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Export market orientation behavior of universities: the British scenario

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This study seeks to extend our knowledge of export market orientation (EMO) in the context of British universities with regard to recruitment of international students. Export marketing remains an area of limited focus in the marketization of higher education literature. The study predominantly follows a quantitative research design using survey methods. A sample of British universities was studied and partial least-squares analysis was performed. The findings indicate that four export higher education-specific variables are important drivers of EMO in universities. The paper also confirms EMO's direct effects on university export performance and its indirect effects mediated through university international reputation. In light of these findings, a number of implications are advanced for university management. The study also makes important theoretical contributions: it contributes to a growing body of literature on marketing of higher education; it enriches the export marketing literature by examining EMO in a service setting and it adds to the EMO–export performance relationship by examining the mediating role of international reputation. The findings are limited to British universities. Therefore, they may not be generalizable to other geographical areas. In addition, the results of this study were obtained from a small sample size and generalization of the findings to other higher education institutions should be made with caution.

Keywords: export market orientation; higher education marketing; PLS

Introduction

Few would argue that the pressures of globalization, besides the financial constraints facing many higher education institutions worldwide, are significant forces driving the expansion of a business-oriented transnational higher education (Bennell & Pearce, 2003). The promotion of increased liberalization of international trade in higher education as evidenced by the inclusion of exporting educational

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services in the General Agreement on Trade in Services (GATS) agenda reflects the relevance of the global imperative to higher education. This has led to the emergence of an export philosophy in higher education. A number of authors (e.g. De Vita & Case, 2003; Harman, 2004; Martens & Starke, 2008; Mazzarol & Hosie, 1996) have argued that higher education has gradually been discovered as a lucrative export service industry driven by the competitive rush for international students and their funds (Molesworth, Scullion, & Nixon, 2011). Some countries have actively sought to take advantage of a growing international market (Martens & Starke, 2008). Explicitly, the UK and Australia are said to be primary export nations (Gürüz, 2012; Organization for Economic Co-operation and Development [OECD], 2004, pp. 284–286). To add to this anecdotal evidence of exporting in higher education, we draw from the literature into exporting services as a premise to discuss exporting the services of higher education.

Exporting the services of higher education

Exporting activity has long been associated with physical goods. According to Lovelock (1999, p. 290), when exporting physical goods, 'the produced 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'. Conversely, being intangible performances, services do not necessarily fit into the pattern of exporting goods. Daniels (2000) suggests that exporting services involves services sold by the residents of one country to residents of another. These are international exports and imports in the conventional balance of payments (BOP) sense. From this perspective, the notion of goods/services transportability invoked in the definition of exporting physical goods is not a condition in services exports. Service delivery can take place domestically and still have an impact on international trade flows (Cowell, 2006; Dunning, 1989).

Unlike manufactured goods where the exported good itself crosses borders, in their study examining the export behavior of services firms, Clark, Rajaratnam, and Smith (1996) argue that services exports can take other forms according to the type of the exported service. In the case of a contact-based service, consumers may cross borders to receive the service (Segebarth, 1990; Stare, 2010). Roberts (1999) refers to domestically located exports in this regard through the provision of services to foreign customers in the domestic market. In higher education, the phenomenon of transnational education illustrates the movement of consumers (students) to a host country to receive the service (education) (Marginson, 2006). The OECD and the GATS agreements recognize international students' recruitment as the most developed form of export education (Naidoo & Wu, 2011). Revenues from the recruitment of international students are visible in the BOP of many exporters of international higher education (Russell, 2005). As a result, the export market is an important target of universities when designing and implementing marketing efforts internationally (Ivy, 2001).

Export marketing in higher education

The importance of export markets has led a number of higher education institutions to develop international marketing strategies for international student recruitment (Mazzarol & Soutar, 2002). While some institutions have been successful at recruiting international students, others are still struggling to see a significant return from their export marketing efforts (Ross, Heaney, & Cooper, 2007). This highlights the importance of research into export marketing in higher education to assist education managers in the recruitment of international students. Surprisingly, however, the literature on international strategic marketing in higher education is scarce. Existing literature tends to focus on some general marketing themes applied to international higher education (branding: Hemsley-Brown & Goonawardana, 2007; segmentation: Mazzarol & Soutar, 2002; and marketing strategy implementation success: Naidoo & Wu, 2011) rather than examining frameworks specifically tapping export marketing. Shah and Laino (2006) applied the model of adaptation versus standardization of communications strategies to prospective international students. Although Shah and Laino's (2006) study is the first to use this model of export marketing strategy, the study overemphasizes the contingencies with regard to how much to standardize or adapt. The model disregards the nature of export marketing activities which should be carried out. To the best of our knowledge, no study has examined managers' perceptions of export marketing behavior in higher education institutions. Specifically, the conceptualization of export market orientation (EMO) (referring to the implementation of export marketing) in the educational setting remains an unchartered territory.

One explanation to the paucity of research in export marketing in higher education relates to some peculiarities in the higher education environment (Maringe, 2005). The specific context of higher education is of particular interest for this research. For example, educational offerings are not a commodity but rather a 'specialty' or 'premium' (Russell, 2005). Unlike business spheres, the selection of a higher education institution is an investment that will contribute toward a career and all of the other social and economic rewards associated with a particular degree. This specificity challenges the traditional notion of exporting a commodity when referring to EMO in higher education. Another salient characteristic of higher education is the range of confounding roles played by the student. The student is the customer, part of the process itself and a quasi-product at the end of the process (Conway, Mackay, & Yorke, 1994). These specificities raise questions as to what the core offering exported/marketed is and what the target of EMO behavior is in a higher education setting. The specificity of the higher education sector provides a perplexing environment to the development and management of EMO activities (Asaad, Melewar, Cohen, & Balmer, 2013). Much remains unknown about how EMO is perceived in the higher education sector and

how higher education institutions manage their export marketing activities in the context of international student recruitment. This study intends to fill the gap by presenting a model of EMO in universities. We use the EMO framework as a basis for predicting the marketing behavior of universities toward their export markets.

Export performance has traditionally been found as an outcome of EMO (e.g. Cadogan, Diamantopoulos, & Siguaw, 2002). Although prior research (e.g. Cavusgil & Zou, 1994; Shoham, 1998) put forward a multidimensional performance construct, there is no consensus on the specific dimensions that constitute export performance (Francis & Collins-Dodd, 2000; Okpara, 2009). In addition, 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 conceptualizing university performance from an organizational or business perspective. In addition to aiming to inform the process of EMO in higher education, this research also aims to provide a new outlook in conceptualizing as well as operationalizing export performance in the higher education setting as a possible consequence of EMO in universities.

The paper is organized as follows. The next section outlines the theoretical model and the specification of hypotheses. This model integrates EMO, its export-specific antecedents and consequences. Next, an empirical study in which the hypotheses are tested is described. Following an exposition of the methodology, the results of the study are discussed, along with their implications.

The model

The model proposed here follows from a combination of the EMO and the higher education management literature. In addition, some key findings from a preliminary qualitative study have been presented to support the model and hypotheses. The qualitative study was undertaken among 12 UK universities. Semi-structured interviews were conducted with managers in the international offices of universities. We follow Kohli and Jaworski's (1990) definition of market orientation (MO) and argue that the construct of EMO connotes the implementation of export marketing. According to Cadogan, Diamantopoulos, and De Mortanges (1999, p. 690), EMO consists of three coordinated information-based activities, namely, 'generation, dissemination and response to export market intelligence'. This conceptualization of EMO pioneered by Cadogan and his colleagues is undoubtedly well established in the literature of export marketing. The activities of generation, dissemination and responsiveness to intelligence are also consistent with the higher education marketing literature as regards the conceptualization of MO in universities advanced by

Caruana, Ramaseshan, and Ewing (1998a) and Wasmer and Bruner (2000). Our qualitative findings also support the aforementioned conceptualization of EMO. A director of a university international office stated:

> The key thing in this export market orientation thing is information. It is not only a matter of doing market research to find interesting information but more importantly, you need to use this information and react quickly with your product and respond to the market. This cannot be achieved without information shared across the board. (Interviewee 2)

Drawing from Wasmer and Bruner (2000), the authors argue that the starting point of an export market-oriented university is export market information generation by formal (e.g. in-house export market research and 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 (Naidoo & Wu, 2011). Monitoring export marketing activities (e.g. new courses developed by foreign universities) implemented by foreign universities is also necessary. In addition, detecting fundamental shifts in the global higher education environment (e.g. regulation and technology) should not be overlooked.

The intelligence generated by the previous phase needs to be disseminated throughout the university both hierarchically and horizontally (Hemsley-Brown & Oplatka, 2010). In order to realize 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 (Hemsley-Brown & Kolsaker-Jacob, 2008). The use of different marketing strategies (e.g. segmentation, positioning, planning) will enable marketing operatives to develop new programs and also to implement systems to market different educational services internationally.

Our approach focuses attention on extending Cadogan, Diamantopoulos, et al.'s (2002) framework of EMO to cover export higher education-specific variables directly associated with EMO in universities, as shown in Figure 1, based on the higher education literature. By taking this approach, we hope to respond to previous calls for examining the nature of EMO from the perspective of some non-traditional international entities (e.g. not-for-profit organizations and organizations in the public sector) (Cadogan, Sundqvist, Salminen, & Puumalainen, 2002). This is in line with the conceptualization of EMO in universities in this paper (with universities being different from traditional for-profit organizations in terms of purpose of existence).
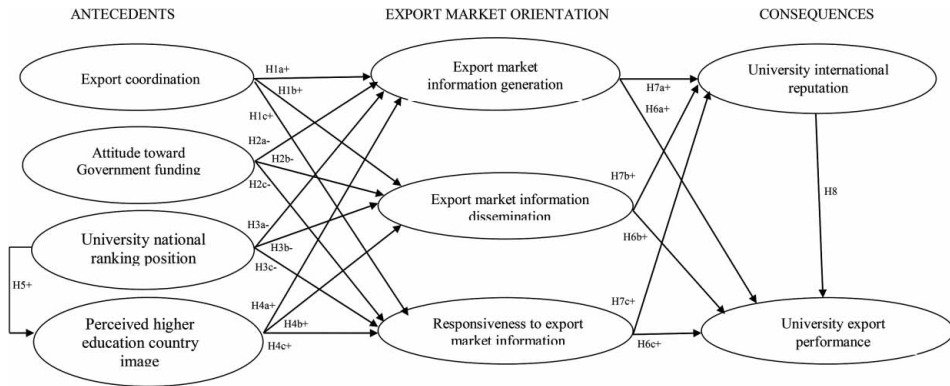
Figure 1.   Conceptual framework.

Hypotheses development

Export coordination

Export coordination is defined as consisting of several interrelated and overlapping themes. These themes include:

> Communication and shared understanding between specific export and non-export staff members; an organizational culture which emphasizes 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)

Recent theoretical work (Cadogan & Diamantopoulos 1995; Cadogan, Salminen, Puumalainen, & Sundqvist, 2001; Cadogan, Sundqvist, et al., 2002; Diamantopoulos & Cadogan 1996) suggests that export coordination is a key predictor of EMO. According to Bartell (2003), we can expect this relationship to hold true for universities. Several scholars (e.g. De Boer, Jurgen, & Liudvika, 2007) perceive universities as organizations with mission statements, employees and management systems. Universities are social units with potentially a number of organizational phenomena such as communication channels, cooperation, interfunctional conflict and shared work-related goals (based on Cadogan et al., 1999). The presence or lack of these organizational themes shapes export coordination. 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 characterized by a common drive to implement export marketing is less likely to witness dysfunctional conflict

mainly between the schools and the international marketing office. According to Bartell (2003), divergence in work-related goals occurs in some regional and internally oriented universities which prioritize the expansion of some academic programs rather than market needs. Based on Cadogan et al. (1999), a lack of dysfunctional conflict and effective communication among different university departments are both required for a fluid dissemination of relevant export market information and to achieve a general understanding of key markets. In addition, common sense suggests that 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 export market information and facilitate effective responsiveness. This can only be achieved, however, through the integration and coordination of the institution's resources (Hemsley-Brown & Oplatka, 2010). Hence, a coordinated university is characterized by a strong integration of resources, effective communication among its departments and a shared responsibility in implementing export marketing. Given the above, we propose:

> *H1*: The more coordinated the university is in relation to its foreign business, (a) the more export market information the university generates; (b) the more export market information the university disseminates; (c) the more responsive the university is to its foreign markets.

University attitude toward government funding

University attitude toward government funding refers to the university's assessment of government funding as a funding source (based on Ebaugh, Chafetz, & Pipes, 2005). 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 & Haynes, 2003). Different reforms (e.g. the 1988 Education Reform Act and the 2003 White Paper) encouraged the financial independence of universities from government funding, forcing universities to find private sources of funding (Altbach & Knight, 2006). As a result, universities are increasingly opting for international ventures within the growing international mass higher education sector (Bennell & Pearce, 2003). Therefore, private institutions are expected to exhibit higher levels of MO than publicly supported ones (Anheier, Toepler, & Sokolowski, 1997; Wasmer & Bruner, 2000). It is implied that unfavorable attitudes toward government funding lead to a more market-oriented approach in universities.

   Cadogan, Diamantopoulos, et al. (2002) maintained that export dependence is a significant driver of EMO. This also pertains to higher education, where universities with unfavorable attitudes toward government funding are more likely to be export dependent. Shortages in the public funding of universities are expected motives for universities to seek alternative sources of funding

(Altbach & Knight, 2006). Given that the funds originating from international students are valuable sources of revenue for universities, managers will perceive the university's success to be tied to its export operations. Thus, the perceived importance of the export market intelligence generated, disseminated and responded to will also be higher. Therefore, we suggest that:

> *H2*: The less favorable the university attitude is toward government funding, (a) the more export market information the university generates; (b) the more export market information the university disseminates; (c) the more responsive the university is to its foreign markets.

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 & Soo, 2005). University rankings or 'league tables' are increasingly an important part of the higher education sector, which is characterized nowadays by growing global competition (Thakur, 2007). Specifically, ranking systems which compare institutions nationally are predominant in a number of countries such as the USA, Canada, China, Germany and the UK (Bastedo & Bowman, 2010).

Cadogan et al. (2001) introduced the concept of export experience as an antecedent to EMO (i.e. the number of years the firm has been exporting). We follow this rationale and argue that 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 favor 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). There has traditionally been a large demand (often exceeding supply) on older and more prestigious universities from students from different parts of the world (Marginson, 2006). Newer universities (e.g. ex-polytechnics), however, have *by default* had less exporting experience (in terms of time) comparatively to the more established universities. Cadogan, Diamantopoulos, et al. (2002) contend that export experience negatively correlates with EMO. Similarly, we argue that higher ranked and well-established universities are generally less export market oriented, given that they can rely solely on their prestige to attract international students. Conversely, it is expected that newer exporting universities will be more aggressive in their marketing activities toward their foreign markets. These universities tend to favor a market-driven model of higher education (Marginson, 2006) which is aligned to industry requirements and makes reference to the social

and economic arena in which universities operate. 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 … At the end of the day prestigious universities don't really need to go to the market, the market will come to them …. (Interviewee 15)

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 & Soo, 2005). One senior international officer stated:

> Sometimes ranking does not give a fair impression of the university. You have to counteract it and say no, we have some fantastic courses …. (Interviewee 11)

In addition, new universities are generally more involved than older universities in entering foreign markets (Rolfe, 2003), in particular the markets that are less ranking conscious, taking into consideration that the domestic market is usually more perceptive of national ranking systems. Applying this reasoning leads us to expect the following:

> *H3*: The better the university national ranking position is, (a) the less export market information the university generates; (b) the less export market information the university disseminates; (c) the less responsive the university is to its foreign markets.

Perceived higher education country image

Higher education country image stems from a more general concept that is product-country 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 & Sikri, 1996), where it is difficult to experience the product prior to purchase. Higher education is an unfamiliar service for most international students due to the intangible nature of educational services (Srikatanyoo & Gnoth, 2002). Higher education intangibility makes it difficult for students to assess its quality. 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 & Knight, 2006. A number of scholars (e.g. Cubillo, Sánchez, & Cerviño, 2006; Mazzarol & Soutar, 2002) 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 country of origin. In seeking to manage this image, marketers' perceptions of product-country image would then shape their export marketing strategy (Kleppe, Iversen, & Stensaker, 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 and branding) (Baker & Ballington, 2011). Thus, marketers' perceptions of product-country image influence the implementation of export marketing (i.e. EMO). One interviewee reflected this idea:

> We believe that the UK higher education image is strong and we make use of it in our marketing activities abroad. (Interviewee 11)

In addition, country images can act as facilitators or inhibitors of entry into foreign markets. A favorable country image can be used as a marketing tool in the export marketing activities of products and services originating from that country (Niss, 1996). In a higher education context, some countries are more export market oriented than others in view of their favorable higher education country image (Larsen & Vincent-Lancrin, 2002). For example, the higher education country image of the UK is more favorable than that of Canada or Germany (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. A marketing manager reflected this idea:

> 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. (Interviewee 7)

Based on the above, we propose:

> *H4*: The more favorable the higher education country image as perceived by managers, (a) the more export market information the university generates; (b) the more export market information the university disseminates; (c) the more responsive the university is to its foreign markets.

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

Han (1989) introduced the 'Summary effect' concept, which suggests that consumers' attitude (positive or negative) toward a specific product/institution from a foreign country can lead to positive or negative perceptions of that country (Li, 2008). Similarly, university image impacts on higher education country image (Srikatanyoo & Gnoth, 2002). Individual universities' images are closely linked to the general national image of higher education (Gray, Fam, & Llanes, 2003). Given that an institution's ranking position reflects its image (Lowry & Owens, 2001), Cubillo et al. (2006) operationalized institution image as institution ranking position. Therefore, it can be argued that university ranking position impacts on higher education country image. Evidence for this implication is found, for instance, in the history of British higher education image which was formed as a result of the prestigious image of top-ranked universities (e.g. Oxford, Cambridge and London) (Warner & Palfreyman, 2001). Hence, we posit that:

> *H5*: University national ranking position has a positive influence on higher education country image.

Export performance

Cadogan et al. (2001), Cadogan, Diamantopoulos, et al. (2002) and Rosé and Shoham (2002) maintained that export performance is the result of the adoption of EMO. 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 & Shoham, 2002; Zajac & Kraatz, 1993). University export performance consists of aspects related to enrolment, revenues, market share and international students' satisfaction.

Caruana, Ramaseshan, and Ewing's (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 (Siu & Wilson, 1998). 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. Thus,

> *H6*: (a) The generation; (b) dissemination and (c) university responsiveness to export market information will enhance its export performance.

University international reputation

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 (based on Alessandri, Yang, & Kinsey, 2006; Moizer, 1997).

Gainer and Padanyi (2002) support the positive effect that MO has on an organization's reputation. MO should generally enhance an organization's reputation. A market-oriented organization communicates and interacts with the market on an ongoing basis. This is expected to stimulate favorable word of mouth and dissipate unfavorable word of mouth, and therefore, improve reputation. A number of scholars contend that marketing communications can lead to a strong reputation (e.g. Weiss, Anderson, & MacInnis, 1999; Wiedmann & Prauschke, 2006). The importance of information-based EMO is heightened in the higher education context with relatively immature adults making a major part of the choice (Litten, 1980). Recognizing and being close to students/market through providing a suitable level of information, details and understanding would lead to favorable word of mouth and the development of a university's reputation.

The relationship between MO and reputation can be extended to an export context where the need for marketing activities is more crucial (Cadogan & Diamantopoulos, 1995). Information requirements and the need for marketing communications may increase rapidly for organizations operating at an international level (Darling & Postnikoff, 1985). Derived from Weiss et al. (1999), international reputation results from the organization's communications with multiple stakeholders in different international markets (Moizer, 1997). Specifically, as a result of increased global competition, there is a need for increasingly market-oriented universities to construct and communicate positive images of 'prestige' and 'quality' to key constituents (Arpan, Raney, & Zivnuska, 2003; Ivy, 2001). In a global market where international students are recognized as customers, universities have to implement marketing strategies (e.g. branding, positioning, etc.) to enhance their reputation internationally (Melewar & Akel, 2005).

Information-based EMO is particularly important in an export context, where little may be known about the university. Seeking higher education abroad is a relatively major expenditure on a complex product with subtle indicators of quality (Marginson, 2006). In the absence of reliable information, the inherent risk is potentially very high. The availability of useful information, which the consumer has confidence in, is essential to reduce the risk level (Mortimer, 1997; Wæraas & Solbakk, 2009). This confidence helps build a strong

university reputation. As a result, the implementation of marketing in universities when targeting foreign markets would enhance a university's international reputation. Thus,

> *H7*: (a) The generation; (b) dissemination and (c) university responsiveness to export market information will enhance its international reputation.

The mediating role of university international reputation

A number of authors (e.g. Nguyen & LeBlanc, 2001; Sung & Yang, 2008) posit that university international reputation is an important extrinsic cue influencing overseas students' choice of a higher education institution. 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 (Mortimer, 1997). Higher education is a high involvement service specifically for full-fee paying overseas students (Li, 2008). Recalled earlier, overseas students do not necessarily have the opportunity to intrinsically evaluate educational services before enrolment due to geographical distance or strict immigration regulations (Altbach & Knight, 2006). 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, favorable university international reputation is positively associated with its export performance.

Bearing in mind the positive hypothesized effects of EMO on both international reputation (H7) and export performance (H6), we posit that EMO positively impacts on university international reputation en route to enhance export performance. Therefore,

> *H8*: University international reputation partially mediates the impact of (a) export market information generation; (b) export market information dissemination and (c) university responsiveness to export market information on university export performance.

Methodology

Data collection procedures

The target population of this study is British universities. We chose to focus on the international office within the university as our unit of analysis and the director of the international office as our key informant. The population size is 130 British universities. With the assistance of the secretary of British Universities International Liaison Association (BUILA), a total of 130

questionnaires were e-mailed to the heads of the international offices of British universities and a response rate of 48% was achieved. After preliminary cleaning of data and checking of missing data, the data set comprised 63 usable questionnaires. The data set revealed a relatively comparable split between pre-1992 (44.5%) and post-1992 (55.5%) universities. Multivariate normality checks indicated multivariate Kurtosis. Therefore, the assumption of multivariate normality was not tenable.

Measures

An introductory phase of semi-structured interviews was conducted to clarify the domain of constructs. All of the measures were developed based on the literature review and semi-structured interviews and were operationalized as multi-item constructs. The measures of 'export coordination in university' were adapted from Cadogan et al. (1999). The measures of 'university attitude toward government funding' were adapted from Ebaugh et al. (2005). To measure 'university international reputation', the authors adapted Gray et al.'s (2003) scale of university reputation and Nguyen and LeBlanc's (2001) scale of institutional reputation (see Appendix).

To measure 'EMO in universities', we have used Cadogan et al.'s (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.'s (1998a) and Wasmer and Bruner's (2000) studies on MO in universities.

'University export performance' was measured based on Rosé and Shoham's (2002) scale of export performance. Once again, their original instrument was amended to reflect the situation in universities based on Zajac and Kraatz's (1993) scale of university business performance.

To measure 'university national ranking position', the authors have used a 'proxy measure' related to the academic performance indicators in the UK *Times* league table based on Dill and Soo (2005). These indicators determine the rank attributed to each university. To the authors' best knowledge, there is no existing reflective scale evaluating university rank.

Finally, this paper used an adapted version of Li's (2008) scale of higher education country image based on Gray et al.'s (2003) study on brand positioning in higher education.

Results

The partial least-squares (PLS) latent path model (Wold, 1982) was used to estimate the causal model in Figure 1 using SmartPLS 2.0 for the following

reasons. First, PLS avoids many of the restrictive assumptions imposed by other causal models that involve latent variables such as LISREL (e.g. normality). More specifically, PLS can accommodate small sample sizes (Wold, 1982). This feature is crucial to the present study as only 63 respondents were available for model testing. Second, PLS path modeling algorithm allows the analysis of models that employ both reflective and formative measurement scales (Diamantopoulos & Winklhofer, 2001). This is crucial as the model in Figure 1 includes both formative and reflective measures. Third, PLS provides measurement assessment, which is critical to our study as we developed some new measures. Finally, SMART PLS software used in this study calculates the standard deviation for parameter estimates and generates an approximate *t*-statistic. This overcomes the advantage of the lack of formal significance tests for parameters resulting from non-parametric methods. Given its overall suitability to our modeling requirements (Hur, Ahn, & Kim, 2011; Pertusa-Ortega, Molina-Azorín, & Claver-Cortés, 2010; Wold, 1982), we employed PLS here.

Measurement

The reliability of the scales used is adequate as measured by Cronbach's alpha (>0.7), composite reliability (>0.6) and average variance extracted (AVE) (>0.5). All scales demonstrate good reliabilities. Convergent validity was also supported by an acceptable level of AVE (i.e. above 0.5), indicating that all latent variables have explained more than 50% of the variance in their observable measures (Gotz, Liehr-Gobbers, & Krafft, 2010). We performed the test for discriminant validity provided by Fornell and Larcker (1981). One criterion for assessing discriminant validity is that 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 & Larcker, 1981). In all cases, these values are considerably higher than any bivariate correlation between constructs. Cross-loadings offer another check for discriminant validity on the indicator level (Gotz et al., 2010). The loading of each indicator was found to be greater than all of its cross-loadings. This suggests that there is discriminant validity among the constructs.

We followed the statistical procedures recommended by Diamantopoulos and Winklhofer (2001) to assess the validity of university national ranking position (UNRP). A formative indicator approach was used in measuring UNRP based on weights rather than loadings (Table 1). Both teaching and research quality contributed the most to a university ranking position. All values of the variance inflation factor (VIF) were far below the common cutoff threshold of 10 (Kleinbaum, Kupper, & Muller, 1988). Multicollinearity does not represent a serious problem.

Table 1.   Outer weights and variance inflation of formative manifest variables.

Symbol	Formative variables	Weights	VIF
UNRP1 → UNRP	Entry standards	0.4*	3.12
UNRP2 → UNRP	Staff/student ratio	0.2	2.48
UNRP3 → UNRP	Teaching quality	0.65**	4.67
UNRP4 → UNRP	Graduation rates	0.18	3.1
UNRP5 → UNRP	Graduates' prospects	0.48**	4.53
UNRP6 → UNRP	Research quality	0.55**	4.68

*$p < .05$.
**$p < .01$.

Structural equations and hypotheses tests

The structural model was evaluated by the R^2 of the dependent constructs. All the variances represented by R^2 values are acceptable or strong (ranging from 0.43 to 0.61) (Chin, 1998; Henseler, Ringle, & Sinkovics, 2009).

Consistent with Chin (1998), bootstrapping using 200 resamples (with 60 cases per sample) was applied to produce *t*-statistics. The path coefficient analysis clearly shows the structure of relationships hypothesized in this study as shown in Table 2. In support of H1, the results 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. Also, coordination (COOR) was significantly related to Resp ($\beta = 0.29$, $p < .01$).

With regard to H2, it was found that a university's attitude toward government funding is significantly and negatively correlated with every single component of EMO. H2a, H2b, H2c and therefore H2 were supported.

With respect to H3, the path coefficient from UNRP to IGen was significant but opposite in direction to that posited in H3a. Therefore, H3a was rejected. Moreover, neither H3b nor H3c were significant. These mixed results do not give support to H3.

Regarding H4, perceived higher education country image showed a positive significant relationship with only one dimension of EMO (i.e. responsiveness) confirming H4c ($\beta = 0.36$, $p < .01$). H4 was partially supported.

H5 was confirmed as 'the university national ranking position has a positive significant effect ($\beta = 0.65$, $p < .001$) on higher education country image as perceived by managers'.

Although no significant direct effect was found from export market information generation (H6a), export market information dissemination (H6b; $\beta = 0.27$, $p < .05$) has a positive significant effect on university export performance. Similarly, responsiveness was found as a significant predictor of university export performance (H6c; $\beta = 0.24$). H6 was therefore supported.

In the seventh group of hypotheses, while the authors found a non-significant relationship for H7b, hypotheses H7a ($\beta = 0.43$, $p < .01$) and H7c

Table 2. Path coefficients.

Paths	H	Expected sign	Path coeff.	Std. error	Absolute t-value
COOR → IGen	H1a	+	0.38**	0.1231	3.0752
COOR → IDiss	H1b	+	0.57***	0.1126	5.0552
COOR → Resp	H1c	+	0.29**	0.1103	2.6062
UAGF → IGen	H2a	−	−0.27*	0.128	2.0979
UAGF → IDiss	H2b	−	−0.3**	0.1151	2.641
UAGF → Resp	H2c	−	−0.21*	0.1103	1.9793
UNRP → IGen	H3a	−	0.34**	0.1309	2.6361
UNRP → IDiss	H3b	−	0.08	0.142	0.5877
UNRP → Resp	H3c	−	0.09	0.1622	0.5444
PHECI → IGen	H4a	+	−0.17	0.1286	1.3517
PHECI → IDiss	H4b	+	−0.15	0.1234	1.2599
PHECI → Resp	H4c	+	0.36**	0.1357	2.6789
UNRP → PHECI	H5	+	0.65***	0.0695	9.394
IGen → UEP	H6a	+	0.15	0.1392	1.0703
IDiss → UEP	H6b	+	0.27*	0.139	1.992
Resp → UEP	H6c	+	0.24**	0.0847	2.9185
IGen → UIR	H7a	+	0.43**	0.1526	2.8077
IDiss → UIR	H7b	+	0.23	0.1564	1.4666
Resp → UIR	H7c	+	0.22**	0.0698	3.2331
UIR → UEP	H8	+	0.29*	0.133	2.2295

*$p < .05$.
**$p < .01$.
***$p < .001$.

($\beta = 0.22$, $p < .01$) were supported. Hence, EMO in a university enhances its international reputation.

To test the mediation effect of university international reputation (H8), the authors employed Baron and Kenny's (1986) step approach. When university international reputation (UIR) was added to the IGen → UEP path, the direct IGen → UEP path decreased and the direct relationship became insignificant. Since the effect was eliminated with the inclusion of UIR, this suggested full mediation (Hair, Anderson, Tatham, & Black, 2006) of UIR in the IGen → UEP relationship. H8a suggesting partial mediation was therefore rejected. Similarly, Resp → UEP decreased with the inclusion of UIR, but the direct relationship remained significant, suggesting partial mediation by UIR (Hair et al., 2006). Therefore, H8c was supported. H8b was, however, not supported given that the direct path IDiss → UIR is insignificant.

The blindfolding results ($G = 30$ blocks) are presented in Table 3. It is noticed that for this model, all blocks had high values for cross-validated (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 & Cha, 1994). Furthermore, the 0.65 value of goodness-of-fit (GOF) index was acceptable. In summary, the results indicated that the model had an acceptable predictive relevance. Overall, the assessment of the measurement and structural models indicates that the results of the PLS model are acceptable.

Table 3.   Blindfolding results.

Block	R^2	Communality	H^2	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		
GOF	0.65			

A rival model

In the proposed model (Figure 1), we maintain that EMO and international reputation have a mediation role in the model. To further examine this mediation role, we have followed Morgan and Hunt's (1994) approach to testing for a rival model. The rival model (Figure 2) allows no indirect effects; in other words, EMO and international reputation are not allowed to mediate any of the relationships. We then test for the rival model and compare it to the proposed model. The overall fit of the rival model is somewhat lower (GOF = 0.58 versus 0.65); only 4 of 8 (50%) of its hypothesized paths are supported at the $p < .05$ level. In contrast, 13 of 20 hypothesized paths (65%) in the proposed model are supported at the $p < .05$ level. Furthermore, little if any additional explanatory power is gained from additional direct links to university export performance in the rival model ($R^2 = 0.64$). We conclude that the proposed model is a better model.

Discussion

Interpretation of the results

Our study extends the EMO model by Cadogan et al. (1999) to the higher education context and hence responds to previous calls for investigating export marketing concepts from the perspective of international services marketers (Cadogan, Sundqvist, Salminen, & Puumalainen, 2000). EMO in universities consist of three information-based activities, namely export market information generation, dissemination and responsiveness. This study is the first to conceptualize and operationalize EMO in universities taking into account the specific context of higher education. As an illustration, given that higher education produces 'premium' offerings that provide access to social status and life-time opportunities, the recruitment of international students involves a considerable experience for the students and therefore the necessity to include the following
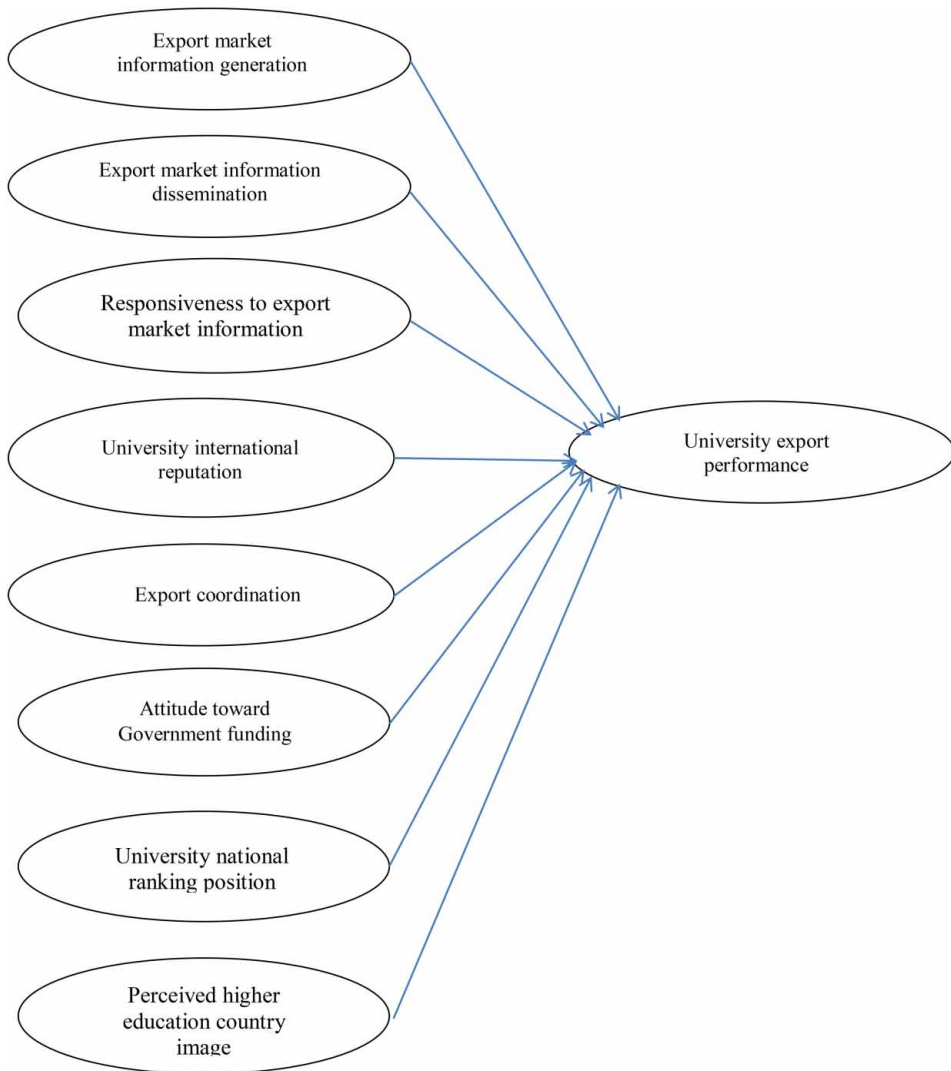
Figure 2.   Rival model.

items when operationalizing responsiveness: 'we periodically review our courses development to ensure that the courses are in line with what international students want'; 'we have good support for international students (e.g., accommodation, visas and pickups) in order to improve their experiences'.

This study also contributes to a growing body of literature in marketing of higher education. Our study presents a systematic framework on EMO in universities, its higher education export-specific antecedents and consequences.

As regards the antecedents, both coordination and university attitude toward governmental funding were found to be key predictors to all dimensions of

EMO in universities. That is, EMO in universities has a positive association with coordination (H1), but a negative association with university attitude toward governmental funding (H2). This is consistent with previous research (e.g. Cadogan, Diamantopoulos, et al., 2002; Wasmer & Bruner, 2000).

It is also interesting to note that the results from the data run counter to H3. The data provided partial indication of the positive effect of university ranking position on EMO. This positive relationship found is evidenced by a large amount of international recruitment activity in some of the top universities/ business schools in the UK such as LSE, Manchester, Durham, Warwick and Imperial College. The conflicting results are explained by the fact that university ranking position would impact on the type of marketing activities geared toward foreign markets rather than simply on the level of EMO implemented. Anecdotal evidence suggests that, while lower ranked universities use 'middle of the road' recruitment events, high-ranking institutions tend to target their audience through direct/exclusive marketing using their profile. This research is the first to link university national ranking position to EMO. The findings emphasize the need for more research into the effects of ranking systems on specific export marketing activities carried out by universities.

The results also showed partial support for the relationship between perceived higher education country image and EMO (H4). This study supports the conclusion that a country's higher education image drives a university's responsiveness to seminal export market information (H4c). However, the results provided no support for the hypothesized positive effect of higher education country image, neither on export market information generation (H4a) nor on information dissemination (H4b). This is in congruence with the studies of Kleppe et al. (2002) and Baker and Ballington (2011), which placed particular emphasis on responsiveness rather than the other dimensions of MO (i.e. information generation and information dissemination) in examining the influence of country image on marketing strategies.

Both hypotheses suggesting consequences of EMO in universities (H6 and H7) were strongly supported. This is in line with Caruana et al. (1998a), Stewart (1991) and Mazzarol and Hosie (1996), emphasizing the importance of MO in achieving sustainable competitive advantage in international education.

Additionally, the present study validated the mediating role of university international reputation. Export market-oriented activities, through positive university international reputation, would improve university export performance with regard to the recruitment of international students. This study was the first to examine the mediating role of international reputation in the 'EMO– export performance' relationship.

Managerial implications

This study has brought some useful implications to managers in universities. The current study offers practical guidelines for international marketing

managers when actively managing their marketing activities toward foreign markets. International marketing managers should seek information, identify global opportunities and react to information on an international basis. While in many universities international offices do carry out market research to identify global opportunities and may share this information with other departments in the university, universities should also respond to foreign markets, as responsiveness was found to have the greatest impact on EMO outcomes. Managers should make every effort to develop a service improvement program in order to improve the quality of services provided to international students (e.g. programs offered, language skills, accommodation, immigration advice, orientation and general support). This requires building a listening orientation toward international students to learn how to serve them better, and thereby improve their experiences. Satisfactory international students' experiences can help enhance a university's international reputation and, therefore, university export performance.

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. A key implication for top management wishing to foster EMO behavior 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 emphasize effective coordination between the international marketing department and other departments and schools within the university. This implies putting in place internal communications systems and procedures aimed at facilitating a free flow of cross-functional communication. Another area associated with coordination that warrants consideration is organizational conflict within the university. A possible disagreement among university departments in pursuing an EMO can lead to a failure of designed marketing programs. By effectively minimizing organizational conflict, the university will enhance the EMO behavior. Managerial programs intended to promote a sense of shared values, communication and to reduce dysfunctional conflict should all help in creating a sense of shared vision.

Limitations and further research

It should be noted that the results of this study were obtained from a sample of 63 British universities, and generalization of the findings to other higher education institutions should be made with caution.

This study was developed from a managerial perspective. Managers were the sole respondents in this study. We acknowledge that some concepts used in this study (i.e. country image) are better gauged if students were the target respondents, thus we call for future research using multiple respondents to examine the link between students' perceptions and universities' export

marketing activities. Despite using self-report questionnaires in this study to collect data at the same time from the same respondents (i.e. managers), we have checked for potential common method variance (CMV). CMV was not a concern in this study.

Future research should also address 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). Finally, future studies may need to examine the effect of EMO on academic quality.

Disclosure statement
No potential conflict of interest was reported by the authors.

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Appendix. Scale items

Perceived higher education country image (PHECI)

- High tuition fees
- High quality of courses
- High quality of teaching staff
- A positive view of graduates from employers
- High employment rate for graduates
- Highly recognised degrees worldwide

University attitude towards government funding (UAGF)

- We are receiving considerable amount of funding for scholarships from the government.
- Government funding is a stable source of funding.
- Government funding is the type of funding we prefer to rely on.
- The share of public revenues is significant compared to other sources.

University export performance (UEP)

- Enrolment volume of international students
- University market share of international students relative to other UK universities
- Level of international students' satisfaction
- Revenues from international students as a percentage of university's total revenues
- Number of international students recruited as a result of our alumni
- Managers' target related to the enrolment volume of international students

University international reputation (UIR)

- Our university has a good reputation worldwide.
- In general, I believe that our university always fulfils the promises it makes to its international students.
- I believe that the reputation of our university is internationally better than many other universities.
- The university offers a worldwide reputable degree.
- The university has a strong brand name internationally.

Export coordination (COOR)

- Key players from other departments (e.g., different schools/faculties) in our university are supportive of the international office activities.
- Departments in our university work together as a team in relation to our foreign business.
- The head of the international office has a very strong working relationship with all the deans/heads of faculties/schools in the university.
- All faculties/schools and departments in our university are brought to the international strategy of the university.
- Personnel from the international office share resources with other departments in our university.
- We resolve issues and conflicts through communication and group problem-solving.

Export market information generation (IGen)

- We regularly run focus groups with current international students in order to learn how to serve them better.

- In this department, we do a lot of secondary market research concerning trends (e.g., competitors, regulation, political, economic, technological developments) in our foreign markets.
- We generate enough relevant information concerning our competitors' activities in our foreign markets.
- We periodically review the likely effect of changes in our foreign business environment (e.g., technology, regulation).
- We analyse our own data through the university main database, to observe the trends of courses that international students are interested in.

Export market information dissemination (IDiss)

- Our international office liaises with our university departments so that they have enough understanding of their key markets.
- We have regular formal meetings with our university schools/faculties to discuss foreign markets trends and developments.
- We use the intranet portal of the university webpage 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 communication.
- 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.
- Personnel from the international office frequently discuss competitors' activities with personnel from other departments of the university.

Responsiveness to export market information (Resp)

- We have good support for international students (e.g., accommodation, obtaining visas, orientation, and airport pickups) in order to make their experience better.
- The information we give out to international students is accurate, clear and understandable.
- We are quick to respond to important changes taking place in the global environment within which our university operates (e.g., regulatory, technology, economy).
- We rapidly respond to competitive actions that threaten us in our export markets.
- We periodically review our courses development to ensure that the courses are in line with what international students want.