, 2004). High multicollinearity could mean that indicators are redundant.

Properties	Explanation	Assessment criteria/ techniques	Supportive literature
Internal consistency reliability	It measures whether several items that propose to measure the same general construct produce similar scores.	Cronbach Alpha Composite reliability Individual item reliability	Nunnally and Bernstain (1994); Hair <i>et al.</i> (2006)
Convergent validity	Is concerned with the correlation between different measures purporting to measure the same construct.	Average variance extracted (AVE)	Fornell and Larcker (1981); Henseler <i>et al.</i> (2009)
Discriminant validity	A measure of a concept is unique and distinct from other concepts' measures.	Fornell and Larcker criterion Cross loadings	Fornell and Larcker (1981); Chin (1998a)
Unidimensionality	Refers to the existence of a single construct underlying a set of measures.	Confirmatory factor analysis (CFA)	McIver and Carmines (1981); Peter and Churchill (1986)

Table 5.10: Scale psychometric properties for the present study

Source: Developed from the literature review

Satisfactory results in the previous phase are necessary to proceed to the final stage of the measurement models assessment. This stage involves the conduction of PLS structural equation modelling (PLS SEM). Thus, the relationship among the constructs was examined. • Assessment of the structural model

The structural model indicates relationships between latent constructs. These relationships are tested by estimating the paths between the constructs. The non-parametric bootstrapping procedure (Chin, 1998b; Davison and Hinkley, 2003) using 200 resamples was carried out to assess the statistical significance of each path coefficient and to provide confidence intervals for all parameter estimates. The researcher used a number of criteria to evaluate the structural model (see table 5.11).

Criterion	Description	Supportive literature
R ² of endogenous latent variables	R^2 values of 0.67, 0.33 and 0.19 for endogenous latent variables are described as substantial, moderate and weak respectively.	Chin (1998b); Henseler <i>et al.</i> (2009)
Estimates for path coefficients	The estimated values for path relationships in the structural model should be evaluated in terms of sign, magnitude, and significance (the latter via bootstrapping).	Barclay <i>et al.</i> (1995); Henseler <i>et al.</i> (2009)
Effect size f^2	For each effect in the path model, the effect size f^2 is calculated as the increase in \mathbb{R}^2 relative to the proportion of variance of the endogenous latent variable that remains unexplained. Values of 0.02, 0.15 and 0.35 mean small, medium and large effects, respectively.	Cohen (1988); Vinzi <i>et al.</i> (2009)
Predictive relevance q^2	Values above zero give evidence that the model has predictive relevance.	Stone (1974); Geisser (1975)
Goodness-of-fit (GOF)	Represents an index to assess the overall fit of the model.	Tenenhaus <i>et al.</i> (2005)

Source: Adapted from Henseler et al. (2009)

5.7 SUMMARY

The objective of this chapter was to describe and discuss the philosophy as well as the methodology used to test the conceptual model and hypotheses presented in chapter 4. The chapter addressed the key issues related to data collection both in the qualitative and quantitative phases of the study: the unit of analysis, the choice of the survey instrument, and population targeted. It also considered the techniques to be used in the data analysis: constant comparative method, coefficient alpha, factor analysis and PLS structural equation modelling.

Chapter 6

The qualitative findings

6.1 INTRODUCTION

The qualitative study was conducted through 12 semi-structured key informant interviews (see table 6.1) in order to validate *a priori* conceptual framework and revise the measurement scales to fit the context of the present research. In addition, the qualitative study aims to gather more in-depth information to advance the understanding of EMO in universities, its higher education export-specific antecedents and consequences.

The chapter starts with an overview of the qualitative data analysis procedure. Subsequently, the chapter presents comprehensive qualitative results related to each theme identified in the conceptual framework. Finally, a summary is presented.

Interviewee	Position	Duration (minutes)	Interview date
1	Head of international office	35	May 2009
2	Acting head of international office	32	May 2009
3	Head of international marketing	45	May 2009
	and admissions		
4	Senior international officer	40	May 2009
5	Head of international office	30	June 2009
6	Head of international office	30	June 2009
7	Head of international office	35	September 2009
8	Head of international office	30	September 2009
9	Head of international marketing	40	October 2009
	and admissions		
10	Head of international office	35	October 2009
11	Senior international officer	45	October 2009
12	Head of international office	30	November 2009

Table 6.1: Profiles of interviewees

6.2 OVERVIEW OF THE QUALITATIVE ANALYSIS PROCESS

In the present qualitative study, the starting point of the analysis is the conceptual framework developed based on the literature. EMO in universities, its antecedents and consequences set the framework for coding and analysing the data. These variables represent the start list of codes (Miles and Huberman, 1994). The start list served as a reference to the qualitative data.

The coding process entails three phases (Strauss and Corbin, 1998; Esterberg, 2002). The first phase is open coding, where themes from the data were contrasted with the start code list. Texts from the interviews were reviewed individually and coded to either the start list or new codes were developed as the understanding of the data increased. The objective is to find data that are relevant to the conceptual framework/literature (Lincoln and Guba, 1985). The second phase refers to axial coding. Axial coding involved analysing texts by comparing and contrasting themes to identify patterns in the data. The third phase is selective coding, which implies a higher level of abstraction. In this phase, the researcher

Defined core constructs around which different themes identified revolve, and specified relationships between constructs (Spiggle, 1994, p.58).

The qualitative analysis and interpretation of the present research made use of the principles of the constant comparative method recommended by Strauss and Corbin (1990) and Spiggle (1994). Categories derived from different texts were constantly compared against each other, as well as compared to the conceptual framework. This enabled consistency of terminology and consistency of the qualitative findings with prior research.

This method was conducted with Nvivo version 8.0 (Bryman and Bell, 2007). Initially, the researcher stored all texts electronically. The software helped the researcher to review texts, code the data through assigning texts to free nodes, connect the free nodes to themes (tree nodes) and proceed through the qualitative data analysis. The software was used following the recommendations of Gibbs (2002) and Esterberg (2002), stating that the software enables better organisation, storage and retrieval of data as well as more accurate and reliable qualitative results (Gibbs, 2002; Esterberg, 2002).

In contrast to quantitative studies, which rely on validity and reliability measures to assess the quality of outcomes, an important criterion measuring the quality of qualitative results is trustworthiness (Lincoln and Guba, 1985; Marshall, 1996). Trustworthiness enables the researcher to cover every aspect of the research questions. The use of methodological triangulation through both qualitative and quantitative methods gives more reliable findings and helps achieve trustworthiness. Moreover, repeating the coding process more than once - as the study was carried out by one researcher - enhances the findings' trustworthiness (Weber, 1985; Boeije, 2002). Also, an independent researcher aware of the topic provided assistance and feedback regarding the themes identified. Overall, an agreement was reached about the qualitative analysis.

6.3 QUALITATIVE RESULTS

6.3.1 Export market orientation in universities

6.3.1.1 Exporting in universities

All universities interviewed agreed on the conceptualisation of the export activity from literature (Roberts, 1999; Lewis, 2005) (chapter 2). They perceive the activity of exporting higher education services consisting of the following categories:

- Cross-border delivery: embodied and wired exports (distance education).
- Inbound delivery: consumption at home.
- Outbound delivery: transhuman exports (temporary movement of academics) and intra-firm exports (delivery of offshore education).

When the researcher introduced this classification to the interviewees, a senior international officer commented as follow:

Absolutely, we recognise that quite clearly. I think that is a fair classification. I think distance education learning is becoming much less popular as an option. I think the two main ones are the transnational education, as you described it, as incoming students and delivery abroad (University 4).

Universities are in different stages of internationalisation. Some have reached the most advanced stage of exporting their educational services through setting up their own branch campuses overseas. One manager stated:

Yes, we have all three; we are involved in all the methods of export that you have mentioned. (University 10).

Others are in an early stage of the internationalisation process through a traditional mode of export. Most, if not all, of the universities interviewed focus heavily on the inbound delivery as their primary export mode. This represents the focus of the analysis. One manager's response was:

I would say we mainly do the inbound. In terms of the outbound, overseas campuses, our university has not really gone down that route. I do not see that it is going to do in a foreseeable future, but that does not mean that it will not do at some point, but at the moment it is concentrating very much on the inbound.

(University 3).

6.3.1.2 A priori dimensions supported

When questioning the nature of an EMO in universities, the following themes emerged:

-An outlook of the export market (out-in approach): as opposed to a product orientation (Sharp, 1991), the participants perceive EMO in universities as based on a view of the export market. In this context, the starting point is the market. Therefore, market needs are expected to engender the university to react with its services. This is consistent with the literature on MO (e.g., Narver and Slater, 1990; Kohli and Jaworski, 1990) maintaining that "market orientation is prevalent when information concerning customers guides, product development and marketing efforts" (Wood and Bhuian, 1993, p.9). Below are some of the comments:

Export market orientation requires that the market research that is done needs actually to have a huge amount of influence on courses' design...We should start from market needs rather than the product. (University 9)

Most of universities are not very market oriented because the academic strategy is based upon the product and that does not always work in terms of the market.

(University 1)

EMO should probably influence course design more than it probably does at the moment. There are a few examples of courses where that has happened. (University 4) **-In-depth analysis and ongoing market research and planning:** a constant surveillance of the export market is a key pillar of an export market-oriented university (Cadogan *et al.*, 2001). This involves ongoing market research analysis and planning in order to align a university's efforts with the expectations of its foreign markets. Effective export market research analysis and planning requires relevant export market information generation and dissemination within the university. One interviewee reflected this idea:

Just taking snapshots every year even it is just not good enough, it should be something that is absolutely ongoing if this market research is going to be worth anything. And it needs people not just taking snapshots but actually looking at the implications and projecting forward and using judgements if we are going to be cutting edge.

(University 2)

-Ability to react quickly with the "product": this represents the university ability to respond to export market needs in a timely fashion. Responsiveness is an important dimension of EMO in universities (Cadogan *et al.*, 1999).

I think this whole idea of having a market orientation means that you can react quickly with your product and respond to the market. Unfortunately most universities are slow organisations and do not necessarily react quickly with the product.

(University 2)

-Information-based activities of EMO: participants approved the conceptualisation of EMO in universities in the literature. They defined EMO as consisting of the activities of generating, disseminating and responding to export market intelligence. When the researcher presented the definition of EMO from the literature, the following responses emerged:

So what you are saying is EMO means collecting, disseminating information and responding to it. Yes, I guess that is what we do anyway and I guess we are market orientated but within the constraints of the fact that we are a slow-moving organisation.

(University 4)

Yes, I would agree.

(University 5)

That works. I agree with you.

(University 11)

Taken collectively, these perceptions are consistent with the literature of EMO in universities. This study gives support to the *a priori* dimensions generated as discussed in chapter 4 from the literature review. On the other hand, the qualitative study provided a number of EMO activities performed by universities. These activities were used to develop the measurement scales (see table 5.6).

6.3.2 Antecedents to EMO in universities

6.3.2.1 Export coordination in universities

Interfunctional coordination in the university is an important driver to EMO (Cadogan *et al.*, 2001; 2002a). Similarly, some of the participants established the importance of export coordination as follows:

EMO needs various bits of the university all coming together and that does not work very well, particularly in a very big university because there are 6 or 7 different departments and you cannot get them all to think the same way. (University 1)

From the VC down, there is a drive for internationalisation, and that is absolutely crucial to our international marketing. (University 6)

As a result, the qualitative findings confirm the positive role export coordination has on EMO in universities.

6.3.2.2 University attitude toward government funding

As shown in the qualitative study, universities have different attitudes towards government funding. The following comments illustrate managers' assessment of this source of funding:

It is an important source but not the only one. (University 10). *Oh no, we cannot rely on government funding. We have to seek other sources of funding.*

(University 12)

I think Oxford University, Cambridge, or Manchester are getting lot of scholarship students from foreign governments and the British government. That is not the case in this university. (University 9)

The analysis of the qualitative findings revealed that university managers who tend to have unfavourable attitudes toward public funds, highlighted that the lack of government funding is a contributing factor to EMO in universities. This supports Wasmer and Bruner's (2000) and Anheier's *et al.* (1997) studies. The following quotes reflect this idea:

One big factor for marketing is funding, we are not a high profile university so we are not getting a lot of scholarship students. That's the way it is. (University 12)

Governmental funding, we are not getting much money from this, so we cannot rely on public funds, we have to commercialise our services. (University 9)

6.3.2.3 University national ranking position

Another key issue raised during the interviews is the importance of university ranking position. For example, some of the respondents noted that:

One thing that has become so big over the last 5 to 10 years is rankings, almost to the point [of being] ridiculous. In so many countries one of the questions that you get asked is "Where are you ranked? Where are you ranked as an institution?" And that is all they are thinking about. And it did not use to be like that. But [rankings] are definitely a big big thing. (University 3)

Ranking is hugely important because many overseas students look at the Times University Guide (national ranking system) and assess which university is right for them...

(University 6)

In addition to the anecdotal evidence that university recruiters are increasingly questioned by potential international students regarding the university national ranking position, there is general consensus among scholars and managers that ranking systems influence students' choice of a particular institution (e.g., Filinov and Ruchkina, 2002; Thakur, 2007). This is particularly the case for international students where status and prestige are significant considerations in decision-making (Hazelkorn, 2007). Therefore lower-ranked universities find themselves at a disadvantage when recruiting international students. This is in line with some of the respondents' comments.

We are sort of very much behind. We are ... a low league table position which puts us at a disadvantage in open recruitment. (University 2)

Because our position in the league table needs to be improved then foreign markets, which are ranking conscious, are not going to come to our university even though there might be large numbers studying in the UK. (University 5)

It can be inferred that university managers are required to take their ranking position into account in their international marketing strategy given the impact of ranking position on international students' decision-making. This is consistent with Thakur (2007) maintaining that rankings are influencing decision-making and planning process within universities (Thakur, 2007). In this context, lower-ranked universities are expected in particular to be more market oriented towards their export markets than the more prestigious institutions "which can just rely on their prestige" (Marginson, 2006, p. 8). A head of international marketing and admissions stated:

You generally find the post-1992 are probably more likely to be doing EMO and the older, more prestigious universities are less likely to be involved in that....

(University 3)

This can be explained by the next comment by a senior international officer of a post-1992 university:

Sometimes ranking does not give a fair impression of the university. You have to counteract it and say no, we have some fantastic courses... (University 4)

As university ranking position is not always a true depiction of university quality (Dill and Soo, 2005), marketing effort is needed as a formal way of communicating the qualities of a university, particularly in the case of a lower-ranked university.

In support of the literature, university ranking position is found to be negatively related to EMO activities.

6.3.2.4 Perceived higher education country image

When discussing export marketing activities, participants place emphasis on higher education country image as follows:

As a UK university, we definitely benefit from the English language as a lingua franca, but it is not just the language, it is the country itself. Some countries [like] Scandinavia and Germany, although [they provide] some programmes in English, they are at a disadvantage as far as their higher education image is concerned.

(University 10)

Some foreign countries would not even see a difference between an Oxford Brookes university degree and an Oxford University degree, all what matters to them is an UK university degree, so we have this advantage when entering foreign markets.

(University 7)

We believe that the UK country image is strong and use it in our marketing activities abroad. (University 11)

In line with Kleppe *et al.* (2002) and Baker and Ballington (2002), these findings support the positive relationship between a country's higher education image and the level of EMO implemented.

6.3.3 Consequences of EMO in universities

6.3.3.1 University export performance

Unlike in the traditional exporting organisations (Zou and Stan, 1998), there is consensus in terms of the variables used to measure the export performance of universities. The findings revealed that international marketing managers perceive the export performance of universities primarily as a business performance. When asked to provide a meaning to the export performance of universities, all participants agree on the primacy of numbers; their initial responses were as follows:

Numbers, sales if you like, no I would not call it sales, but we have to achieve a target, a number of students or an income target. We get something like 24 million so we have to achieve this target, I feel that it is the only target that matters, everything else is point... secondary to that. (University 1)

The marketing managers are trying to bring in as many students from their region as they can.

(University 3)

These comments are in line with the literature of higher education marketing, which considers international higher education as a large business (Coate *et al.*, 2001). In other words, international higher education has gradually been discovered as a lucrative service industry and export commodity (Martens and Starke, 2008). In this respect, Ivy (2001) supports the legitimacy of adopting the business philosophy in the higher education sector. In particular, some studies (e.g., Caruana *et al.*, 1998a; Binsardi and Ekwulugo, 2003) advocate the usefulness of measuring the business performance of universities.

Like the work of Zajac and Kraatz (1993), the findings revealed the primacy of both financial and customer-based indicators in measuring the business performance of universities. In an export setting, a key financial measure of university business performance is considered to be the revenues from international students. A senior international officer stated:

Every international office would have to be honest and say that a major factor in recruiting an international student is the income that an international student brings in. This is an income that the university can spend in whatever way it chooses.

(University 4)

Customer-related measures include: customer acquisition, market share, and customer satisfaction (Kaplan and Norton, 1996). Similarly, when considering the international student as the primary customer of the university, managers perceived the following as export performance indicators:

-Enrolment volume of international students. When asked to provide measures for export performance, one head of the international office stated:

Number of students, as simple as that! (University 12)

-Market share of international students relative to other universities. An example of the comments is:

We regularly monitor the HESA statistics of international student numbers and our overall position. I guess we would aim to be in the top 20. (University 4)

-International students' satisfaction. One manager confirmed this idea:

International students' satisfaction would be an indicator of performance and we did undertake a survey of our students. (University 5) The respondents provided other subjective indicators to measure export performance in universities as follows:

-Number of international students recruited as a result of a university's alumni is an indicator peculiar to the specific nature of higher education.

An important indicator would be the number of international students recruited as a result of our alumni. (University 8)

Furthermore, in accordance with Rose and Shoham's (2002) operationalisation of export performance, some managers expressed the suitability of two other dimensions. These are managers' satisfaction with enrolment volume and market share, and managers' goal achievement in terms of enrolment volume and market share.

Each year we set a target in terms of the number of international students we hope to get and that we believe we can achieve, so obviously our satisfaction is related to the enrolment volume that we reach. (University 10)

In summary, the qualitative results regarding university export performance are aligned to Bijmolt and Zwart's (1994) and Shoham's (1998) suggestion to use a set of variables, that is, financial and non-financial in measuring export performance.

The findings support the positive relationship between EMO and export performance in universities as hypothesised in chapter 4. Some respondents commented on this relationship as follows: Performance is definitely an outcome of marketing our services to different foreign markets.

(University 7)

We allocate a budget for these marketing activities: going abroad for exhibitions is an example, so we obviously want something in return for these expenses. The more we spend on a market, the more we want and expect in terms of better performance.

(University 9)

6.3.3.2 University international reputation

The respondents generally provided a good and comprehensive understanding of different aspects of reputation as identified in the marketing literature. Consistent with Fombrun and Van Riel (1997), university international reputation was regarded as a result of the university's past actions. In this respect, the interviewees stated that university international reputation is shaped on the basis of direct and indirect experiences of international students with the university (based on Caruana, 1997). However, the same respondents perceived university international reputation as an uncontrollable attitudinal concept. This is congruent with Helm (2007) and Bromley (2000) arguing that reputation is an attitudinal construct that only exists in the minds of individuals.

The following comments not only cover some of the key definitions in the marketing literature but illustrate the complexity of the international reputation construct.

Reputation is the hardest to counteract. In theory it is an internal thing, we have our own procedures to give students a good experience but we do not have much control on our reputation internationally.

(University 4)

We try our best to provide our students with a good experience because that affects our reputation overseas. You can type the name of the university and then many things come up, some of them are good and some of them are bad, and that is difficult to manage.

(University 11)

Respondents tend to closely link the reputation concept with the implementation of marketing. This finding supports the hypothesised relationship between the implementation of export marketing (i.e., EMO) and university international reputation. As an example, when emphasising this relationship, one respondent viewed reputation as a long-term concept that evolves over time (Gray and Balmer, 1998).

The positive accumulated image in the international market over the years is certainly an outcome of our consistent marketing and communication efforts. (University 7)

Another interesting finding relates to the emphasis given to university international reputation in mediating the effect of EMO on university export performance. The qualitative findings revealed that through the implementation of marketing and being responsive to international students, the university international reputation is enhanced. This in turn positively impacts on university export performance.

The other major thing is reputation: if the students' experience here is not good it is going to massively impact on the university's reputation internationally and eventually recruitment. If the students' experience is good then they are going to go back home and recommend it to people.

(University 3)

If students have a good academic experience, then you know it is a kind of welcoming supportive environment and that in itself is your marketing tool. Many of the students that we get, particularly from India, I don't even have to sell the university, when I go to Hyderabad for example, when I'm interviewing in that room, there will [be] 5, 6 students that have a friend or a senior or a relative who has already studied at our university so they don't look anywhere apart from our university.

(University 5)

Furthermore, when asked about the desired outcomes of pursuing an EMO approach, one respondent commented as follows:

I hope that we will get some of the overseas students [to] go home and do wonderful things and some of them would be ambassadors for our university. That is very important for our reputation globally and our performance. (University 8)

The comments above revealed a mediating role of university international reputation in the EMO-university export performance relationship. This mediation is only partial given that both the literature and qualitative results support a direct relationship between EMO and university export performance. In summary, the qualitative study provides a better understanding of the research questions (section 5.2). The literature review led to the development of the conceptual framework, and the qualitative study generally confirmed the research model and hypotheses to be tested in the subsequent quantitative study. One main hypothesis regarding the mediating role of university international reputation was added. In summary, table 6.2 presents the revised hypotheses.

Table 6.2: Revised research hypotheses

H1	The more coordinated the university is in relation to its foreign business, the more export market oriented the university is.
H1a	The more coordinated the university is in relation to its foreign business, the more export market information the university generates.
H1b	The more coordinated the university is in relation to its foreign business, the more export market information the university disseminates.
H1c	The more coordinated the university is in relation to its foreign business, the more responsive the university is to its foreign markets.
H2	The less favourable the university attitude is toward government funding, the more export market oriented the university is.
H2a	The less favourable the university attitude is toward government funding, the more export market information the university generates.
H2b	The less favourable the university attitude is toward government funding, the more export market information the university disseminates.
H2c	The less favourable the university attitude is toward government funding, the more responsive is the university to its foreign markets.
Н3	The better the university national ranking position is, the less export market oriented the university is expected to be.
H3a	The better the university national ranking position is, the less export market information the university generates.

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H3b	The better the university national ranking position is, the less export market information the university disseminates.
НЗс	The better the university national ranking position is, the less responsive the university is to its foreign markets.
H4	The more favourable the higher education country image as perceived
	by managers, the more export market oriented the university is.
H4a	The more favourable the higher education country image as perceived by managers, the more export market information the university generates.
H4b	The more favourable the higher education country image as perceived by managers, the more export market information the university disseminates.
H4c	The more favourable the higher education country image as perceived by managers, the more responsive the university is to its foreign markets.
H5	University national ranking position has a positive influence on higher
	education country image as perceived by managers.
H6	Export market orientation in a university will enhance its export
	performance.
Нба	Export market information generation in a university will enhance its export performance.
H6b	Export market information dissemination in a university will enhance its export performance.
Нбс	University responsiveness to export market information will enhance its export performance.
H7	Export market orientation in a university will enhance its international
	reputation.
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H7a	Export market information generation in a university will enhance its international reputation.
H7b	Export market information dissemination in a university will enhance its international reputation.
H7c	University responsiveness to export market information will enhance its international reputation.
H8	University international reputation has a positive influence on its export performance.

H9	University international reputation partially mediates the impact of EMO on university export performance.
H9a	University international reputation partially mediates the impact of export market information generation on university export performance.
H9b	University international reputation partially mediates the impact of export market information dissemination on university export performance.
Н9с	University international reputation partially mediates the impact of university responsiveness to export market information on university export performance.

6.4 SUMMARY

The chapter discussed the results of the qualitative study. Firstly, the data collection and analysis procedures were explained. The qualitative findings were presented around the main themes identified from the literature. Some of the themes were expanded upon and integrated into the literature on higher education marketing. Generally, support was given to the conceptual framework presented in chapter 4. Moreover, hypotheses were revisited.

CHAPTER 7

Data analysis

7.1 INTRODUCTION

This chapter presents research findings from the quantitative study (i.e., survey). It first reports basic information about the dataset such as data profile, normality and outliers. Reliability tests and exploratory factor analysis were carried out subsequently as a primary purification stage for the measures. Next, confirmatory factor analysis was used to test whether all items in each individual construct are valid and reliable. SEM (PLS) was used at the last stage to test the full model.

7.2 DATASET

The researcher received a total of 63 questionnaires via e-mail from different UK universities, which resulted in a response rate of 48%. While entering the raw data into an SPSS file, eye screening was the first method used to identify the completeness and quality of questionnaires. After eye screening, the dataset remained at 63 usable questionnaires. Table 7.1 reveals the respondents' (i.e., universities) profiles. More scientific purification procedures were also carried out subsequently. This is discussed in the following sections.

Table 7.	.1:	Survey	data	profile
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Characteristics	Ν	%
Localisation		
Greater London	13	20.64
South England	12	19.05
North England	8	12.8
Yorkshire and Humberside	6	9.52
East of England/East Midlands	8	12.8
West Midlands	5	7.93
Scotland	5	7.93
Northern Ireland	1	1.58
Wales	5	7.93
Total	63	100
Age		
20 years old or less	18	28
21 to 50 years old	6	11
51 to 99 years old	12	19
100 years old or more	27	42
Total	63	100
Modes of export		
Provision at home	63	100
Distance education	24	38.1
Partnerships (OVCs)	29	46
Campuses overseas	8	12.7
Breath of export		
25 countries or less	5	7.94
26 to 50 countries	12	19.05
51 to 80 countries	8	12.69
81 to 100 countries	12	19.05
Over 100 countries	26	41.27
Total	63	100
Export experience		
10 years or less	19	30.17
11 to 40 years	27	42.85
41 to 79 years	6	9.52
Over 80 years	11	17.46
Total	63	100

7.3 DATA CLEANING

While all marketing textbooks discussed data cleaning, there is no consistent standard step to follow. As Neale (2006) commented, "data cleaning is a mixture of judgment and process to arrive at a dataset than can be used with multiple analyses" (p.135). Several methods can be used to check a dataset. This study used three different methods as discussed below.

7.3.1 Out-of-range values

Data entry errors are common (Coakes and Steed, 2007). Therefore, the first step of data cleaning this study took was to check data entry errors such as out-of-range values. Frequencies were obtained from SPSS until results showed that there were no out-of-range values in the dataset.

7.3.2 Missing data

The technical aspect of the e-mail questionnaires enabled no missing values. Unless every question is filled, respondents would not have been able to proceed and the "save" option would not have been activated.

7.3.3 Non-response bias

Although the response rate in this study is relatively high (48%), the researcher performed tests of non-response bias to check whether there are significant differences between the questionnaires received earlier and those received at a later stage or even those which were not returned (considering the response alternatives to lie on a continuum) (Suppes and Krasne, 1961). The researcher used MANOVA to compare the means of all the variables for early and late respondents. Bearing in mind that the main survey lasted six months, the researcher defined early responses as the questionnaires received within three months whereas the late responses were the questionnaires which were received after the third month.

According to table 7.2, the non significant p-value of 0.18 revealed that there are no significant differences between responses of early and late respondents. The researcher confirmed this statistical result by randomly calling some non-respondents. The reasons of non-participation relate to university' policies and/or the hectic schedule of managers. The non-response was therefore not due to the non-interest in the questionnaires. This indicates that non-response bias was not problematic in this research.

Effect	Test Statistics	F-value	Hypothesis df	Error df	P-value
Grp	Pillai's Trace	1.47	8	54	0.18
	Wilks' Lambda	1.47	8	54	0.18
	Hotelling's Trace	1.47	8	54	0.18
	Roy's Largest Root	1.47	8	54	0.18

Table 7.2: MANOVA test results (early versus late responses)

7.3.4 Normality tests and outliers

7.3.4.1 Normality

We can test whether the underlying distribution of these data is a normal distribution or not. The researcher checked univariate normality of variables first through visual inspection (histogram and normal probability plot). Normal probability plot is a statistical technique that reveals the data observed plotted against a theoretical normal distribution (Pallant, 2005). This inspection showed that all the variables are fairly normally distributed.

In addition, univariate normality was tested through inspecting the Skeweness and Kurtosis statistics as shown in tables 7.3 and 7.4. All the values of Kurtosis and Skeweness statistics are within the conventional range of +-2.5. This means that all manifest variables were reasonably normally distributed.

	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
PHECI2	63	2	7	0.51	1.26	-0,488	0,301589	-0,1995	0,59484
PHECI3	63	2	7	5.65	1.22	-0,666	0,301589	0,03968	0,59484
PHECI5	63	3	7	5.74	1.04	-0,424	0,301589	-0,6088	0,59484
PHECI6	63	2	7	5.53	0.1	-0,674	0,301589	-0,0227	0,59484
PHECI7	63	1	7	5.01	1.41	-0,518	0,301589	-0,0619	0,59484
PHECI8	63	3	7	6.15	0.09	-1,094	0,301589	0,79805	0,59484
UAGF1	63	1	7	3.6	1.79	0,4167	0,301589	-0,7384	0,59484
UAGF3	63	1	7	3.50	1.77	0,3963	0,301589	-0,6809	0,59484
UAGF4	63	1	7	3.22	1.69	0,6799	0,301589	-0,31	0,59484
UAGF5	63	1	7	3.38	1.83	0,5276	0,301589	-0,8015	0,59484
COOR1	63	2	7	5.19	1.34	-0,401	0,301589	-0,5129	0,59484
COOR2	63	1	7	4.69	1.67	-0,316	0,301589	-0,7458	0,59484
COOR3	63	1	7	5.06	1.58	-0,509	0,301589	-0,6078	0,59484
COOR4	63	1	7	4.93	1.58	-0,721	0,301589	-0,176	0,59484
COOR5	63	1	7	5.09	1.69	-0,815	0,301589	-0,0384	0,59484
COOR8	63	1	7	4.92	1.34	-0,546	0,301589	0,20674	0,59484
IGen3	63	1	7	4.57	1.87	-0,458	0,301589	-0,8943	0,59484
IGen6	63	1	7	4.68	1.78	-0,327	0,301589	-10,074	0,59484
IGen7	63	1	7	0.45	1.60	-0,358	0,301589	-0,6211	0,59484
IGen8	63	1	7	4.96	1.66	-0,446	0,301589	-0,8236	0,59484
IGen9	63	1	7	4.77	1.72	-0,401	0,301589	-0,8275	0,59484
IDiss1	63	1	7	5.11	1.47	-0,731	0,301589	0,42506	0,59484
IDiss2	63	1	7	4.88	1.60	-0,559	0,301589	-0,3329	0,59484
IDiss4	63	1	7	4.74	1.59	-0,502	0,301589	-0,4563	0,59484
IDiss5	63	1	7	5.12	1.62	-0,54	0,301589	-0,4294	0,59484
IDiss6	63	1	7	4.98	1.58	-0,454	0,301589	-0,444	0,59484
IDiss8	63	1	7	4.90	1.49	-0,662	0,301589	0,08614	0,59484

Table 7.3: Skeweness and Kurtosis results at the item level

Resp1	63	2	7	5.73	1.34	-1,042	0,301589	0,47419	0,59484
Resp2	63	2	7	5.71	1.21	-0,832	0,301589	0,30571	0,59484
Resp6	63	1	7	5.39	1.54	-0,894	0,301589	0,19486	0,59484
-	63	2	7	5.63			,	<i>,</i>	
Resp8					1.34	-0,889	0,301589	0,18416	0,59484
Resp11	63	2	7	5.63	1.40	-1,076	0,301589	0,54555	0,59484
UEP1	63	1	7	4.42	1.91	-0,413	0,301589	-0,9361	0,59484
UEP2	63	1	7	4.42	1.77	-0,325	0,301589	-0,7745	0,59484
UEP3	63	1	7	4.19	1.94	-0,209	0,301589	-11,662	0,59484
UEP4	63	1	7	3.96	1.89	-0,056	0,301589	-11,349	0,59484
UEP5	63	1	7	3.95	1.89	-0,076	0,301589	-11,402	0,59484
UEP8	63	1	7	4.53	2.09	-0,428	0,301589	-11,675	0,59484
UIR1	63	1	7	4.57	1.65	-0,517	0,301589	-0,3722	0,59484
UIR2	63	1	7	4.50	1.87	-0,567	0,301589	-0,748	0,59484
UIR3	63	1	7	4.38	1.96	-0,331	0,301589	-10,917	0,59484
UIR4	63	1	7	4.46	1.97	-0,374	0,301589	-10,604	0,59484
UIR7	63	1	7	4.39	1.70	-0,409	0,301589	-0,8078	0,59484

Table 7.3 (cont.): Skeweness and Kurtosis results at the item level

Table 7.4: Skeweness and Kurtosis results at the construct level

	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
UEP_C	63	1	7	4.25	1.75	-0,311	0,301589	-0,8814	0,59484
IGen_C	63	1,4	7	4.71	1.55	-0,369	0,301589	-0,8009	0,59484
PHECI_C	63	2,33	7	5.54	1.01	-0,634	0,301589	0,25531	0,59484
UIR_C	63	1	7	4.46	1.76	-0,404	0,301589	-0,8548	0,59484
UAGF_C	63	1	7	3.42	1.69	0,6238	0,301589	-0,5958	0,59484
IDiss_C	63	1	7	4.96	0.14	-0,71	0,301589	0,22703	0,59484
Resp_C	63	2	7	5.62	1.24	-0,892	0,301589	0,47321	0,59484
COOR_C	63	1,67	7	4.98	1.37	-0,511	0,301589	-0,4959	0,59484

In addition to univariate normality, multivariate normality was assessed through Mardia's (1970) coefficient (Bentler, 1995) using AMOS.18. A sample is said to be multivariate normally distributed at the 0.05 level when Mardia's coefficient is close to 0 with a critical ratio less than 1.96. With a significant value of Mardia's coefficient (Mardia's coefficient = 54.34, CR = 3.46, p < .05), this result indicates

significant multivariate Kurtosis. Therefore, the assumption of multivariate normality was not tenable.

7.3.4.2 Outliers

Outliers are data with values that are extremely different from the majority of data values in the dataset. Identifying outliers is important in SEM analyses because the outliers may affect the results of SEM, even if the majority of the data are normally distributed (West *et al.*, 1995). The main detection methods available for identifying outliers include the univariate and multivariate methods. Hair *et al.* (1998) suggested that a researcher should use more than one method to identify outliers in a consistent format.

The univariate method first looked at the standardised scores (Z-scores). Hair *et al.* (1998) suggested that if the sample size is 80 or fewer, cases with standard scores of 2.58 or greater are considered outliers. For a larger sample (more than 80 observations), the value of standard scores greater than 3.26 and less than -3.26 are considered to be outliers (Coakes and Steed, 2007). This study used +-2.58 standard scores to identify outliers.

Z-scores were obtained in SPSS 15.0 through the Descriptives command. Only three outliers were found (values ranging between +-2.58 and +-3.26). Graphically, using boxplots, the identified outliers were found to be mild rather than extreme (i.e., represented by circles not asterixs) (Pallant, 2006). These outliers were not exceedingly distant from the threshold level of +-2.58. As a result, these cases were not removed since the researcher did not have demonstrable proof that they were

"truly aberrant and not representative of any observations in the population" (Hair *et al.*, 1998, p.66).

One procedure for identifying multivariate outliers called Mahalanobis Distances (Mahalanobis, 1936) was employed. It calculates the distance of particular scores from the center cluster of remaining cases. Mahalanobis D^2 can be computed in SPSS with the regression procedure for a set of independent variables. The researcher used the probability values to identify the cases which are most distant, or different, from the other cases in the sample. Using the traditional alpha level of 0.05 of statistical significance, no outlier was identified.

7.3.5 Multicollinearity and homoscedasticity

Multicollinearity refers to the relationship between more than two independent variables. The presence of multicollinearity can be problematic to multivariate analyses. A high degree of multicollinearity makes the assessment of the effect of each independent variable difficult (Hair *et al.*, 2006). To diagnose multicollinearity, the researcher employed SPSS 15.0 for Windows to check the variance inflation factor (VIF). No VIF exceeded the threshold value of 10, with 1.962 as the highest value obtained for export market information dissemination. This suggests that multicollinearity is not severe and should have a little effect on the interpretation of findings (Hair *et al.*, 1998).

Homoscedasticity refers to the level of homogeneity of variance (Hair *et al.*, 2006). Homoscedasticity can be assessed graphically as well as statistically. First, the scatterpolts were visually assessed. The scatterplots produced a fair level of homoscedasticity as the data was quite evenly scattered around the horizontal line of the plots. Second, Levene test (Levene, 1960) was performed with the resulting p-value of all variables above the critical value of 0.05. Thus, all variables satisfied the homoscedasticity assumption.

7.4 DATA SIMPLIFICATION: RELIABILITY AND EXPLORATORY FACTOR ANALYSIS (EFA)

In order to purify measurement scales, the researcher conducted two analyses: reliability and EFA.

7.4.1 Reliability analysis

According to the classical test theory, scale reliability strictly refers to the proportion of variance attributable to the true score of latent variables (DeVellis, 2003, p.27). Scale reliability discussed in past literature can generally be classified into three types: (1) the internal consistency reliability which can be regarded as the homogeneity of items within a scale (Churchill, 1979); (2) the test-retest reliability which is concerned with the stability of item responses over time (Nunnally, 1978, p.206); and, (3) the alternative-form reliability which refers to the extent to which two different statements can be used to measure the same construct at two different times (Netemeyer *et al.*, 2003, p.46).

In parallel with past research (e.g., Churchill, 1979; Melewar and Saunders, 1999), the researcher refers to the scale reliability as the internal consistency reliability. The

internal consistency of a scale is an important measurement property as it implies that items of the scale, notwithstanding their distinctiveness and specificity, share a common core and measure the same concept (Anderson and Gerbing, 1982; Netemeyer *et al.*, 2003, p.46). Following a recommendation by Churchill (1979), the researcher assessed the internal consistency of scales by measuring their coefficient alphas (Cronbach, 1951). Theoretically, the coefficient alpha is concerned with the degree of interrelatedness among a set of items designed to measure a single construct (Netemeyer *et al.*, 2003, p.49).

The internal consistency reliability can also be measured by another method, the "split-half" technique. Computationally, scale items are split in half and the correlation between these two portions is computed to assess the reliability (Netemeyer *et al.*, 2003, pp.47-48). In this research, the coefficient alpha method is preferred over the split-half technique mainly because the results of split-half technique are varied, making the "real" reliability assessment difficult, if not impossible (Peter, 1979). In addition, factors other than the value of the construct itself (i.e., sources of error such as the fatigue of respondents after reading the lengthy first portion) can affect the responses for each half, hence confounding the reliability calculation (De Vellis, 2003, p.40). Finally, it is more practical, yet comparatively effective, for the researcher to employ the coefficient alpha rather than the split-half method due to the limited sample size.

The researcher assessed coefficient alpha and item-to-total correlation for each provisional construct. The statistical criteria for item retention were (a) a corrected

item-to-item correlation above 0.35 (Saxe and Weitz, 1982; Bearden *et al.*, 2001) and (b) a coefficient alpha above 0.7 (Nunnally, 1978, p.226; Churchill, 1979).

7.4.2 Exploratory factor analysis (EFA)

EFA is a variable reduction technique which identifies the number of latent constructs and the underlying factor structure of a set of variables during the initial stage of scale development (Netemeyer *et al.*, 2003). Traditionally, EFA has been used to explore the possible underlying factor structure of a set of measured variables without imposing any preconceived structure on the outcome (Child, 1990), which explains the exploratory nature of this technique.

Although we started with some well-established measures from the literature, a number of these measures were reworded and/or adapted to a new context (i.e., higher education). Furthermore, some new indicators emerged as a result of the exploratory qualitative study. Based on the rationale of carrying out an EFA recalled earlier, the researcher conducted an EFA.

The data reduction tool in SPSS 15.0 for Windows was used to conduct EFA after checking the general properties of data (e.g., missing values, descriptive statistics, etc.) and the basic assumptions underlying EFA: minimum absolute sample size of 50 observations, strong conceptual foundation supporting the structure, at least five variables for each proposed factor (Hair *et al.*, 2006, pp.113-115). Items were divided into groups to ensure that the number of observations per item for each analysis was at least 5:1 (Hair *et al.*, 2006, p.113). Manifest variables were divided

into five groups. The first one consisted of perceived higher education country image (PHECI) and university attitude towards government funding (UAGF) constructs¹. The second group consisted of export information generation (IGen) and information dissemination (IDiss) constructs². The third group consisted of university export performance (UEP) and international reputation (UIR) constructs³. Finally, each of the two remaining groups consisted of only one construct (i.e., export coordination, responsiveness).

To reduce the number of items and extract factors, the researcher employed the principal component analysis technique (Netemeyer *et al.*, 2003, p.121; Hair *et al.*, 2006, p.112). A Varimax rotation was then applied to initially-extracted factors. This is in line with previous research (e.g., Cadogan *et al.*, 2001). In addition, Fabrigar *et al.* (1999) stated that the pattern of loadings was almost always found to be the same with Varimax as with oblique rotation.

To assess the factorability of items, the researcher examined three indicators (i.e., Kaiser-Meyer-Olin Measure of Sampling Adequacy, Barlett's Test of Sphericity and communalities). For every EFA, it was found that manifest variables have KMO Measures of Sampling Adequacy above 0.79, which is above the threshold of 0.6 (Kaiser, 1974), as well as p-values for Barlett's test of Sphericity (Barlett, 1954) below 0.05. Communalities were also found well above 0.5 suggesting satisfactory factorability for all items.

¹ Both were classified as exogenous variables. Moreover, combining them resulted in 10 items for EFA. This number satisfied the 5:1 rule of thumb mentioned above.

² Both are conceptually related under the umbrella of export market orientation. Moreover, combining them resulted in 12 items for EFA. This number satisfied the 5:1 rule of thumb mentioned above. Responsiveness is also an export marketing oriented activity. Yet, it was not possible to include it with respect to the rule of thumb mentioned earlier.

³ Both were classified as endogenous variables. Moreover, combining them resulted in 11 items for EFA. This number satisfied the 5:1 rule of thumb mentioned above.

In addition, the researcher evaluated the factorial solutions (e.g., item loadings and percentage of variance extracted) obtained from SPSS. Any item whose highest factor loading was less than 0.55 or whose loadings were high on more than one factor was dropped (Hair *et al.*, 2006). This step was repeated until all measurement scales had at least acceptable reliability (coefficient alpha>0.7) and simultaneously exhibited clear factor structures. This purification process was used in order to arrive at the final dataset. Some items did not pass the EFA and reliability tests. Below are the synopses of scale purification for each group of construct.

Perceived higher education country image: the initial calculation of item-to-total correlations showed that some items of this construct were not internally consistent. Based on the criteria set beforehand, two items (PHECI1, PHECI4) were dropped because their item-to-total correlations were below 0.35 (i.e., 0.327 for PHECI1 and 0.311 for PHECI4). When applying EFA, the result showed a clear factor structure with an acceptable level of cross-loadings (e.g., factor loadings of PHECI2 on factor 1 and factor 2 were 0.853 and 0.013 respectively). The coefficient alpha and item-to-total correlations of the remaining six items were subsequently recalculated and were found to meet the criteria (table 7.5).

University attitude towards government funding: the assessment of internal consistency reliability showed acceptable levels of coefficient alpha (0.720). However, some of the item-to-total correlations were found to be below the threshold value (0.35) (i.e., 0.028 for UAGF2 and -0.129 for UAGF6). Hence, these two items were pruned. Recalculating both coefficient alpha and item-to-total

correlations of the remaining four items provided satisfactory results. Furthermore, the result of EFA showed that there was only one clear factor on which all items loaded.

Items	Factor 1	Factor 2
1st group: Perceived higher education country image (PHECI) (α=0.916)		
PHECI2 High tuition fees	0.832	
PHECI3 High quality of courses	0.829	
PHECI5 High quality of teaching staff	0.812	
PHECI6 A positive view of graduates from employers	0.893	
PHECI7 High employment rate for graduates	0.849	
PHECI8 Highly recognised degrees worldwide	0.796	
1st group: University attitude towards government funding (UAGF) (α=0.967)		
UAGF1 We are receiving considerable amount of funding for scholarships from the government.		0.964
UAGF3 Government funding is a stable source of funding.		0.959
UAGF4 Government funding is the type of funding we prefer to rely on.		0.942
UAGF5 The share of public revenues is significant compared to other sources.		0.912

Table 7.5: Final EFA results

Export market information generation: when testing the reliability of this construct, three items showed weak corrected item-to-total correlation with 0.31 for IGen2, 0.311 for IGen4 and 0.281 for IGen5. The remained six items, showing adequate internal consistency, were retained and additionally tested for their dimensionality. The EFA result revealed that this construct had a clear factorial structure. However, one item (IGen1) loaded on a factor (loading=0.674) to which it was not assigned. Therefore, IGen1 was dropped and the coefficient alpha as well as the item-to-total

correlations of remaining five items were subsequently recalculated and were found

to meet the criteria (alpha=0.94).

Table 7.5 (cont.): Final EFA results

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the key tool for disseminating information on our foreign			
markets.	markets.		
IDiss5 We feed back to the schools/faculties about their 0.9	IDiss5 We feed back to the schools/faculties about their		0.9
recruitment process through informal conversations as part of	recruitment process through informal conversations as part of		
everyday communication.	everyday communication.		
IDiss6 As an international office, we feed information that we 0.9	IDiss6 As an international office, we feed information that we		0.9
get from current international students back to the relevant			
university department in order to take action.	university department in order to take action.		
IDiss8 Personnel from the international office frequently discuss 0.885	IDiss8 Personnel from the international office frequently discuss		0.885
competitors' activities with personnel from other departments of	- · ·		
the university.	1 1 1		

Export market information dissemination: most items assigned to this dimension were found to have satisfactory corrected item-to-total correlations and coefficient alpha (alpha=0.852). Yet, items IDiss3 and IDiss7 revealed low item-to-total correlations with 0.092 and -0.004 respectively. Hence both IDiss3 and IDiss7 were dropped. Furthermore, the result of EFA showed that there was only one clear factor on which all items loaded. The coefficient alphas as well as item-to-total correlations for this construct were recalculated.

University export performance: the preliminary reliability analysis revealed that three items (UEP6, UEP7 and UEP9) did not meet the item-to-total threshold (with 0.168, 0.227 and 0.004 respectively). Hence, these three items were deleted. The result of EFA showed a relatively clear factor structure with an acceptable level of cross-loadings (e.g. factor loadings on UEP5 on factor1 and factor2 were 0.886 and 0.279 respectively). Moreover, the dimensionality was in line with the expectation as all the items loaded highly on the predicted factor. Coefficient alphas and item-to-total correlations were also recalculated.

University international reputation: when testing the reliability of this construct, two items showed weak corrected item-to-total correlation with 0.325 for UIR5, 0.304 for UIR6. The remained five items, showing adequate internal consistency, were retained and additionally tested for their dimensionality. The EFA result revealed that this construct had a clear factorial structure with all the items loading highly on the predicted factor.

Table 7.5 (cont.): Final EFA results

Items	Factor 1	Factor 2
3rd group: University export performance (UEP)		
(α=0.961)		
UEP1 Enrolment volume of international students.	0.859	
UEP2 University market share of international students	0.763	
relative to other UK universities.		
UEP3 Level of international students' satisfaction.	0.875	
UEP4 Revenues from international students as a percentage of	0.898	
university's total revenues.		
UEP5 Number of international students recruited as a result of	0.886	
our alumni.		
UEP8 Managers' target related to the enrolment volume of	0.843	
international students.		
3rd group: University international reputation (UIR) (α=0.978)		
UIR1 Our university has a good reputation worldwide.		0.918
UIR2 In general, I believe that our university always fulfils		0.858
the promises it makes to its international students.		
UIR3 I believe that the reputation of our university is		0.876
internationally better than many other universities.		
UIR4 The university offers a worldwide reputable degree.		0.883
UIR7 The university has a strong brand name internationally.		0.932

Responsiveness: the initial calculation of coefficient alpha item-to-total correlations showed that the items of this construct were not internally consistent. Item-to-total correlations ranged from -0.07 for Resp7_R to 0.577 for Resp1 whereas coefficient alpha was 0.647, suggesting that particular items should be trimmed in order to improve the overall reliability of the scale. Based on the criteria set beforehand, some items (Resp3, Resp4, Resp5_R, Resp7_R, Resp9, Resp10_R) were dropped because they failed to reach the minimum required item-to-total correlations value with 0.117 for Resp3, 0.334 for Resp4, 0.164 for Resp5_R, -0.070 for Resp7_R,

0.272 for Resp9 and 0.004 for Resp10_R. The coefficient alpha and item-to-total correlations of the remaining five items were subsequently recalculated and were found to meet the criteria (alpha=0.946). As for the dimensionality of the remaining items, the EFA result showed that they loaded clearly on one factor. The loadings varied from 0.843 for Resp6 to 0.961 for Resp8. Since these five items exhibited satisfactory reliability and dimensionality, they were retained for further analysis.

Export coordination: when testing the reliability of this construct, two items were found to have a level of item-to-total correlation below the threshold (i.e., 0.225 for COOR6_R and 0.344 for COOR7_R). Trimming these two items allowed satisfactory internal consistency reliability of the construct. Moreover, the EFA result showed the existence of one mere component. This is in line with the expectation.

Table 7.5(cont.): Final EFA results

Items	Factor 1
4th group: Responsiveness to export market information (Resp) (α=0.946)	
Resp1 We have good support for international students (e.g., accommodation, obtaining visas, orientation, and airport pickups) in order to make their experience better.	0.946
Resp2 The information we give out to international students is accurate, clear and understandable.	0.94
Resp6 We are quick to respond to important changes taking place in the global environment within which our university operates (e.g., regulatory, technology, economy).	0.843
Resp8 We rapidly respond to competitive actions that threaten us in our export markets.	0.961
Resp11 All departments in our university are involved in implementing our marketing strategy for international recruitment.	0.869
5th group: Export coordination (COOR) (α=0.949)	
COOR1 Key players from other departments (e.g., different schools/faculties) in our university are supportive of the international office activities.	0.879
COOR2 Departments in our university work together as a team in relation to our foreign business.	0.94
COOR3 The head of the international office has a very strong working relationship with all the deans/heads of faculties/schools in the university.	0.923
COOR4 All faculties/schools and departments in our university are brought to the international strategy of the university.	0.934
COOR5 Personnel from the international office share resources with other departments in our university.	0.824
COOR8 We resolve issues and conflicts through communication and group problem-solving.	0.868

7.5 CONFIRMATORY FACTOR ANALYSIS (CFA)

Subsequent to revealing the potential dimensionality by indicating items that load poorly on an intended factor or load highly on more than one factor, the researcher employed CFA to further assess the quality of a factor solution (Churchill, 1979). Unlike EFA, CFA is a technique usually employed to "confirm an *a priori* hypothesis about the relationship between a set of measurement items and their respective factors" (Netemeyer *et al.*, 2003, p.148). CFA was used to confirm the unidimensionality of all constructs, another important psychometric property, of a scale initially developed by EFA (Churchill, 1979). Anderson *et al.* (1987) defined unidimensionality as the existence of one latent trait or construct underlying a set of measurement items.

The researcher first used SPSS.15 and employed principal component technique to confirm the unidimensionality of each construct (Leech *et al.*, 2008). Constructs were entered each at a time (Field, 2005). The results (appendix 3) revealed unidimensionality of all constructs as expected on the basis of pre-established knowledge on the structure of the data.

The researcher also used AMOS.18, a structural equation modelling software, to perform CFA. However, due to the limitations of the sample size, the researcher was unable to test the full model with CFA, because CFA requires a minimum of five observations per parameter estimate (Bentler, 1992; Floyd and Widaman, 1995). The researcher used CFA for each construct at a time to ensure acceptable parameter estimate-to-observation ratios (Bentler and Chou, 1987; Vorhies and Morgan, 2005). This procedure is in line with the suggestions of Joreskog (1993).

Following Lee's (2001) seminal paper combining PLS and CFA, the researcher examined both chi-squares statistics χ^2 and goodness-of-fit index (GFI). Chi-square

statistic⁴ is a fundamental statistically based measure of overall fit in structural equation modelling (Joreskog and Sorbom, 1996). Acceptable model fit is indicated by a chi-square probability greater than or equal to 0.05. GFI is a measure of the overall degree of fit which compares the squared residuals from prediction with the actual data. A GFI higher than 0.9 shows an acceptable fit (Schumaker and Lomax, 1996).

Given that it is especially appropriate for a relatively small sample (Hair *et al.*, 1998, p.657), CFI (Bentler, 1990), connoting an incremental fit index that compares the hypothesised model and the null model, was also inspected. Similarly to GFI, a value higher than 0.9 shows an acceptable fit (Hu and Bentler, 1999).

CFA results (appendix 4) demonstrated acceptable unidimentionality with satisfactory fit indices. Therefore, there was no need to delete items. These results are in parallel with the CFA run through SPSS.15.

It is noted that additional indices and tests (e.g., composite reliability, AVE, convergent and discriminant validity) are reported in the following section through PLS.

⁴Although widely reported, it was criticised for being too sensitive to sample size, especially if the sample size is lower than 100 or higher than 200 respondents. According to Bentler and Boner (1980), if the sample size becomes large enough, significant differences will be found for any specified model. On the other hand, if the sample size is less than 100, the chi-square test will show anacceptable fit even when none of the model paths is shown to be statistically significant.

7.6 STRUCTURAL EQUATION MODELLING USING PLS

7.6.1 Assessment of the measurement model

The measurement model relates to the relations between manifest variables (observed items) and latent variables. The measurement model is tested by assessing the validity and reliability of the items and constructs in the model. This ensures that only reliable and valid constructs' measures are used before assessing the nature of relationships in the overall model. PLS path modelling includes two different kinds of outer models: reflective and formative measurement models (Jarvis *et al.*, 2003).

7.6.1.1 Reflective measures

Reflective measurement models should be assessed with regard to their reliability and validity (Bollen, 1989). As previously discussed (section 7.4.1), Cronbach's alpha (Cronbach, 1951) is a traditional criterion for internal consistency. All constructs revealed satisfactory levels of Cronbach's alpha, ranging from 0.91 to 0.97 (table 7.6). However, Cronbach's alpha "tends to provide a severe underestimation of the internal consistency reliability of latent variables in PLS path models" (Henseler *et al.*, 2009, p.299). A different measure, the composite reliability (Werts et *al.*, 1974), is more appropriate. The composite reliability considers that indicators have different loadings, and can be interpreted in the same way as Cronbach's alpha. The data indicated that the measures are robust in terms of their internal consistency reliability as indexed by the composite reliability (table 7.6). The composite reliabilities of the different measures ranged from 0.93 to 0.98, which exceeded the recommended threshold value of 0.8 or 0.9 (Nunnally and Bernstein, 1994).

Table 7.6: Overview result	Table	7.6:	Overview	results
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	Composite reliability	Cronbach's alpha	AVE
COOR	0.9604	0.9501	0.8019
IDiss	0.9717	0.9648	0.8513
IGen	0.9558	0.9419	0.8123
PHECI	0.9349	0.9194	0.706
Resp	0.9613	0.9494	0.8329
UAGF	0.9758	0.9671	0.9099
UEP	0.9692	0.9617	0.8399
UIR	0.9836	0.9791	0.9229

Given that indicators have different loadings, it is wise to assess the individual item reliability. In assessing the reliability of each indicator, the researcher examined the loadings of the measures with their respective constructs generated by PLS (i.e., outer loadings). Each loading was reviewed to verify whether the individual items were reliable. All measurement items with loadings greater than 0.7 were retained. The factor loadings from the PLS measurement model are reported in table 7.7. It is noticed that all items loaded significantly (loadings ranging from 0.81 to 0.97) on their respective factors, which was an indication of indicator reliability (Fornell and Larcker, 1981).

	COOR	IDiss	IGen	PHECI	Resp	UAGF	UEP	UIR
COOR1	0.8732				1			
COOR2	0.9421							
COOR3	0.9245							
COOR4	0.9356							
COOR5	0.8263							
COOR8	0.8653							
IDiss1	0.0000	0.9501						
IDiss2		0.9205						
IDiss4		0.8509						
IDiss5		0.9465						
IDiss6		0.9589						
IDiss8		0.9047						
IGen3		012017	0.841					
IGen6			0.9089					
IGen7			0.9045					
IGen8			0.9058					
IGen9			0.943					
PHECI2				0.7817				
PHECI3				0.8772				
PHECI5				0.8863				
PHECI6				0.8519				
PHECI7				0.8134				
PHECI8				0.8379				
Resp1					0.9519			
Resp11					0.8611			
Resp2					0.9479			
Resp6					0.8262			
Resp8					0.9673			
UAGF1						0.9649		
UAGF3						0.9625		
UAGF4						0.9463		
UAGF5						0.9416		
UEP1							0.922	
UEP2							0.8628	
UEP3							0.929	
UEP4							0.94	
UEP5							0.9234	
UEP8							0.9195	
UIR1								0.9494
UIR2								0.9446
UIR3								0.977
UIR4								0.9735
UIR7								0.9582

Table 7.7: Factor loadings

For the assessment of validity, two types of validity are usually examined: the convergent validity and the discriminant validity. Convergent validity measures the degree to which items on a scale are in theory linked. The researcher assessed convergent validity by observing the average variance extracted (AVE) index. Results revealed that the AVE for all constructs exceeded the minimum threshold value of 0.5 (table 7.6), indicating that all latent variables have explained more than 50% of the variance in their observable measures (Gotz *et al.*, 2009).

	COOR	IDiss	IGen	PHECI	Resp	UAGF	UEP	UIR
					P			
COOR	0.8954							
IDiss	0.6869	0.9226						
IGen	0.5824	0.6874	0.9012					
PHECI	0.3546	0.1895	0.2643	0.8422				
Resp	0.5523	0.3821	0.3674	0.5869	0.9126			
UAGF	-0.4556	-0.5563	-0.55	-0.292	-0.496	0.9538		
UEP	0.567	0.6547	0.6285	0.3481	0.5473	-0.499	0.9164	
UIR	0.5062	0.6102	0.6691	0.4037	0.4709	-0.49	0.682	0.9606

Table 7.8: Latent variable correlations

On the other hand, discriminant validity measures whether a concept is unique and distinct from the measures of other concepts (Peter, 1981; Bagozzi *et al.*, 1991). In PLS path modelling, discriminant validity can be evaluated using two criteria: the Fornell-Larcker criterion and the cross-loadings. The Fornell-Larcker criterion (Fornell and Larcker, 1981) assesses discriminant validity on the construct level. It postulates that a construct should share more variance with its own measures than it shares with other constructs in a model. In other words, the correlation of a construct with its indicators (i.e., the square root of AVE) should exceed the correlation between the construct and any other construct (Fornell and Lacker, 1981). The

results in table 7.8 show that in all cases the root AVE values were greater than the corresponding off-diagonal correlations, indicating adequate discriminant validity (Barclay *et al.*, 1995). Cross-loadings offer another check for discriminant validity on the indicator level. The loading of each indicator is expected to be greater than all of its cross-loadings (Chin, 1998b; Gotz *et al.*, 2009). This is the case for the present study as shown in table 7.9.

Table 7.9: Cross-loadings

	UNRP*	COOR	IDiss	IGen	PHECI	Resp	UAGF	UEP	UIR
UNRP1		0.2782	0.2284	0.3057	0.5955	0.429	-0.3377	0.3724	0.4616
UNRP2		0.3136	0.2521	0.4761	0.451	0.3754	-0.3583	0.3694	0.4241
UNRP3		0.3861	0.3726	0.4619	0.547	0.474	-0.4412	0.4698	0.5286
UNRP4		0.3737	0.2733	0.3917	0.5829	0.4365	-0.3561	0.428	0.4951
UNRP5		0.3917	0.3626	0.4577	0.6724	0.5152	-0.4593	0.4955	0.5846
UNRP6	11/1	0.3728	0.2785	0.5142	0.549	0.5433	-0.3931	0.4622	0.5641
COOR1	0.5092	0.8732	0.4434	0.3568	0.5116	0.6476	-0.3397	0.4216	0.4092
COOR2	0.35	0.9421	0.699	0.6175	0.2824	0.497	-0.4089	0.5292	0.4801
COOR3	0.3468	0.9245	0.6739	0.511	0.367	0.5667	-0.4196	0.5473	0.4922
COOR4	0.3754	0.9356	0.677	0.5951	0.2674	0.4122	-0.4363	0.5706	0.5147
COOR5	0.2732	0.8263	0.6294	0.5616	0.1422	0.2999	-0.4172	0.4981	0.3448
COOR8	0.3921	0.8653	0.5348	0.4595	0.3556	0.5578	-0.4225	0.465	0.4636
IDiss1	0.4096	0.7087	0.9501	0.7011	0.2596	0.3894	-0.5627	0.6562	0.6469
IDiss2	0.254	0.6532	0.9205	0.6474	0.1822	0.4027	-0.5482	0.5786	0.5551
IDiss4	0.2643	0.517	0.8509	0.6251	0.0073	0.2675	-0.4126	0.5507	0.4856
IDiss5	0.355	0.6728	0.9465	0.6243	0.2633	0.3849	-0.5282	0.6319	0.5709
IDiss6	0.3561	0.6784	0.9589	0.6434	0.2285	0.354	-0.505	0.6098	0.5877
IDiss8	0.3269	0.5499	0.9047	0.5589	0.0698	0.3023	-0.5105	0.5896	0.5154
IGen3	0.5888	0.4811	0.5397	0.841	0.234	0.3695	-0.5504	0.564	0.6394
IGen6	0.4254	0.5415	0.7026	0.9089	0.1974	0.3243	-0.4944	0.6166	0.6303
IGen7	0.544	0.4681	0.5616	0.9045	0.2746	0.3559	-0.4176	0.4932	0.5961
IGen8	0.3357	0.5842	0.6337	0.9058	0.2661	0.3227	-0.5116	0.6122	0.5498
IGen9	0.4059	0.5453	0.6538	0.943	0.2209	0.2782	-0.4917	0.5355	0.5892
PHECI2	0.4322	0.1389	0.0231	0.1143	0.7817	0.4091	-0.1024	0.1733	0.1761
PHECI3	0.6596	0.4136	0.2524	0.3771	0.8772	0.5556	-0.272	0.4207	0.4111
PHECI5	0.6219	0.4568	0.2949	0.3317	0.8863	0.6404	-0.37	0.3733	0.5246
PHECI6	0.4622	0.161	0.0476	0.0616	0.8519	0.3616	-0.1488	0.1936	0.2379
PHECI7	0.5115	0.193	0.0325	0.0879	0.8134	0.4471	-0.174	0.267	0.233
PHECI8	0.5313	0.2801	0.1756	0.218	0.8379	0.4538	-0.3107	0.2297	0.322
Resp1	0.5051	0.588	0.3731	0.3819	0.5571	0.9519	-0.4207	0.5151	0.4696
Resp11	0.4599	0.4102	0.2995	0.3059	0.4875	0.8611	-0.4536	0.4745	0.3505
Resp2	0.6126	0.5494	0.4169	0.4166	0.5967	0.9479	-0.5047	0.568	0.5589
Resp6	0.3802	0.3662	0.2628	0.1983	0.4377	0.8262	-0.4892	0.3509	0.2163
Resp8	0.4946	0.5608	0.3617	0.3301	0.5726	0.9673	-0.4174	0.5478	0.4758

Based on the preceding assessments of reliability, convergent validity and discriminant validity across all reflective constructs, the measures showed satisfactory reliability and validity, and were thereby retained.

UAGF1	-0.4215	-0.4215	-0.4936	-0.4831	-0.2642	-0.4493	0.9649	-0.3959	-0.4389
UAGF3	-0.4028	-0.4016	-0.4652	-0.4527	-0.2644	-0.4595	0.9625	-0.4009	-0.4294
UAGF4	-0.3737	-0.4407	-0.6091	-0.5536	-0.2015	-0.4285	0.9463	-0.5131	-0.4935
UAGF5	-0.5497	-0.4656	-0.5393	-0.5887	-0.3752	-0.5462	0.9416	-0.5696	-0.4979
UEP1	0.518	0.5898	0.62	0.603	0.4123	0.5395	-0.5542	0.922	0.6144
UEP2	0.3986	0.4558	0.6045	0.6181	0.2415	0.3756	-0.3312	0.8628	0.6514
UEP3	0.4604	0.5188	0.598	0.5336	0.2831	0.5592	-0.4218	0.929	0.6275
UEP4	0.4548	0.4582	0.578	0.5402	0.2613	0.5061	-0.4381	0.94	0.6154
UEP5	0.4505	0.4943	0.5527	0.5701	0.2644	0.4906	-0.4215	0.9234	0.5904
UEP8	0.5265	0.5909	0.6408	0.5898	0.4372	0.5305	-0.5645	0.9195	0.6458
UIR1	0.6592	0.4224	0.456	0.6061	0.4389	0.4984	-0.4466	0.59	0.9494
UIR2	0.592	0.4936	0.6131	0.6265	0.3865	0.4698	-0.4986	0.6712	0.9446
UIR3	0.5236	0.5222	0.659	0.6858	0.3468	0.4198	-0.4589	0.716	0.977
UIR4	0.534	0.5102	0.6463	0.6861	0.3531	0.4208	-0.4894	0.6953	0.9735
UIR7	0.6131	0.4738	0.5338	0.599	0.4268	0.4623	-0.4597	0.5847	0.9582

Table 7.9 (cont.): Cross-loadings

*Cross-loadings and the Fornell-Larcker criterion are not applicable in case of UNRP as the concept of AVE is meaningless for formative measures.

7.6.1.2 Formative measure

Bollen (1989) and Bagozzi (1994) maintained that traditional validity assessments and classical test theory do not apply to manifest variables that are used in formative measurement models and that the concepts of reliability (i.e., internal consistency) and construct validity (i.e., convergent and discriminant validity) are not meaningful when a formative mode is employed.

Due to its conceptualisation as a formative construct, interpretation of the UNRP construct should be based on weights instead of loadings (Schroer and Hertel, 2009). Table 7.10 reveals the weights of this construct's indicators.

	Weights	VIF
UNRP1 -> UNRP	0.4*	3.12
UNRP2 -> UNRP	0.2	2.48
UNRP3 -> UNRP	0.65**	4.67
UNRP4 -> UNRP	0.18	3.1
UNRP5 -> UNRP	0.48**	4.53
UNRP6 -> UNRP	0.55**	4.68

Table 7.10 Outer weights and variance inflation of formative manifest variables

Some of UNRP items (i.e., UNRP2 and UNRP4) showed non-significant weights. However, indicator deletion is problematic with regards to formative measures, as "omitting an indicator is omitting a part of the construct" (Bollen and Lennox, 1991, p.305).

Multicollinearity might pose a relevant problem as the formative measurement model is based on multiple regression (Diamantopoulos and Winklhofer, 2001). In the dataset, the highest value for the variance inflation factor (VIF) was 4.68 for UNRP6, which is far below the common cut-off threshold of 10 (Kleinbaum *et al.*, 1988). This value is also below 5 as it is generally suggested that VIF values should be below 5 as PLS is sensitive to multi-collinearity (Sarstedt, 2008). Therefore, multicollinearity does not represent a serious problem.

7.6.2 Assessment of the structural model

Structural model specifies relations between latent constructs. The structural model is tested by estimating the paths between the constructs, which are an indicator of the model's predictive ability. Smart PLS provides the squared multiple correlations (R^2) for each endogenous construct in the model and the path coefficients. R^2 indicate the percentage of a construct's variance in the model, whilst the path coefficients indicate the strengths of relationships between constructs (Chin, 1998b). Consistent with Chin (1998b), bootstrapping (200 resamples) was applied to produce standard errors and t-statistics. This enables the measurement of the statistical significance of the path coefficients.

The statistical objective of PLS is to show high R^2 and significant t-values, thus rejecting the null hypothesis of no effect. Figure 7.1 illustrates the results of our PLS model. On one hand, Chin (1998b) recommends that path coefficients range between 0.20 and 0.30 along with measures that explains 50% or more of the variance in the latent variable or model. In this study, although some of the path coefficients were weak (the details of path coefficients are discussed further), figure 7.1 shows that all the variances represented by R^2 values are acceptable or strong (ranging from 0.43 to 0.61).

On the other hand, the t-values need to be significant to support the hypothesised paths. Parameters with an absolute t-value greater than 1.96 indicate a significance level of 0.05 (i.e., p<0.05), those with an absolute t-value over 2.58 present a significance level of 0.01 (i.e., p<0.01), and those with an absolute t-value over 3.26 present a significance level of 0.001 (i.e., p<0.001). Table 7.11 shows PLS results testing hypotheses 1 to 8.

In support of H1, the results in table 7.11 and table 7.12 show that export coordination in the university has a significant positive effect on all export marketing activities in a university (i.e., export market information generation, dissemination and responsiveness). H1a, H1b and H1c were all supported. In other words, the coefficient of the path from COOR to IGen was significant with medium effect size and small predictive relevance (β =0.38, p<0.01, f^2 =0.2, q^2 =0.14), as was the coefficient of the path from COOR to IDiss, with large effect size and large predictive relevance (β =0.57, p<0.001, f^2 =0.53, q^2 =0.35). Moreover, COOR was significantly related to Resp with small effect size and small predictive relevance (β =0.29, p<0.01, f^2 =0.13, q^2 =0.06).

Table 7.11: Summary of results of hypotheses testing

Hypotheses	Assessment
H1: The more coordinated the university is in relation to its foreign business, the more export market oriented the university is.	Supported
H1a: The more coordinated the university is in relation to its foreign business, the more export market information the university generates.	Supported
H1b: The more coordinated the university is in relation to its foreign business, the more export market information the university disseminates.	Supported
H1c: The more coordinated the university is in relation to its foreign business, the more responsive is the university to its foreign markets.	Supported
H2: The less favourable the university attitude is toward government funding, the more export market oriented the university is.	Supported
H2a: The less favourable the university attitude is toward government funding, the more export market information the university generates.	Supported
H2b: The less favourable the university attitude is toward government funding, the more export market information the university disseminates.	Supported
H2c: The less favourable the university attitude is toward government funding, the more responsive the university is to its foreign markets.	Supported
H3: The better the university national ranking position is, the less export market oriented the university is expected to be.	Not supported
H3a: The better the university national ranking position is, the less export market information the university generates.	Rejected
H3b: The better the university national ranking position is, the less export market information the university disseminates.	Not significant
H3c: The better the university national ranking position is, the less responsive the university is to its foreign markets.	Not significant

Table 7.11 (cont.): Summary of results of hypotheses testing

H4: The more favourable the higher education country image as perceived by managers, the more export market oriented the university is.	Partially supported
H4a: The more favourable the higher education country image as perceived by managers, the more export market information the university generates.	Not significant
H4b: The more favourable the higher education country image as perceived by managers, the more export market information the university disseminates.	Not significant
H4c: The more favourable the higher education country image as perceived by managers, the more responsive the university is to its foreign markets.	Supported
H5: The university national ranking position has a positive influence on the higher education country image as perceived by managers.	Supported
H6: Export market orientation in a university will enhance its export performance.	Partially supported
H6a: Export market information generation in a university will enhance its export performance.	Not significant
H6b: Export market information dissemination in a university will enhance its export performance.	Supported
H6c: University responsiveness to export market information will enhance its export performance.	Supported
H7: Export market orientation in a university will enhance its international reputation.	Partially supported
H7a: Export market information generation in a university will enhance its international reputation.	Supported
H7b: Export market information dissemination in a university will enhance its international reputation.	Not significant
H7c: University responsiveness to export market information will enhance its international reputation.	Supported
H8: University international reputation has a positive influence on its export performance.	Supported
H9: University international reputation partially mediates the impact of EMO on university export performance.	Partially Supported
H9a: University international reputation partially mediates the impact of export market information generation on university export performance.	Rejected
H9b: University international reputation partially mediates the impact of export market information dissemination on university export performance.	Rejected
H9c: University international reputation partially mediates the impact of university responsiveness to export market information on university export performance.	Supported

Paths	Н	Expected sign	Path coeff.	Std. error	Absolute t-value	5 j	6 ₄ 2 9
COOR -> IGen	H1a	+	0.38**	0.1231	3.0752	0.2**	0.14*
COOR -> IDiss	H1b	+	0.57***	0.1126	5.0552	0.53***	0.35***
COOR -> Resp	H1c	+	0.29**	0.1103	2.6062	0.13*	0.06*
UAGF -> IGen	H2a	-	-0.27*	0.128	2.0979	0.1*	0.07*
UAGF -> IDiss	H2b	-	-0.3**	0.1151	2.641	0.15**	0.1*
UAGF -> Resp	H2c	-	-0.21*	0.1103	1.9793	0.07*	0.04*
UNRP -> IGen	H3a	-	0.34**	0.1309	2.6361	0.11*	0.06*
UNRP ->IDiss	H3b	-	0.08	0.142	0.5877	≈0	≈ 0
UNRP -> Resp	H3c	-	0.09	0.1622	0.5444	≈0	≈0
PHECI -> IGen	H4a	+	-0.17	0.1286	1.3517	≈0	≈ 0
PHECI -> IDiss	H4b	+	-0.15	0.1234	1.2599	0.03	≈0
PHECI -> Resp	H4c	+	0.36**	0.1357	2.6789	0.17**	0.14*
UNRP ->PHECI	Н5	+	0.65***	0.0695	9.394	0.74***	0.35***
IGen -> UEP	Нба	+	0.15	0.1392	1.0703	≈0	≈0
IDiss -> UEP	H6b	+	0.27*	0.139	1.992	0.09*	0.04*
Resp -> UEP	H6c	+	0.24**	0.0847	2.9185	0.12*	0.05*
IGen -> UIR	H7a	+	0.43**	0.1526	2.8077	0.2**	0.15**
IDiss -> UIR	H7b	+	0.23	0.1564	1.4666	0.06	0.03
Resp -> UIR	H7c	+	0.22**	0.0698	3.2331	0.09*	0.07*
UIR -> UEP	H8	+	0.29*	0.133	2.2295	0.1*	0.07*

Table 7.12: Path coefficients

With regard to H2, it was hypothesised that university unfavourable attitude towards government funding would stimulate a higher level of EMO. As expected, it was found that a university's attitude towards government funding is significantly and negatively correlated with every single component of EMO.

The coefficient of the path from UAGF to IGen was significant with small effect size and small predictive relevance (β =-0.27, p<0.05, f^2 =0.1, q^2 =0.07), as was the coefficient of the path from UAGF to IDiss with medium effect size and small predictive relevance (β =-0.3, p<0.01, f^2 =0.15, q^2 =0.1). Also, UAGF was found to be a significant predictor of Resp with small effect size and small predictive relevance (β =-0.21, p<0.05, f^2 =0.07, q^2 =0.04). Thus, H2a, H2b, H2c and thereby H2 were supported.

With respect to H3, the path coefficient from UNRP to IGen was significant but negative with small effect size and small predictive relevance (β =0.34, p<0.01, f^2 =0.11, q^2 =0.06). This path coefficient obtained for H3a was opposite in direction to that posited in H3. Therefore, H3a was rejected. Moreover, university national ranking position was neither significantly related to export market information dissemination nor to responsiveness. This means that neither H3b nor H3c are significant. These mixed results do not give support to H3.

Regarding H4, it can be derived from the tables that perceived higher education country image did not correlate significantly with two dimensions of EMO in a university (i.e., export market information generation and dissemination). However, the perceived higher education country image showed a positive significant relationship with responsiveness with medium effect size and small predictive relevance, confirming H4c (β =0.36, p<0.01, f^2 =0.17, q^2 =0.14). It is concluded that H4 was partially supported.

Four constructs (i.e., export coordination, university national ranking position, university attitude towards government funding and perceived higher education country image) explain 50%, 56% and 53% of the variance in information generation, dissemination and responsiveness respectively.

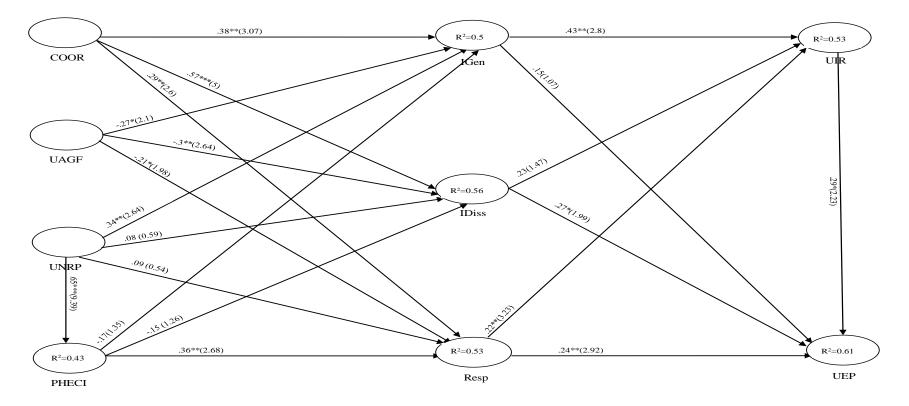


Figure 7.1: PLS structural model

H5 was confirmed as the university national ranking position has a positive significant effect (β =0.65, p<0.001, f^2 =0.74, q^2 =0.35) on higher education country image as perceived by managers with large effect size and large predictive relevance. In addition, the university national ranking position explains 43% variance in perceived higher education country image.

As established in H6, EMO would determine university export performance. Although no significant direct effect was found from export market information generation (H6a), export market information dissemination (H6b; β =0.27, p<0.05, f^2 =0.09, q^2 =0.04) has a positive significant effect on university export performance with small effect size and small predictive relevance. Similarly, responsiveness was found as a significant predictor of university export performance (H6c; β =0.24, p<0.01, f^2 =0.12, q^2 =0.05) with small effect size and small predictive relevance. H6 was therefore supported.

In the seventh group of hypotheses, while the researcher found a non-significant relationship for H7b, hypotheses H7a and H7c were supported. The coefficient path from IGen to UIR was significant with medium effect size and medium predictive relevance (β =0.43, p<0.01, f^2 =0.2, q^2 =0.15). Furthermore, the coefficient path from IGen to Resp was significant with small effect size and small predictive relevance (β =0.22, p<0.01, f^2 =0.09, q^2 =0.07). Hence, EMO in a university enhances its international reputation. EMO activities explain 53% of the variance in university international reputation.

H8 suggests that university international reputation has a positive influence on its export performance. The results support this hypothesis as the path coefficient of 0.29 was statistically significant at p<0.05 with small effect size and small predictive relevance (f^2 =0.1, q^2 =0.07). The three dimensions of EMO as well as university international reputation explain 61% of the variance in university export performance.

The blindfolding results (G=30 blocks) are presented in table 7.13. It is noticed that for this model all blocks had high values for CV-communality index H^2 , and satisfactory values for CV-redundancy index F^2 . These values were well above the threshold level of zero (Fornell and Cha, 1994). Furthermore, the 0.65 value of GOF index was acceptable. In summary, the results indicated that the model had an acceptable predictive relevance. The structural model is therefore appropriate.

In addition, SMART PLS provided the researcher with total effects (see appendix 5). It is noticed from appendix 5 that the total effect of each of export market information generation, dissemination and responsiveness on university export performance is significant. The total effect also accounts for the indirect effect through university international reputation. This suggests that EMO dimensions influence university export performance mostly through university international reputation (based on Groth *et al.*, 2009), which is in line with H9. To test the mediation effect of university international reputation (H9), the researcher employed Baron and Kenny's (1986) step approach. When UIR was added to the IGen -> UEP path, the direct IGen -> UEP path decreased and the direct relationship became insignificant (see table 7.12). Since the effect was eliminated with the inclusion of

UIR, this suggested full mediation (Hair *et al.*, 2006) of UIR in the IGen -> UEP relationship. H9a suggesting partial mediation was therefore rejected. Similarly, Resp -> UEP decreased with the inclusion of UIR, but the direct relationship remained significant (see table 7.12), suggesting partial mediation by UIR (Hair *et al.*, 2006). Therefore H9c was supported. H1b was however not supported given that the direct path IDiss -> UIR is insignificant.

Block	R^2	⁵ Communality	${}^{6}H^{2}$	$^{7}F^{2}$
IDiss	0.5604	0.8513	0.7769	0.4429
IGen	0.499	0.8123	0.6979	0.3842
PHECI	0.4266	0.7093	0.5833	0.26
Resp	0.5286	0.8329	0.7302	0.4069
UEP	0.6122	0.8399	0.7607	0.4768
UIR	0.5329	0.9228	0.8549	0.4674
UNRP		0.7326	0.6453	
COOR		0.8019	0.7077	
UAGF		0.9099	0.8059	
Average	0.53	0.82		
⁸ GOF	0.65			

Table 7.13: Blindfolding results

⁵ Communality $j = 1/p \Sigma \operatorname{cor}^2 (X_{jh}, Y_j)$, where p = is the total number of MVs in the block; $X_{jh} = h^{th}$ MV in jth block; $Y_j =$ latent variable. The communality index measures the quality of the measurement model for each block (Tenanhaus *et al.*, 2005).

 $^{6 \}text{ H}^2 = \text{CV-communality index}$

⁷ CV-redundancy $(F^2 j) = 1 - \Sigma_D = (\Sigma_D SSE_D) / (\Sigma_D SSO_D)$, where *D* is the omission distance, SSE is the sum of squares of prediction errors, and SSO is the sum of squares of observations (Henseler *et al.*, 2009). It measures the capacity of the path model to predict the endogenous MVs indirectly from a prediction of their own LV using the related structural relation, by cross-validation (Tenanhaus *et al.*, 2005).

⁸GoF = $\sqrt{\text{average R square*average communality}}$ (Tenanhaus *et al.*, 2005).

7.7 SUMMARY

The research instrument presented in the previous chapter was tested in this chapter through SEM (PLS) based on a valid sample of 63 questionnaires. The model presented in 7.1 reveals all the relationships. This model will be discussed in more detail in the next chapter.

CHAPTER 8 DISCUSSION

8.1 INTRODUCTION

In this chapter the results presented in chapter 7 are discussed in more detail. The findings of all hypotheses testing were reviewed and compared with prior research. Both existing literature and follow-up interviews were used to support the discussion. On the basis of 7.1, summarising the research findings, eight follow-up interviews were conducted with marketing managers in the international offices of UK universities (see their profiles in table 8.1 at the end of the chapter).

The structure of this chapter is as follows. First, the focal construct: EMO in universities and its underlying dimensions are discussed. Second, the antecedents of export market-oriented activities in universities (H1-H5) are explained. Finally, the consequences of EMO (H6-H9) are examined with a consideration of the mediating role of university international reputation.

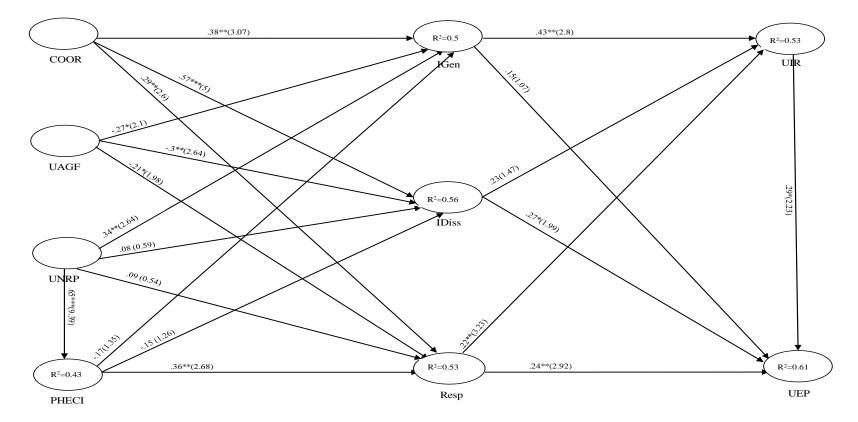


Figure 7.1: PLS structural model

8.2 FOCAL CONSTRUCT: EMO IN UNIVERSITIES

Notwithstanding the importance of the export market in shaping the direction of higher education marketing (De Vita and Case, 2003; Russell, 2005), there is little research investigating the significance of EMO in the higher education context. Few studies examined the applicability of MO in a higher education setting (Stewart, 1991; Caruana *et al.*, 1998a; Wasmer and Bruner, 1999). Nevertheless, insufficient empirical research has been carried out on MO in higher education institutions from an international perspective. Therefore, this study attempted to achieve a meaningful level of understanding of the EMO construct in universities.

In accordance with the international business literature (e.g., Cadogan and Diamantopoulos, 1995; Diamantopoulos and Cadogan, 1996) as well as the higher education marketing literature (Stewart, 1991; Caruana *et al.*, 1998a;b), follow-up interviews illustrated EMO in universities as consisting of information-based activities geared towards foreign markets. Superior knowledge and awareness of the market components is central to the implementation of these information-based activities (Kohli and Jaworski, 1990). This involves market information generation and dissemination, as well as the need for rapid responsiveness due to the changing nature of the market. A director of the international office reflected this idea:

I think market orientation is about knowing your product: it should be about knowing who your competitors are, and I think one of the most interesting things at the moment is the changing nature of the customer, the very rapidly changing nature of the customer, and by customer, I mean students.. (University D).

The results of the follow-up interviews further confirm the findings of the quantitative study, validating three aspects of the EMO construct in the higher education context. The first one focuses on the generation of market intelligence pertaining to the needs and expectations of potential and current international students (e.g., details of courses, fees), as well as the different market trends (e.g., competition, regulation, technological, political and economic developments) characterising the university's export environment. For example, a marketing manager stated:

For prospective international students, obviously what we are looking at is which courses are they interested in? What are their main motivating factors? Why do they want to come and study in the UK? ... And in terms of what the students want when they get here, that's certainly services. We run some focus groups with students every now and again. We also try to keep up with the global picture by keeping in touch with the news and the general economic and political picture of the world as much as we can.

(University H)

Furthermore, when asked about the process of generating relevant market intelligence, a deputy at the international office stated:

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We clearly do secondary data collection in terms of the data available from the British Council, from UCAS, we work mainly through partnerships overseas... there is also information gathering during my visits out there.

(University A).

Another aspect of EMO in universities relates to the dissemination of relevant intelligence throughout the university, essentially between the international office and different schools/departments. For example, according to one senior international officer:

Usefully we do have an international committee that meets regularly; representatives of the committee are from faculties, the services (registry, accommodation and finance) and the international office, and that's a forum for sharing information and discussion about the international activity... (University C)

In addition, the follow-up interviews captured another important component of EMO in universities, which was confirmed by the quantitative study. University responsiveness entails designing and implementing necessary actions in order to meet the needs of its export markets. One marketing manager explained:

If there are some areas where we are not performing very well then we put a kind of taskforce into place to try and improve that. For example, last year in the barometer survey, we came out really badly for Internet access and it was really affecting students' experience. So we have made lot of changes to sort out that problem.

(University E)

8.3 HIGHER EDUCATION EXPORT-SPECIFIC ANTECEDENTS TO EMO

8.3.1 Export coordination

Export coordination was found to have positive relationships with all the dimensions of EMO. The findings illustrated the importance of export coordination as a key predictor of EMO in universities. This is in congruence with previous studies (Cadogan and Diamantopoulos 1995; Diamantopoulos and Cadogan 1996; Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a) stating the presence of a strong impact of export coordination on EMO. This study has advanced the export coordination-EMO relationship by validating the relationship in the higher education context. Export coordination promotes cohesion among the international office and different schools and departments, facilitating the information gathering, dissemination, and responsiveness activities. This finding makes good sense in view of the coordination's role as a pillar of marketing. In addition to the statistical results, two marketing managers gave their opinions about the impact of export coordination on EMO in universities as follows:

We have got a very good team here, and it's a team that wants to deliver successfully. (University D)

The working relationship between personnel in the international office and personnel from different departments is very strong in terms of coordination and teamwork. So all the faculties are brought to the international strategy of the university.

(University C)

8.3.2 University attitude towards government funding

In the higher education marketing literature, funding issues have been fairly related to the implementation of the marketing concept as well as the exporting activity of universities (Mazzarol and Hosie, 1996; Buchbinder, 1993). Research findings offered robust evidence in this respect, demonstrating a definite negative relationship between university attitude towards government funding and all the dimensions of EMO. Unfavourable attitudes towards government funding are expected motives for universities to seek alternative sources of funding (Lindsay and Rodgers, 1998). Given that the funds originating from international students are valuable sources of university revenues, universities are expected to pursue an EMO towards international students.

In a similar vein, the relationship between source of funding and marketing orientation in universities is validated in a prior study (Wasmer and Bruner, 1999). Publicly supported institutions were found to exhibit lower levels of marketing orientation than private colleges. This prior finding is in parallel with the present study's finding. Below is an example of the comments about this issue: As you may know, there has been a decrease in the public funds received, so I think that would be a factor which has made many universities in the country pursue this export marketing thing.

(University G)

8.3.3 University national ranking position

The data in this study exhibited no support for the hypothesised negative relationship between university national ranking position and EMO. Conversely, the results revealed that university national ranking position positively influences export market information generation. Furthermore, ranking position was found to have an indirect positive effect on responsiveness. These findings are consistent with some of the higher education literature considering the impact of university rankings on the implementation of marketing (Clarke, 2007; Hazelkorn, 2009). Similarly, the findings are consistent with Klassen's (2002) study revealing that top-ranked institutions are more responsive to their consumers compared with lower-ranked institutions.

However, no significant effect was found for export market information dissemination. A probable explanation is that there may exist some organisational variables hindering the effect of ranking position on information dissemination in universities. As an illustration, intuition suggests that an organisational structure characterised by a lack of coordination represents an obstacle to a smooth flow of information, and thereby would obstruct the process of information dissemination in spite of the ranking position of an institution. In the same line of arguments, when considering the operational model (section 7.6) with the exclusion of the coordination variable, the relationship between ranking position and information dissemination is positively significant. However, with the inclusion of coordination, the effect of ranking position on information dissemination turns into an insignificant level. This led the researcher to conclude that, given that the effect of coordination is considerably strong on information dissemination, this variable (i.e., coordination) seems not only to take precedence over ranking but also, and more importantly, to mask the effect of ranking position on information.

Taken together, the data provided partial indication of the positive effect of university ranking position on EMO. Yet, the results from the data run counter to earlier hypotheses (section 4.4), suggesting a negative relationship between ranking position and EMO in universities. Respondents in follow-up interviews also confirmed the statistical result, stating that superior ranking position is an asset driving universities to be more market oriented internationally. When asked about how the ranking position influences their market-oriented activities for international recruitment, some interviewees commented as follows:

Yes, in my opinion, our position very much influences marketing strategy. Where there is strength (for example, in league tables), then this is a key selling point.

(University B)

The adherence to high quality throughout the teaching and research agenda of the university is reflected in our ranking, and allows us to market with confidence internationally.

(University F)

Both propositions have merits. Both top and lower-ranked universities are increasingly embracing marketing principles and tools for their foreign markets. Top-ranked institutions benefit from their prestigious ranking position as a key marketing tool to enter foreign markets seeking to recruit students "who are assets to maintain/enhance the rank" (Clarke, 2007, p.61). Whereas in the particular case of lower-ranked universities, marketing effort is needed as a formal way of communicating the university's qualities given that ranking position does not always fairly depict academic quality (Dill and Soo, 2005).

The conflicting results may be explained by the fact that university ranking position would impact on the type of marketing activities geared towards foreign markets rather than simply on the level of EMO implemented. As one respondent stated:

The fact that we are a high-ranking institution clearly has an effect on how we market ourselves, as group fairs and more "middle of the road" recruitment events do not work, we tend to target our audience (direct/exclusive marketing) using our profile.

(University F)

Some also point out that ranking position has an effect on the choice of particular export markets to target. An example can be shown as follows:

Yes, in terms of whom we compete with and where we market. We avoid metro cities that are expensive to market in and where students prefer to research intensive/high ranking universities. We don't have the institution to compete at that level. We are a niche institution and compete like that.

(University A)

The positive relationship found between university ranking and market-oriented international recruitment is evidenced by a large international recruitment activity in some of the top universities/business schools in the UK such as: LSE, Manchester, Durham, Warwick, and Imperial College (Sunday Times, 2007; Franz, 2009).

This research is the first to link university national ranking position to EMO. Therefore, these findings emphasise the need for more research into the effects of ranking systems on specific export marketing activities carried out by universities.

8.3.4 Perceived higher education country image

A previous study (Papadopoulos and Heslop, 1993) found product country image to be an antecedent to export marketing strategy. However, this assumption has not been tested yet. This study is the first to empirically assess the relationship between higher education country image as perceived by managers and EMO in universities. The results showed partial support for this relationship. This is in line with the higher education marketing literature.

In general, country images can act as facilitators or inhibitors of entry into foreign markets. A favourable country image can be used as a marketing tool in the export marketing activities of products and services originating from that country (Niss, 1995). This is also the case in the higher education industry, as one manager commented:

I think one major reason why UK universities have been successful in recruiting international students from different parts of the world is because of the prestigious image of UK education, so we are in a fortunate position being a UK institution. A number of universities from other countries are finding it difficult to approach foreign markets and some of them would not even dare to because of a lack of or even a negative country image.

(University B)

More specifically, managers' awareness of the images foreign markets hold about them would represent a basis for responding to these markets. Responsiveness is carried out through designing all the components of the marketing mix and implementing appropriate marketing strategies (e.g., positioning, branding) (Kleppe *et al.*, 2002; Baker and Ballington, 2002). This supports the significant relationship between perceived higher education country image and responsiveness. We are lucky to have a very good UK education brand worldwide, and that helps us when responding to our markets abroad. We do bring into play the UK image in our branding and promotion strategies, that is so important in order to stand out from other universities overseas.

(University H)

However, the results provided no support for the hypothesised positive effect of higher education country image, on neither export market information generation, nor information dissemination. This is in congruence with the studies of Kleppe *et al.* (2002) and Baker and Ballington (2002), which placed particular emphasis on responsiveness rather than the other dimensions of MO (i.e., information generation, information dissemination) in examining the influence of country image on marketing strategies. Below is a comment about this:

The university is full of data that nobody uses, we've got enough information, but in terms of actions, I think probably the actions are not necessarily taken. We need more responsive actions reflecting the UK education image. (University A)

Surprisingly however, the effects of country image on both export market information generation and dissemination were found to be negative although not significant. A probable explanation is that, the less favourable the country image is, the greater the need for the university to gather and disseminate information on the facets and rationale behind this image before responding to foreign markets. Nevertheless, a more favourable image would act as a facilitator for directly responding to export markets.

It can be concluded that a country's higher education image drives the implementation of marketing activities in universities. As one interviewee stated:

Over the last 10 years, British universities and the British Council have got their act together a little more and have presented an overall face for UK education as their overall brand. I think that is important because there was a point where the Australians took over Britain in a major way because they were going to conferences, presenting their own country brand in their marketing strategies. Meanwhile, the Brits were sort of lost and there was a conflict between the post-1992 and old universities and it really didn't do us any favours.

(University H)

8.4 CONSEQUENCES OF EMO IN UNIVERSITIES

8.4.1 University international reputation

As initially predicted, the current findings show that university international reputation was significantly correlated with two dimensions of EMO. Both export market information generation and responsiveness are significant antecedents to university international reputation. Intelligence dissemination was not related to university international reputation. This finding may suggest that the reputation consequence of EMO is primarily an intradepartmental (i.e., international office) process. No study, to the researcher's knowledge, has previously investigated the consequences of intelligence dissemination.

Prior studies (Gainer and Padanyi, 2002; Vlastelica, 2006) found market-oriented behaviour to be a key antecedent to an organisation's reputation. Along the same line, the marketing literature supports the importance of some marketing activities such as marketing communications in building a strong reputation of different types of organisations including universities (Melewar and Akel, 2005; Wiedmann and Prauschke, 2006; Alessandri *et al.*, 2006). These marketing activities are crucial to implementing the information-based behaviours of a market-oriented university. Derived from Day (1994), a market-oriented university communicates and interacts with its market. Thus, the information communicated represents a basis for the formation of a university's reputation.

Specifically, the importance of MO in influencing a university's reputation is even greater on the international stage. Geographic distance and the dispersion of foreign markets make it difficult for universities to manage their reputation overseas. Therefore, increased market-oriented efforts are required to manage a university's international reputation when targeting foreign markets in particular. This study is the first to empirically evaluate the impact of EMO on a university's international reputation. The study concludes that the reputation consequence of a market-oriented organisation is relevant to universities operating in an international context. When asked about the outcomes hoped from pursuing an EMO, one director replied:

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Definitely increasing the reputation of the university globally, I think that is very important.

(University D)

Although it is difficult, we try to manage our reputation abroad through marketing. We get a reputation for being famous and very good at media, for example, and students pass on information and somehow it will become known that we are good at the media, it now becomes "how we are seen" in the market but we have to counteract and say, "No, we have all these other fantastic areas."

(University E)

8.4.2 University export performance

Research into university performance is very limited (Caruana's *et al.*, 1998a; Zajac and Kraatz, 1993), and in particular, little attention has been given to organisational performance in universities from a managerial perspective (Zajac and Kraatz, 1993). In Caruana's *et al.* (1998) study linking MO and performance in universities, the authors operationalised university performance from the perspective of the academics rather than managers. In addition, university performance was gauged as a single aggregated measure (i.e., overall performance).

The present study, however, uncovered another outlook on the conceptualisation of university export performance, as a business/organisational performance from a managerial perspective. This is in accordance with Zajac and Kraatz (1993) considering university performance as an organisational outcome of universities' strategic orientation. According to Zajac and Kraatz (1993), university performance consists of two focal aspects: enrolment and revenues. Similarly, the results of the present study illustrated university export performance as entailing international students' enrolment (Gilmartin, 1981; Binsardi and Ekwulugo, 2003), as well as the revenues generated from international students' recruitment (King, 1995). Examples of comments include:

Well, surely the university is interested in the number of fee-paying international students that come into the university. (University D)

Of course yes, we are quite dependent on foreign markets in terms of revenues.

(University G)

Furthermore, the qualitative research captured two other important components of university export performance. The first one focuses on the university market share of international students relatively to other UK universities (Binsardi and Ekwulugo, 2003). This was confirmed by the follow-up interviews: We aim to improve our position in terms of international student numbers relative to other universities in the UK.

(University E)

International students' satisfaction (based on Shoham, 1998; Rose and Shoham, 2002) is another performance outcome that has been uncovered by the qualitative study and confirmed by the quantitative study. The results showed that universities consider international students as the centre of their marketing strategies, and therefore put emphasis on international students' satisfaction when assessing their performance. This element was also confirmed in the follow-up interviews, for example:

We are a member of BUILA and we do undertake the barometer survey on a yearly basis to measure international students' satisfaction.

(University C)

The present findings show that export market-oriented universities tend to perform better vis-à-vis their foreign markets. This is in conformity with previous findings (Francis and Collins-Dodd 2000; Cadogan *et al.*, 2002a; Rose and Shoham 2002) revealing EMO activities as significant predictors of export performance. Similarly, the higher education marketing literature (Caruana *et al.*, 1998a;b) provides support for the existence of a positive relationship between MO and overall performance among departments in universities. The present study exhibited a positive effect of information dissemination on universities' export performance. Likewise, responsiveness was found to be a key predictor of performance in universities. However, the results reveal that information generation was not a direct antecedent to performance. Nonetheless, there exists an indirect influence of information generation on performance through university international reputation. It might be that information generation has an effect on performance that is masked due to the fact that all hypothesised links are estimated simultaneously. Another possible explanation for the lack of a direct relationship between information generation and performance is that the impact of information generation might be perceived only in the medium to long term. In other words, the process of generating and disseminating relevant information so that it is responded to and can influence performance is likely to be gradual and prolonged. A manager reflected this idea:

I think this market orientation could be a long process: from generating the relevant information to idea to launch it's more than 18 months and then if you launch at the wrong moment it's another 12 months before you actually get students through the door.

(University A)

Responsiveness was the most critical dimension of EMO influencing performance (with the highest f^2). This is in line with Caruana *et al.* (1998a) stating that while the generation of market information and its dissemination throughout the school/department are indispensable preliminary steps, it is responsiveness to this

information that provides the possibility of meeting market needs which in turn prompts performance. The following comment from a director emphasises the importance of responsiveness in enhancing university export performance:

I would come back from a trip abroad, and have a meeting with the head of school and the director of learning and quality and say, "This is what I need for this market and I need it quickly." And normally it's done! They want the students and that's how they would get them.

(University G)

Prior research established a link between a single combined global measure of EMO and export performance (Cadogan *et al.*, 2002a; Rose and Shoham 2002; Akyol and Akehurst, 2003). This study built upon previous research by assessing the impact of multiple dimensions of EMO on export performance. Moreover, this finding of the research attempted to broaden the relevance of EMO beyond the manufacturing sector, indicating that EMO is also relevant to universities.

8.4.3 The mediation role of university international reputation

The findings reveal the importance of university international reputation in enhancing university performance in its export markets. The findings are consistent with previous studies confirming the existence of a positive relationship between corporate reputation and performance (e.g., Srivastava *et al.*, 1997; Roberts and Dowling, 2002; Boyd *et al.*, 2010). In the higher education context, Ridings and Pokarier (1999) and Abbott and Ali (2005) argued that university international

reputation significantly influences international students' choice of their study destination. Given that the "international student" is the centre of university export performance, this provides support to the present finding linking university international reputation to university export performance.

Bearing in mind the positive impact of EMO on university international reputation (section 8.4.1), superior international reputation would in turn improve university export performance. The present study validated the mediating role of university international reputation. The results demonstrated that university international reputation fully mediates the relationship between export market information generation and university export performance. The findings also indicated that university international reputation partially mediates the impact of both export market information dissemination and responsiveness on university export performance. This study was the first to examine the mediating role of international reputation in the "EMO-export performance" relationship. Below are some comments on this issue:

We can be doing all the marketing in the world, saying wonderful things about our university but if the students are not happy, that would obviously affect our reputation, and this is going to massively impact on our performance in terms of recruitment. It's like when you're planning a holiday, and you're typing a hotel's name [into a website] with people's feedback. You listen as much as to what the corporate website is saying, so it's marketing yes, but equally it's marketing that reinforces positive reputation.

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(University H)

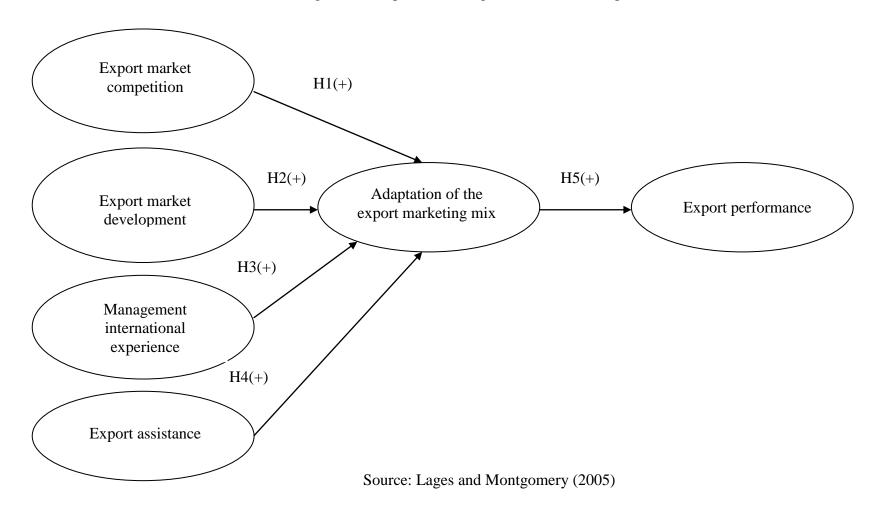
While marketing our university, we try to counteract the negative images and emphasise the positive perceptions that students hold about us. Hopefully that will make us more attractive and help us to achieve our performance targets.

(University A)

8.5 ALTERNATIVE MODEL: EXPORT MARKETING STANDARDISATION/ADAPTATION

Lages and Montgomery 2004 and 2005 examined the concept of export marketing standardisation/adaptation, as well as its antecedents and consequence: export performance (figure 8.1). Based on the contingency theory, the authors argue that the level of standardisation or adaptation of the marketing mix strategy to the foreign market depends on some contingencies (internal and external forces) (Zou et *al.*, 1997; Lages and Montgomery, 2004; 2005).

Figure 8.1: Export marketing standardisation/adaptation



In line with the present research, this model suggests export-specific antecedents to export marketing strategy, as well as a positive relationship between export marketing strategy and export performance. However, this model overemphasises the contingencies with regards to how much to standardise or adapt. The model disregards the nature of export marketing activities/processes which should be carried out (Based on Easton, 2002). Given that EMO is the core of marketing implementation towards export markets, this study examined EMO in universities as a stepping stone to the application of different export marketing models in higher education.

8.6 SUMMARY

Follow-up interviews were used as a tool to assist in the discussion of the findings. Both the follow-up interviews and the main research findings support the argument that universities may be able to implement effective marketing behaviour towards their foreign markets. This can be achieved via a coordinated management recognising the strengths and weaknesses of the university as well as acting towards EMO as an important overall strategy.

Additionally, the follow-up interviews provided support for the argument that export marketoriented activities, through positive university international reputation, would improve university export performance with regards to the recruitment of international students.

In the next chapter, the findings are further discussed in terms of their theoretical, managerial and policy implications. Research limitations will also be outlined and implications for future research directions will be explored. The details about the participants in the follow-up interviews are presented in the table below.

Interviewee	Position	Duration (minutes)	Interview date
А	Deputy head of international	30	July 2010
	office		
В	Head of international office	30	July 2010
С	Senior international officer	25	July 2010
D	Director of international office	25	July 2010
E	Marketing manager	35	September 2010
F	Head of international office	25	September 2010
G	Director of international office	35	September 2010
Н	Marketing manager	30	September 2010

Table 8.1: Details of follow-up interviews

CHAPTER 9 CONCLUSION

9.1 INTRODUCTION

This chapter draws together the key arguments of the thesis and presents the core conclusions. Research contributions in four aspects (theoretical, managerial, policy and Academia) are elaborated upon in the next section. In addition, the limitations of the research and corresponding future research avenues are then presented. Finally, the chapter ends with a summary account of the conclusions.

9.2 RESEARCH CONTRIBUTIONS

9.2.1 Theoretical contributions

This research contributes to the export marketing literature and other fields in several ways. The first and most evident contribution of this research is the examination of the EMO construct within a new and peculiar service context: higher education. The bulk of EMO research (Diamantopoulos and Cadogan, 1996; Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a; Akyol and Akehurst, 2003) has mostly been conducted within a manufacturing setting. Yet, there is a dearth of studies examining EMO across services sectors. Hence, the present study contributed to the theory of EMO by providing a validated framework which explains the relationships between the construct of EMO in universities, its antecedents and consequences,

in an attempt to address this gap and respond to previous calls for investigations into export marketing theories from the perspective of international services marketers (Cadogan *et al.*, 2000).

The findings of this research advocate that the essence of the construct of EMO remains unchanged in the higher education setting. The dimensions of an EMO adopted by a higher education institution are also associated with the activities of generating, disseminating and responding to the market. However, the existence of some peculiarities related to the higher education environment (e.g. the offerings are not a commodity but rather a "specialty" or "premium" (Russell, 2005)) involved the necessity of accommodating these peculiarities when operationalising the EMO construct in a higher education setting. In this context, the qualitative study uncovered particular items capturing some of the specificities of universities. As an illustration, given that higher education offerings are a "premium" delivered to students, careful design of courses and programmes is necessary: "When designing a new course, we advise schools/faculties on what we think their foreign markets are likely to be in order to meet the needs ..." In addition, the recruitment of international students involves a considerable experience for the students, and therefore the necessity to include the following item: "We have good support for international students (e.g. accommodation, visas and pickups) in order to improve their experiences". It can be concluded that this research extends further the theory of EMO in a higher education context.

Second, previous studies (Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a) operationalised EMO as a single combined measure when investigating its antecedents and consequences. Nevertheless, the present study empirically examined the relationships between each

dimension of EMO, its antecedents and consequences. This component-wise approach allowed for a detailed and deeper understanding of the factors enhancing or discouraging each of the export market-oriented activity as well as the impact of each aspect of EMO. Therefore, this will assist managers with more practical guidance on implementing particular activities in order to improve specific outcomes (the managerial contributions are detailed in the next section 9.2.2).

Third, this study provides evidence for an ongoing debate about the definition and measurement of export performance. Although prior research (Cavusgil and Zou, 1994; Styles, 1998, Zou *et al.*, 2003; Shoham, 1998) put forward a multidimensional performance construct, there is no consensus on the specific dimensions that constitute export performance (Francis and Collins-Dodd, 2000). The present study provided a new outlook in conceptualising as well as operationalising export performance in the higher education setting. Export performance was found a unidimensional construct that includes (enrolment, revenues, market share and international students' satisfaction aspects) in the context of the present research.

Fourth, the current study contributes to the higher education literature in which the measurement of university performance has varied, with no single construct definition dominating the field (Wright, 1996). Most studies defined university performance exclusively as an academic quality (Lucier, 1992), with few studies conceptualising university performance from an organisational or business perspective. In parallel with Zajac and Kraatz (1993), this study emphasised the business perspective of university performance, and advanced existing knowledge in the higher education field by extending the concept of university performance to an export context.

In assessing the mediating role of university international reputation in the model (figure 4.2), the study attempted to broaden the scope of the EMO-EP theory. Previous research (Cadogan *et al.*, 2001; Cadogan *et al.*, 2002a; Akyol and Akehurst, 2003) examined a direct causality of EMO on export performance. However, the mechanism through which EMO affects export performance remained unclear. In an attempt to address this gap, this study examined how the three core components of EMO (export intelligence generation, dissemination and responsiveness) affect international reputation *en route* to affecting export performance in universities. In this respect, the thesis offers an additional contribution to the field of export marketing.

Although marketing is believed to be a noteworthy practice in higher education institutions operating internationally (Conway *et al.*, 1994), much of the evidence to date remains anecdotal or speculative. In this respect, the current study also contributes to the literature on higher education marketing. In particular, it presents a systematic framework on EMO in universities, and thereby informs the process of how universities can implement marketing for their foreign markets.

In terms of methodology, the major contribution of this study stems from the use of SEM PLS. PLS is a method of analysis that has not previously been employed in higher education marketing research. In addition, only few export marketing researchers (Holzmuller and Stottinger, 1996; Julien and Ramangalahy, 2003) adopted the PLS technique. PLS has the advantage of being able to estimate very complex models with several latent and manifest variables (Falk and Miller, 1992). Moreover, PLS can handle both reflective and formative

measurement models, which is not the case with other methods of analysis (e.g., CBSEM) (Diamantopoulos and Winklhofer, 2001; Henseler *et al.*, 2009). Thus, in the present research a considerable methodological contribution has been made by using PLS to deal with a small sample size and a formative scale.

Furthermore, the current study used a mixed methods approach. Interviews enabled the researcher to explore the concept of EMO to the higher education context, which had not previously been examined, and to refine the research framework. Then, the quantitative phase followed, with a survey analysed through SEM PLS. This particular combined approach (interviews and PLS) had not commonly been used in this area of research. Hence, such an attempt should set a new benchmark for future research carried out in this field.

The study provides reliable and valid measurement scales for all constructs, which could be used for further research. Moreover, the results of the hypothesis testing reveal that all the antecedents have either a direct or indirect effect on different dimensions of EMO in universities. Also, EMO enhances university export performance partially through international reputation. Therefore, this study contributes in predicting factors influencing EMO as well as the desired outcomes from implementing such orientation in a specific context, namely higher education. To sum up, the use of PLS in preference to other more popular methods (CBSEM, regression) has brought about a significant contribution at both the measurement and structural levels.

In summary, this research is the first to conceptualise and operationalise the concepts of EMO and export performance in a higher education context. By combining literature from

two disciplines, export marketing and higher education marketing, this study represents an attempt to construct a new premise that would also have important implications for different types of managers in universities.

9.2.2 Managerial implications

The present study offers a number of practical managerial implications for international marketing managers of universities, top management and managers of other departments within a university.

The UK is a popular international destination for higher education, with new programme launches, a number of significant expansion plans and increasing numbers of international students from different parts of the world. This growing export activity of UK universities gives credence to the understanding and implementation of the export marketing behaviour. Therefore, international marketing managers should always be encouraged to put EMO into practice. To this end, the current study offers practical guidelines for international marketing managers when actively managing their marketing activities towards foreign markets. Export market-oriented universities should seek information, identify global opportunities, and react to information on an international basis. Another practical recommendation for international marketing managers in universities is to incorporate the measurement of EMO in their marketing programme in order to identify areas for improvement.

The call to implement EMO in universities is heightened in view of the positive influence of EMO on university export performance. This contribution will help different types of managers in universities to understand the important role of EMO and its dimensions as well

as support its implementation. Additionally, the findings indicate that EMO has a positive effect on international reputation. This finding can be useful for international marketing managers wishing to enhance their university's international reputation, given the importance of such extrinsic cues in shaping export customers' evaluations of foreign services (Sung and Yang, 2008). This is particularly beneficial to higher education as a service industry, due to the intangible and possibly unfamiliar nature of the service specifically when delivered to international students.

The study also revealed some factors that would facilitate or hinder the adoption of EMO in universities. Admittedly, two variables investigated in this study namely, university attitude towards government funding and ranking position, could be viewed as uncontrollable variables, at least in the short term. In this respect, a manager cannot easily change his/her attitude towards government funding given that the government funding system is well established and fairly fixed. Furthermore, university rankings are difficult to control as they are mostly produced by discrete and independent commercial publishing enterprises. However, managers need to be aware of the effect of these factors on the development of an export marketing strategy when embracing an EMO.

Another conclusion can be drawn from the present study with regards to the impact of university ranking position on EMO. Both top and lower-ranked universities should be export market-driven. Recalled earlier (section 8.3.3), university ranking position would impact on the type of marketing activities carried out towards targeted foreign markets rather than merely on the level of EMO adopted. Therefore, international marketing managers of lower-ranked universities should not be discouraged by their position. These managers should also be encouraged to compete on an international scale while putting an emphasis on their assets

(e.g., the ranking of a specific school/subject or any other qualities that can serve as a competitive advantage). On the other hand, managers of top-ranked universities should portray the favourable ranking position in their marketing activities.

By understanding the global market needs, as well as being aware of the ranking position and any other university strengths or weaknesses, international marketing managers would be able to make the right decisions in choosing the export markets to target and the most appropriate channels to respond to these markets' needs.

Although the international marketing office in universities has a central role in the implementation of EMO activities, this cannot be achieved solely by the international office. Coordination with other departments and services within the university is vital. The most significant managerial implication of this study is related to the strong relationship between coordination and EMO. Since this variable is quite manageable, an obvious implication for top management wishing to foster EMO behaviour within the university is to clearly communicate the importance of EMO to heads of schools and managers of other departments within the university. Top management should also emphasise effective coordination between the international marketing department and other departments and schools within the university.

In practice, top management can examine the organisational structure of the university in order to determine ways in which coordination can be enhanced. This implies putting in place internal communications systems and procedures aimed at facilitating a free flow of crossfunctional communication. Another area associated with coordination that warrants consideration is organisational conflict within the university. A possible disagreement among university departments in pursuing an EMO can lead to a failure of designed marketing programmes. By effectively minimising organisational conflict, the university will enhance the EMO behaviour. As noted, managerial programmes intended to promote a sense of shared values, communication and to reduce dysfunctional conflict, should all help in creating a sense of shared vision.

Furthermore, managers of different departments (i.e., international office, schools, library, accommodation, etc) should be more responsive to foreign markets, taking into account that responsiveness was found to have the greatest impact on EMO outcomes. Two main practical implications of responsiveness are worth discussing. First, managers should make every effort to develop a service improvement programme in order to improve the quality of the primary as well as the auxiliary higher education services. This requires building a listening orientation towards international students to learn how to serve them better, and thereby improve students' experiences. Satisfactory international students' experiences can help enhance a university's international reputation and therefore university export performance. Second, adequate investment in promotional efforts reflecting the assets of the university is required as another means of managing university international reputation.

The resulting significant relationship between perceived higher education country image and responsiveness suggests that top management should lay emphasis on a favourable higher education country image to senior managers in the university. Positive perceptions about higher education country image should be translated into the promotion strategy with content information highlighting the long history of UK higher education and the presence of some of the most prestigious universities in the world. Also, the top management of different UK

universities are responsible for cooperating and presenting an overall UK higher education image.

9.2.3 Implications for academia and curricula

This research is also useful for academia and curricula within universities. First, the resulting positive relationship between EMO and university international reputation suggests that export market-oriented universities are likely to improve their international reputation. Favourably reputable universities are expected to attract better quality students. This in turn will participate in developing the academic quality of the university. Therefore, the academic staff too should understand the value of EMO in universities. It is only if the academic staff realises the importance of EMO that they will then adhere to its implementation. A significant implication of a general consent (managers and academics) on the importance of EMO in universities is to reduce any possible dysfunctional conflict among different departments and schools within the university. As a result, a well-coordinated export market-oriented university with a minimum level of dysfunctional conflict would prioritise market needs rather than internal politics.

Second, investigating foreign market needs and the forces influencing them enables academics to become well-informed about the up-to-date trends of the job market. This is attributable to the fact that students' needs and preferences are generally in line with industry requirements, due to their concerns regarding employment prospects (Desmarez and Thys-Clement, 1994). Awareness of the job market needs should influence heads of schools to adapt the programmes offered accordingly, in order for the curricula to fit within the social and economic arena where universities operate. Hence, the current study contributes to

university curricula by emphasising the need for a more vocational and market-driven model of higher education (Lomas, 1997) which is aligned to industry requirements.

9.2.4 Implications for public policy-makers

The present research is parallel with a strong interest of both national and international public policy-makers in encouraging universities to go global.

From a national government perspective, serving foreign markets is attractive given that exporting has a positive effect on a nation's balance of payments (Santos-Paulino and Thirlwall, 2004) and thereby contributes to its economy. This research is in parallel with the adhesion of universities in a number of exporting countries to a market-oriented and business corporation model. State universities are increasingly required by their governments to become more proactive, financially autonomous and therefore more export market-oriented (McBurnie and Ziguras, 2007; Duffield, 2007). By identifying useful export marketing practices for universities, the empirical model presented offers guidelines for national public policy-makers to direct domestic support to the implementation of export marketing in universities. As an illustration, the governments of the UK (Deem et al., 2008), Australia (Carrington et al., 2007) and New Zealand (Martens and Starke, 2008) are providing considerable support for higher education exports. An example of governments support is the provision of promotional schemes to enhance the recruitment of international students as well as offshore delivery (Carrington et al., 2007). This reveals the considerable interest paid by the governments of some exporting countries in internationalising the delivery of higher education services.

Additionally, the findings will be of particular interest to some educational organisations such as the British Council (BC) because the BC plays an important role in the market information generation of UK universities by providing them updated information on foreign market needs. Also, follow-up interviews suggest that the BC should present an overall image of UK higher education, in order to strengthen the international competitiveness of UK universities.

As a consequence of the growing importance of public policy-making for international marketing practice, there is an increasing need to develop more policy-oriented international marketing research (Czinkota, 2000). Over the last two decades, some industrialised and less industrialised nations have become increasingly interdependent in economic terms. More specifically, the General Agreement on Tariffs and trade of Services (GATS) has made major contributions to the development of the international commercialisation of higher education.

9.3 RESEARCH LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

This study represents an underpinning of future research that will build on the topic of EMO in universities from the managers' perspective. However, the results found should be interpreted in the light of some limitations suggesting directions for further research. The limitations and corresponding directions for further research relate to the method of sampling/analysis, the measurement level and the causality level.

9.3.1 The method of sampling/analysis

The most evident limitation relates to a small sample size of 63 cases, bearing in mind that the study adopted an SEM approach which requires a larger sample size (Hair *et al.*, 2006).

However, with the university as the unit of analysis, the researcher was restricted to a limited population of 130 UK universities. A satisfactory 48% response rate is consistent with previous research (e.g., Caruana *et al.*, 1998a). Additionally, the PLS technique used is suitable for small sample sizes (30-100) considering that the rule of thumb of the minimum required sample size (Henseler *et al.*, 2009) was met.

In relation to the first limitation, the survey questionnaire was completed by a single manager in each university. Yet, this limitation is less of an issue for this research given that most universities tend to have one manager (i.e., the head of international office) as the general international marketing manager; whereas other managers are responsible for specific foreign markets. The heads of international offices are deemed to be the most involved in and knowledgeable about EMO as a significant strategic orientation in universities. Moreover, other managers generally expressed their reluctance to participate in the survey, and referred the researcher to the head of the international office. Because the survey questionnaire is general with no focus on a particular market, as well as strategically oriented, the choice of a single informant approach is justified.

In addition, performing a pilot study prior to the main survey was impractical due to a small population base. The researcher did not want to waste resources from respondents and preferred to save all the prospective responses from potential respondents for the main survey. Despite the lack of a pilot study, the present research includes a face validity stage from both academics and managers (potential respondents). Face validity served as a check to the suitability of measures so as to increase the quality and efficiency of the subsequent survey. This study was conducted in a single setting. The findings may be limited to the UK context and may not necessarily reflect EMO in universities in other countries. Thus, a suggestion for further research would be to replicate this study in other exporting countries in order to help provide generalisability of the findings.

The assessment of a PLS model is based on measures that are non-parametric (Chin, 1998b). PLS provides less restriction in terms of distributional assumptions and sample size requirements (Fornell and Bookstein, 1982) as compared to covariance-based structural equation modelling. Since PLS makes no distributional assumptions for parameter estimation, PLS path modelling does not report any type of fit indices such as RMSEA or CFI in opposition to CBSEM. However, a measure was undertaken to counteract some of these limitations. As detailed in chapter 7, the researcher included a CBSEM confirmatory factor analysis with the use of AMOS software and reported key fit indices (see section 7.5).

9.3.2 The measurement level

Given that this research represents a first attempt to investigate the construct of EMO in universities, its antecedents and consequences, for which limited previous literature was available, future studies should attempt to further validate all measurement scales purified in this research.

This study investigated higher education country image as perceived by managers rather than the actual image which international students hold about a country's higher education. It is believed that managers' perceptions of the external environment influence their strategic export marketing decisions and activities (e.g., EMO) (Reid, 1981). However, higher education country image could be further examined from the international students' perspective as an antecedent to EMO in universities. Analysing EMO from the students' viewpoint would enable future research to reveal students' assessment about the extent to which universities fulfil their needs and expectations, which is the core of being export market oriented.

Similarly, university international reputation was measured from a managerial perspective. Despite the fact that this taps the scope of the research investigating EMO in UK universities from the international marketing managers' viewpoint, future researches may examine university international reputation as perceived by students. However, Dutton *et al.* (1994) argues that reputation as perceived by internal stakeholders (e.g., managers) is highly correlated with consumers' perceptions of reputation.

To assess the effect of university national ranking position on EMO, the researcher employed an index scale containing the indicators which determine a university's rank as a proxy to university ranking position. To the researcher's knowledge, there is no existing reflective scale evaluating university rank. Hence, another avenue for further research is to establish a reflective scale aimed at assessing the favourability of a university ranking position subjectively. This would also be useful for future research potentially investigating the effect of university ranking position on the type of export marketing implemented as well as on the choice of export markets.

9.2.3 The causality level

With the present cross-sectional study, it is not possible to provide evidence into the direction of causality between the variables examined. Yet, support for the relationships was provided by theoretical development (chapters 2, 3 and 4) and by the qualitative research (chapter 6). Further research might use a longitudinal approach when resources are available in order to understand the development of EMO in universities.

9.3 OTHER RESEARCH DIRECTIONS

It must be emphasised that the objective of this research is not to present a holistic approach to EMO in universities. Rather, the focus is on examining EMO in universities on a micro level through delineating the key higher education export-specific antecedents and consequences of EMO. However, some studies (Binsardi and Ekwulugo, 2003) revealed the importance of the macro environment (e.g., economic, regulatory) in shaping the strategic marketing behaviour of higher education institutions. Thus, further research can incorporate new variables related to the macro environment of universities into the EMO framework. As an illustration, the impact of the host country's visa regulations on the EMO-export performance relationship would be a possible direction for future research. Also, the influence of the economic situation of some foreign markets on the targeting strategy of these markets is another example of potential areas of future investigation.

Since the present study represents a first attempt to conceptualise EMO in the higher education context, future research is encouraged to further develop the concept of EMO in universities while taking into account different types of customers (e.g., parents, employers, government) (Conway *et al.*, 1994; Caruana *et al.*, 1998a). It should also be useful to consider

other modes of export of higher education services such as distance learning and/or the outbound delivery (Larsen and Vincent-Lancrin, 2002). In this respect, future research should investigate whether the domains of the EMO construct change and how the relationships in the proposed model vary with respect to the type of export activity carried out. Another rich direction for future research is to focus on a particular programme or course directed to a specific export market, which enables the association of the effects of EMO more precisely with marketing outcomes (Cavusgil and Kirpalani, 1993).

This study was developed from a managerial perspective. Future research should address the academics' perceptions of EMO in universities considering that academics are influential stakeholders in higher education institutions. Academics' adherence to EMO is essential as the marketing approach cannot be solely performed by the marketing department. An effective implementation of export marketing activities needs the coordination of all departments and schools. Additionally, future research should investigate whether the domains of the EMO construct change and what particular dimensions appear important to a specific type of stakeholders (i.e., academics). In parallel to that, conceptualising performance as academic quality and examining the effect of EMO on academic quality would be another area worth consideration.

More recently, the UK government has encouraged a more market-driven approach to higher education in view of public spending cuts. The government plans for the year 2012 involve cancelling the cap on tuition fees for domestic students and replacing it by a free market, where universities would set their own fees for different programmes and courses (BBC, 2011). This reveals a prospective tendency of UK universities in becoming more marketoriented towards the domestic market in addition to export markets (i.e., being export marketoriented). This development calls for a revival to the theory of market orientation in the higher education sector. One significant direction for further research is to revise the frameworks of MO in universities (e.g., Caruana *et al.*, 1998a and Wasmer and Bruner, 2000) within the context of the UK government new regulations.

9.4 SUMMARY

This research was the first empirical study on EMO in UK universities. The study adopted a mixed method approach to better comprehend such complex phenomenon (i.e., EMO) and obtain rigorous results. The first qualitative phase enabled the researcher to develop a theoretical framework, which was tested in a subsequent quantitative stage through a survey. The study also used PLS SEM to analyse collected data. The structural equation analysis revealed satisfactory psychometric properties. The focal finding is that EMO in universities consists of three dimensions, export market intelligence generation, dissemination and responsiveness. Some higher education export-specific variables predicting EMO were also identified. Moreover, the positive impact of EMO on university export performance was significant with university international reputation partially mediating the EMO-EP relationship. In a later stage, follow-up interviews were carried out to support these findings.

Given that some limitations do exist, future research directions are recommended to build up on this study. It is suggested that subsequent research further validate the measurements, as well as examine the relationships between the concepts from other stakeholders' perspectives (e.g., academics, students) in different countries and also over time. In summary, it is believed that a strong foundation for future research is provided given the implications of the study's findings for researchers, international marketing managers, academics and policy-makers.

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APPENDICES

Appendix 1: Interview instruments: relationships of hypotheses to the literature review and the key research questions

RQ1 (Introductory question): How do universities perceive and practice the export activity?				
	Qualitative Questions (International office of universities)			
No Hypothesis	This research investigates how universities manage and perceive market orientation in their export operations of educational services to international students (i.e. EMO).			
<i>RQ1</i> aims to explore universities' perception and practice of the export activity.	In light with the academic literature in the export of services (e.g. Cowell, 1983; Dunning, 1989; Segebarth, 1990; Roberts, 1999), the OECD and the GATS recognise three categories of export educational services (i.e. cross-border delivery via distance education for example, delivery of offshore education through branch campuses set overseas, and delivery of education to international students moving to the country of the supplier to receive education) (Lewis, 2005).			
	QQ1: Please indicate your level of agreement with this statement and state why you agree or not agree.			
	QQ2: Which category of international delivery does your university carry out?			
RQ2 (Main question): What elements consti	Q2 (Main question): What elements constitute export market orientation in universities?			
No Hypothesis RQ2 is associated with the conceptualisation (i.e. defining the construct) and operationalisation (i.e. develop measurement scales) of EMO in universities (i.e. focal construct).	QQ3: Will you please give your opinion on the following definition of EMO in universities? "EMO in universities refers to the implementation of export marketing" (Based on Jaworski and Kohli, 1990). Please indicate your level of agreement and state why you agree or not agree.			

No Hypothesis RQ2 is associated with the conceptualisation (i.e. defining the construct) and operationalisation (i.e. develop measurement scales) of EMO in universities (i.e. focal construct).	QQ4: EMO has been defined in academic literature as consisting of four generic activities associated with the generation, dissemination, response to export market intelligence through a coordinating mechanism. These activities are oriented towards export customers, competitors, and exogenous market influences (Diamantopoulos and Cadogan, 1996; Cadogan <i>et al.</i> , 1999). Do you think that EMO in universities consists of the same activities? If not, please state why not. If yes, how would you categorise and define EMO in universities?	
(i.e. jocui construct).	DO: What do you think constitutes EMO in universities?	

PQ: What do you think constitutes EMO in universities?

RQ3 (Main question): What factors specific to exporting universities determine an EMO in universities?				
Hypotheses	Supporting Literature	Qualitative Questions(International office of universities)		
H1: The more coordinated is the university in relation to its foreign business, the more export market oriented is the university.	Cadogan et <i>al.</i> (1999); Grönroos (1999); Cadogan et <i>al.</i> (2001); Cadogan et <i>al.</i> (2002)	QQ5: What would you consider as organisational factors that emphasise universities to pursue an EMO?		
H2: The less favourable university attitudes toward governmental funding, the more export market oriented is the university.	Mazzarol (1998); Lindsay and Rodgers (1998) Wasmer and Bruner (2000)	QQ6: Based on your experience, how would you describe the role of funding regarding the adoption of an EMO?		
H3: The better university national ranking position is, the less export market oriented the university is expected to be.	Cadogan et al. (2002); Marginson (2006); Hazelkorn (2007)	QQ7: How would you describe the higher education environment that influences the adoption of an EMO?		
H4: The more favourable higher education country image as perceived by managers, the more export market oriented is the university.	Webb and Po (2000); Kleppe et <i>al.</i> (2002); Mazzarol and Soutar (2002); Larsen and Vincent-Lancrin (2002); Cubillo et <i>al.</i> (2006)	QQ7: (See above)		
H5: University national ranking position has a positive influence on higher education country image as perceived by managers.	Srikatanyoo and Gnoth (2002); Li (2008)	QQ7: (See above)		

RQ4 (Main question): What are the consequences of adopting an export market orientation as perceived by universities?					
No Hypothesis	Export performance has been perceived in academic literature to be the result of the adoption of EMO (Cadogan <i>et al.</i> , 2001 and 2002; Rosé and Shoham, 2002). Export performance is a multidimensional construct (Francis and Collins-Dodd, 2000). The most widely used dimensions in measuring export performance are: export sales, profit, revenues and customer satisfaction (Zou and Stan, 1994; Katsikeas, 2000; Lawrence and Sharma, 2002). QQ9: Do you think export performance in universities can be categorised in a similar way? If not, please state how would categorise and define export performance in universities.				
H6: Export market orientation in university will enhance its export performance.	Stewart (1991); Mazzarol and Hosie (1996); Caruana's et <i>al.</i> (1998b); Cadogan <i>et al.</i> (2001); Cadogan <i>et al.</i> (2002); Rosé and Shoham (2002)	QQ10: Do you think that in the university context, export performance is a consequence of EMO? If no, please state why not. If yes, through which mechanism do you think EMO can influence export performance?			
H7: Export market orientation in university will enhance its international reputation.	Gray and Balmer (1998); Weiss et <i>al.</i> (1999); Gainer and Padanyi (2002); Alessandri et <i>al.</i> (2006); Wiedmann and Prauschke (2006)	QQ11: According to your experience, what are the other desired outcomes of adopting an EMO?			
H8: University international reputation has a positive influence on its export performance.	Weissman (1990); Nguyen and LeBlanc (2001); Roberts and Dowling (2002); Gainer and Padanyi (2002); Sung and Yang (2008)				

Source: Template provided by Prof. TC Melewar and developed by the author.

Appendix 2: Questionnaire

An investigation into export market orientation in UK universities: a study from the international marketing managers' perspective Brunel University, UK

RESEARCH OBJECTIVE

The core theme of the study is **export market orientation in university** which connotes **'the implementation of marketing in universities in their export operations of educational services to international students'**. The focus of the study is on the traditional mode of exporting educational services involving **international recruitment** and therefore **the provision of higher education at home (UK) to international students**.

The ultimate objective is to identify how UK universities can obtain greater success in their exporting activity of higher education services to international students moving to the UK to receive education.

CONFIDENTIALITY

The information you provide will be kept strictly confidential:

- □ It will not be possible to identify the respondents and universities involved in this study.
- □ The data will be used for statistical purposes only and released in aggregated form. No single name will be disclosed.

YOUR CASE IS VALID

This investigation aims the participation of ALL UK universities, without exception.

This research aims to include the heads of international office/ senior international officers (managers) of as many UK universities as possible. Heads of international office of other UK universities are currently filling similar questionnaires as well.

YOUR SUPPORT IS VITAL

The success of this investigation depends entirely on the data contributed by the heads of international office/ senior international officers of UK universities such as you.

UTILITY FOR YOUR UNIVERSITY

In recognition of your participation, the researcher will send you a report with the conclusions of this study which will include some <u>practical recommendations</u> that can assist international marketing managers of UK universities in <u>enhancing their marketing activities</u> towards their foreign markets as well as their <u>business performances</u>.

Thank you for your co-operation,

Yousra ASAAD BSc, MSc, PhD candidate International Marketing

If you require further information about the questionnaire, please contact: Yousra ASAAD, Brunel Business School, Brunel University, Uxbridge, Middlesex, UK. Tel: 07949595981 Email: <u>Yousra.asaad@brunel.ac.uk</u>

An investigation into export market orientation in UK universities:

A study from the international marketing managers' perspective

HOW TO FILL IN THE QUESTIONNAIRE

- Please click □ the option that best represents your opinion. If some questions are not applicable to you, simply click □ the "Not Applicable" option. However, there is no right or wrong answer to this questionnaire. The importance is to obtain your opinion on the specific aspects of export market orientation in your university.
- 2. This questionnaire (10 pages) is structured so that its completion will be as easy and quick. It will take <u>approximately 25 minutes</u> to complete.

SECTION A – CHARACTERISTICS OF YOUR UNIVERSITY

A1. In which region is your university's headquarters based? (Please tick ONE box only)

٠	Greater London	
•	South of England	
•	North of England	
•	Yorkshire and Humberside	
•	East of England/East Midlands	
•	West Midlands	
•	Scotland	
•	Northern Ireland	
•	Wales	
•	Overseas (Please specify)	

A2. The following categories represent the different modes of export of higher education services. Which of the following modes of export does your university carry out? (Please tick all the boxes that apply).

• Provision of education at home (international recruit	ment of students)
• Distance education	
• Provision of education through partnerships with fo Validated Courses)	reign institutions (e.g. Overseas
• Education via branch campuses set overseas	
• Other	

If other please specify in the space below:

The focus of the following sections of the questionnaire is on exporting educational services involving <u>international recruitment</u> and therefore, <u>provision of higher</u> education at home (UK) to international students (non EU).

A3. For the last academic year (2008/2009), from how many overseas countries (non EU) did your university recruit international students?

1-25	26-50	51-80	81-100	Over 100 🗌

SECTION B – HIGHER EDUCATION SPECIFIC FACTORS

B1. Perceived higher education country image

To what extent do you agree or disagree with the following statements based on the scores from '1' to '7'? (1 = Very Strongly Disagree, 4 = Neither Agree Nor Disagree, and 7 = Very Strongly Agree).

With reference to last academic year (2008/2009), the head of international office* perceive **UK higher education** to have the image of:

	1	2	3	4	5	6	7	
1. Good student support system.								
2. Reasonable tuition fee.								
3. High quality of courses.								
4. High level of resource allocation for research.								
5. High quality of teaching staff.								
6. A positive view of graduates from employers.								
7. High employment rate for graduates.								
8. Highly recognised degrees worldwide.								

*Please answer these questions even if your university does not have an international office as a separate department. In this case, the international office could be a member of staff that deals with the international activities (international marketing/international recruitment) of the university.

B2. University attitude toward government funding

With reference to the last academic year (2008/2009), to what extent do you agree or disagree with the following statements based on the scores from '1' to '7'? (1 = Very Strongly Disagree, 4 = Neither Agree Nor Disagree, and 7 = Very Strongly Agree).

	1	2	3	4	5	6	7
1. We are receiving considerable amount of funding for scholarships from the government.							
2. Government funding is easy to obtain.							
3. Government funding is a stable source of funding.							
4. Government funding is the type of funding we prefer to rely on.							
5. The share of public revenues is significant compared to other sources.							
6. The amount of money from public sources is considerable.							

B3. Export coordination in university

With a special emphasis on personnel from the international office*, consider the interaction between and within functional units/ departments in your university... To what extent do you agree or disagree with the following statements for the last academic year (2008/2009) based on the scores from '1' to '7'? (1 = Very Strongly Disagree, 4 = Neither Agree Nor Disagree, and 7 = Very Strongly Agree).

	1	2	3	4	5	6	7	'Not Applicable'
1. Key players from other departments (e.g. different schools/faculties and departments) in our university are supportive of the international office* activities.								
2. Departments in our university work together as a team in relation to our foreign business.								

3. The head of the international office* has a very strong working relationship with all the deans/heads of faculties/schools in the university.	
4. All faculties/schools and departments in our university are brought into the international strategy of the university.	
5. Personnel from the international office* share resources with other departments in our university.	
6. Certain key players in our university attach little importance to our export activities (i.e. international recruitment).	
7. In our university there is 'interdepartmental' conflict.	
8. We resolve issues and conflicts through communication and group problem-solving.	

B4. University national ranking position

a. What was your national ranking position for the academic year 2008/2009 according to the Times university guide 2009?

Тор 35	36-70	71-100	101-122	Non ranked	Don't Know
\Box					

b. How do you evaluate the following academic quality indicators for your university for the last academic year (2008/2009) based on the scores from '1' to '7'? (1 = Extremely Very Low, 4 = Moderate, and 7 = Extremely Very High).

	1	2	3	4	5	6	7	'Don't know'
1. Entry standards.								
2. Staff/Student ratio.								
3. Teaching quality.								
4. Graduation rates.								

5. Graduates prospects.	
6. Research quality.	

c. Do you think this position influences your marketing strategy for the international recruitment? If yes, in what way?

SECTION C- EXPORT MARKET ORIENTATION IN UNIVERSITY

- The focus of the following sections of the questionnaire is on exporting educational services involving <u>international recruitment</u> and therefore, <u>domestic</u> <u>provision of higher education courses and programmes (in the UK) to</u> <u>international students (non EU)</u>.
- Export market orientation in university refers to the implementation of marketing through information-based activities (information generation, dissemination and responsiveness) in university' export operations of educational services to international students' (Based on Cadogan et al. 1999).

With reference to your **international recruitment** activity and the associated **domestic provision** (in the UK) of higher education to international students (non EU), to what extent do you agree or disagree with the following statements for last academic year (2008/2009) based on the scores from '1' to '7'? (1 = Very Strongly Disagree, 4 = Neither Agree Nor Disagree, and 7 = Very Strongly Agree).

<u>C1. Information generation</u>

	1	2	3	4	5	6	7	'Not Applicable'
1. We work with various higher education bodies and organisations which provide us with relevant marketing information concerning our foreign markets.								
2. We get lots of marketing information in terms of changes in demand and prospective students' requirements from our education partners and agents overseas.								
3. We regularly run focus groups with current international students in order to learn how to serve them better.								

4. We regularly participate in international fairs overseas so that we can track the different needs of students from different countries.								
5. We survey international students at least once a year to assess the quality of our courses and services.] [] [] [] [
6. In this department (international office*), we do a lot of secondary market research concerning trends (e.g., competitors, regulation political, economical, technologica developments) in our foreign markets.	1 ,] [] [] [
7. We generate enough relevant information concerning our competitors' activities in our foreign markets.] [
8. We periodically review the likely effect of changes in our foreign business environmen (e.g. technology, regulation).] [] [] [
9. We analyse our own data through the university main database, to observe the trends of courses that international students are interested in.	5] [
C2. Information dissemination	1	2	3	4	5	6	7	'Not Applicable'
1. Our international office* liaises with our university departments so that they have enough understanding of their key markets.								
understanding of their key markets.								
 We have regular formal meetings with our university schools/faculties to discuss foreign markets trends and developments. 								
2. We have regular formal meetings with our university schools/faculties to discuss foreign								

5. We feed back to the schools/faculties about their recruitment process through informal conversations as part of everyday communication.								
6. As an international office*, we feed information that we get from current international students back to the relevant university department in order to take action.								
7. When designing a new course, we advise schools/faculties on what we think their foreign markets are likely to be in order to meet the needs and wants of their foreign markets.								
8. Personnel from the international office* frequently discuss competitors' activities with personnel from other departments of the university.								
<u>C3. Responsiveness</u>	1	2	3	4	5	6	7	'Not Applicable'
C3. Responsiveness 1. We have good support for international students (e.g. accommodation, obtaining visas, orientation, and airport pickups) in order to improve their experience.	1	2	3	4	5	6	7	
1. We have good support for international students (e.g. accommodation, obtaining visas, orientation, and airport pickups) in order to	1	2	3	4	5	6	7	
 We have good support for international students (e.g. accommodation, obtaining visas, orientation, and airport pickups) in order to improve their experience. The information we give out to international 	1	2	3	4	5	6	7	
 We have good support for international students (e.g. accommodation, obtaining visas, orientation, and airport pickups) in order to improve their experience. The information we give out to international students is accurate, clear and understandable. If we sense a need for a particular course, the university implements the course in a timely fashion in order to respond to foreign market 		2	3	4	5	6 	7	

5.	We	are	slow	to	dec	ide	how	to	respon	nd to	
sig	gnific	cant	chan	ges	in	our	con	npe	titors'	fees	
str	uctu	res i	n fore	ign	mar	kets.	•				

6. We are quick to respond to important changes taking place in the global environment within which our university operates (e.g. regulatory, technology, economy).	
7. In the international office*, we tend to ignore international students' complaints.	
8. We rapidly respond to competitive actions that threaten us in our export markets.	
9. We periodically review our courses development to ensure that the courses are in line with what international students want.	
10. The educational services we provide to our foreign markets depend more on internal politics than real market needs.	
11. All departments in our university are involved in implementing our marketing strategy for international recruitment.	

SECTION D –UNIVERSITY EXPORT PERFORMANCE

Please answer all the questions, including those that use different measures from those of your university.

D1. With reference to your **international recruitment** activity and the associated **domestic provision** (in the UK) of higher education to international students (non EU), how do you evaluate the following performance indicators for the last academic year (2008/2009) based on the scores from '1' to '7'? (1 = Extremely Very Low, 4 = Moderate, and 7 = Extremely Very High).

	1	2	3	4	5	6	7	'Don't know'
1. Enrolment volume of international students.								
2. University market share of international students recruited relative to other UK universities.								
3. Level of international students' satisfaction.								

4. Revenues from international students as a percentage of university total revenues.	
5. Number of international students recruited as a result of our alumni.	
6. Managers satisfaction with the enrolment volume of international students.	
7. Managers satisfaction with the university market share of international students recruited relative to other UK universities.	

D2. With reference to your **international recruitment** activity and the associated **domestic provision (in the UK) of higher education to international students (non EU)**, how do you evaluate the level of meeting the following target in the last year (2008/2009) based on the scores from '1' to '7'? (1 = Not met at all, 4 = Moderately met, and 7 = Perfectly met).

	1	2	3	4	5	6	7	'Don't know'
1. Target related to the enrolment volume of international students.								
2. Target related to university market share of international students recruited relative to other UK universities.								

SECTION E –UNIVERSITY INTERNATIONAL REPUTATION

With reference to the last academic year (2008/2009), to what extent do you agree or disagree with the following statements based on the scores from '1' to '7'? (1 = Very Strongly Disagree, 4 = Neither Agree Nor Disagree, and 7 = Very Strongly Agree).

	1	2	3	4	5	6	7	'Don't know'
1. Our university has a good reputation worldwide.								
2. In general, I believe that our university always fulfils the promises it makes to its international students.								

3. I believe that the reputation of our university is internationally better than many other universities.	
4. The university offers a worldwide reputable degree.	
5. The university offers worldwide high quality courses.	
6. The university offers high standard of education internationally.	
7. The university has a strong brand name internationally.	

SECTION F – OTHER

F1. What is your current position in this university?

F2. How long have you been working for this university?

F3. How old is this university?

F4. How long has the university been recruiting international students?

F5. Please use the space below to explain briefly about your university's marketing strategy for international recruitment which has been implemented in the past 3 years.

F6. Are you interested in receiving the analysis results of this research? Yes \Box No \Box

If yes, please indicate the address to where I can send the results to.

Thank you very much for your co-operation

Appendix 3: Factorability and CFA using SPSS.15

Export coordination

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy.	Measure of Sampling	.908
Bartlett's Test of	Approx. Chi-Square	373.918
Sphericity	df	15
	Sig.	.000

Component Matrix (a)

	Component
	1
COOR2	.940
COOR4	.934
COOR3	.923
COOR1	.879
COOR8	.868
COOR5	.824

Extraction Method: Principal Component Analysis. a .1 components extracted.

Export market information dissemination

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy.	Measure of Sampling	.817
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	508.913 15 .000

Component Matrix (a)

	Component
	1
IDiss6	.958
IDiss1	.948
IDiss5	.946
IDiss2	.919
IDiss8	.907
IDiss4	.854

Extraction Method: Principal Component Analysis. a.1 components extracted.

Export market information generation

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling		
Adequacy.		.880
Bartlett's Test of	Approx. Chi-Square	201.004
	Approx. Clii-Square	291.994
Sphericity	df	10
	Sig.	.000

Component Matrix (a)

	Component
	1
IGen9	.947
IGen8	.910
IGen6	.910
IGen7	.907
IGen3	.831

Extraction Method: Principal Component Analysis. a 1 components extracted.

Responsiveness to export market information

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.822
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	393.520 10 .000

Component Matrix(a)

	Component
	1
Resp8	.961
Resp1	.946
Resp2	.940
Resp11	.869
Resp6	.843

Extraction Method: Principal Component Analysis. a 1 components extracted.

Perceived higher education country image

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy.	Measure of Sampling	.797
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	295.990 15 .000

Component Matrix (a)

	Component	
	1	
PHECI6	.883	
PHECI5	.854	
PHECI3	.850	
PHECI7	.839	
PHECI8	.827	
PHECI2	.812	

Extraction Method: Principal Component Analysis. a 1 components extracted.

University attitude towards government funding

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.804
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	377.013 6 .000

Component Matrix (a)

	Component	
	1	
UAGF1	.970	
UAGF3	.968	
UAGF4	.942	
UAGF5	.935	

Extraction Method: Principal Component Analysis. a 1 components extracted.

University export performance

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.867
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	459.759 15 .000

Component Matrix (a)

	Component 1
UEP4	.942
UEP3	.931
UEP5	.926
UEP1	.920
UEP8	.917
UEP2	.861

Extraction Method: Principal Component Analysis. a 1 components extracted.

University international reputation

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.860
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	527.260 10 000

Component Matrix(a)

	Component
	1
UIR3	.975
UIR4	.972
UIR7	.961
UIR1	.952
UIR2	.943

Extraction Method: Principal Component Analysis. a 1 components extracted.

Export market orientation in university

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy.	.611	
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	48.534 3 .000

Component Matrix (a)

	Component	
	1	
IDiss_C	.877	
IGen_C	.870	
Resp_C	.659	

Extraction Method: Principal Component Analysis. a 1 components extracted.

Appendix 4: CFA using AMOS.18

Construct	Number of items	χ2	df	р	GFI	CFI
Export market						
information generation	5	10.07	5	0.073	0.94	0.983
Export market						
information						
dissemination	6	9.054	6	0.17	0.958	0.994
Responsiveness to export						
market information	5	6.43	4	0.17	0.962	0.994
Export coordination	6	14.13	8	0.079	0.928	0.984
Perceived higher						
education country image	6	11.52	5	0.052	0.944	0.978
University export						
performance	6	10.75	7	0.15	0.948	0.992
University international						
reputation	5	5.26	4	0.262	0.967	0.998
University attitude						
towards government						
funding	4	3.08	2	0.18	0.952	0.98

*RMSEA values were not reported in this study as some values were found above the typical 0.08 threshold. Given its formula ($\sqrt{[([\&chi2/df] - 1)/(N - 1)]}$), RMSEA value is a factor of the sample size (Rigdon, 1996). So the smaller sample size, the higher is the RMSEA value (e.g., Rigdon, 1996; Hu and Bentler, 1999). Thus, some RMSEA values in this study that are higher than the critical value can be largely attributed to small sample size (Homburg and Furst, 2005). Therefore, due to a small sample size in this study, the researcher followed Lee's (2001) seminal paper and considered solely the indices of goodness of fit without taking into account the measures of badness of fit (i.e., RMSEA).

Appendix 5: Total effects

PATHS	Path coeff.	Std. error	Absolute T- value
UNRP -> IDiss	-0.01	0.1314	0.138
UNRP-> IGen	0.23	0.1238	1.8693
UNRP -> PHECI	0.65	0.0695	9.394
UNRP-> Resp	0.32	0.13	2.5056
UNRP -> UEP	0.16	0.0749	2.1345
UNRP -> UIR	0.16	0.0803	2.0989
COOR -> IDiss	0.57	0.1126	5.0552
COOR -> IGen	0.37	0.1231	3.0752
COOR -> Resp	0.28	0.1103	2.6062
COOR -> UEP	0.39	0.0806	4.8533
COOR -> UIR	0.35	0.0772	4.6345
IDiss -> UEP	0.34**	0.1374	2.5103
IDiss -> UIR	0.22	0.1564	1.4666
IGen -> UEP	0.27*	0.1369	2.0169
IGen -> UIR	0.42	0.1526	2.8077
PHECI -> IDiss	-0.15	0.1234	1.2599
PHECI -> IGen	-0.17	0.1286	1.3517
PHECI -> Resp	0.36**	0.1357	2.6789
PHECI -> UEP	0.01	0.0853	0.1476
PHECI -> UIR	-0.02	0.0785	0.3571
Resp -> UEP	0.31**	0.0733	4.2833
Resp -> UIR	0.22	0.0698	3.2331
UAGF -> IDiss	-0.3	0.1151	2.641
UAGF -> IGen	-0.26	0.128	2.0979
UAGF -> Resp	-0.21	0.1103	1.9793
UAGF -> UEP	-0.24	0.0815	3.0355
UAGF -> UIR	-0.23	0.0838	2.7929
UIR -> UEP	0.29	0.133	2.2295