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# Market Orientation: the Impact of Mascomex on the Internationalization of the Galician Economy

## 1. University education and labour market

In recent decades, education has undergone constant changes in all countries. These changes clearly indicate a general tendency towards adapting the educational system at all levels to meet the demands of the labor market. In turn, this reflects the view that the level of acquired education should primarily prepare individuals for their professional career, and, therefore, should satisfy company demands in the areas of knowledge, competencies and skills in order to fulfill their aim of improving well-being of society as a whole.

This tendency is especially intense at university level, since declining birth rates in almost all countries have reduced the number of students requiring higher education. The aforementioned together with an increase in the number of universities and other higher education institutions in recent decades, has generated growing competition to enroll students, who increasingly strive to improve their employability. Universities are aware of the fact that the majority of students seek a university degree as a way of becoming qualified to carry out a professional occupation.

This orientation in educational institutions is also fostered by the need to maximize the return on the enormous amount of financial resources received from governments each year. This is particularly true in the case of higher education institutions, as the financial resources required by universities are greater than those set aside for other levels of education. Therefore there is greater pressure to demonstrate that they maintain high levels of quality and efficiency, especially at universities depending primarily on public funds.

These tendencies are particularly evident in the Spanish university system. Over the last two decades the intensity of competition has become very pronounced. Our country has one of the lowest birthrates in the world, while at the same time it has experienced a great increase in the number of universities constituting its educational offer. Simultaneously, there has been deterioration in economic conditions. The Spanish economy is at the top of world rankings in terms of public and private debt, trade and budget deficit, unemployment and economic stagnation. This has brought about an increasing tendency to reduce spending among individuals and government institutions. Most Spanish universities are public, so they have been especially affected by cutbacks in public spending, to the point of experiencing salary reductions for professors and other employees. Meanwhile, private companies, the government and society at large are demanding improvements in educational quality to promote national competitiveness.

The change from the old elite university model to the new mass university model, together with the increased competition previously mentioned, and the deterioration of the economic environment is putting pressure on universities to become competitive. It is for this reason that a growing proportion of the university community coincide with almost all experts in higher education regarding the need for universities to incorporate marketing and a market orientation into their philosophy and management models, as do many business organizations, public administrations, and non-profit organizations.

## 2. Market orientation in universities: the Spanish case

The essence of marketing is to focus on the customer and all business activity should revolve around this principle. A market orientation promotes the understanding and management of information regarding customers, competitors and environmental forces so that it can be collectively handled within the organization to create and maintain an offer that generates greater value (Varela and Calvo, 1998). Thus, the ultimate aim of a market oriented organization is to react to the needs that continually develop in the marketplace and to anticipate them with an offer that is more satisfactory to consumers than that of the competition.

The market orientation approach can be addressed from two perspectives: a cultural and an operational perspective. According to the former, market orientation

can be described as an organizational culture in which clients and competitors are the behavioral axis of the company's behavior. This means that the concept represents a set of values and attitudes shared by the entire organization, which aim to stimulate the creation of value for customers (Webster, 1998). On the other hand, the operational perspective involves the establishment of behaviors and tasks to be executed in order to generate said value; that is to put the organizational culture into practice. Three types of activities characterize an organization that is market oriented: the generation of market intelligence at all levels of the organization regarding the current and future needs of consumers, as well as the behavior of competitors, and the evolution of business environment forces; the dissemination of this information to all areas of the company; and the development of a suitable organizational response (Kohli and Jaworski, 1990). The deepest demonstration of a market orientation occurs at the cultural level, where over time, as new events occur in the organization, there is a strengthening of organizational processes that build the conviction among employees that customers and learning about the market are significant (Hurley and Hult, 1998).

In accordance with the above, it could be said that a market oriented organization is an organization oriented toward learning, which strengthens its market oriented beliefs and behaviors through the very principles of organizational learning (Jawoski and Kohli, 1996). We should recognize that the importance of learning is such that some authors have concluded that it is the only source of sustainable competitive advantage (Day, 1994). Thus, effective adoption of a market orientation is considered to mean essentially the development and maintenance of a competitive advantage that can to superior results. It has been clearly demonstrated that organizations with a stronger market orientation have a greater capacity to identify changes in demand, anticipate opportunities, and respond to competition; thereby obtaining better results (Narver and Slater, 1990).

Accordingly, market orientation can be considered a key organizational resource for attaining and maintaining competitive advantage. It is a resource that can be utilized by companies as well as other types of organizations, like universities, to improve performance. In line with this, there are a number of studies that confirm that the incorporation of a market orientation by universities contributes to improving their competitiveness and subsequent results (Cann and George, 2003; Caruana *et al.*, 1998; Qureshi, 1993).

The introduction of a market orientation gives universities important instruments for improving the quality of their teaching and research, and fosters innovation in their curricula as well as in all services they provide by better adapting to the needs of their multiple customers and society as a whole. Nevertheless, the introduction of a market orientation in universities is not without difficulty, since we must keep in mind that universities, especially public universities, are substantially different from other types of organization. Universities do not have the same ends, neither the same power structure, nor the same characteristics as companies. In general, we could say that they are more complex organizations than companies.

The first difficulty arises when trying to establish the university's mission. There is no doubt that the fundamental service universities provide to society stems from their teaching work, through which knowledge is transmitted to new generations. In addition, universities should try to expand and improve this knowledge through intensive research work. In this area, each university should specify which are its particular ends, and adapt them to the needs and requirements of the particular society which it serves, taking into account the resources and skills that it possesses as a result of its historical development (research tradition, organizational culture, human and material resources, etc...). The university must go beyond its charter and statutes to incorporate these considerations into objectives, decisions and concrete actions, as for example, by developing study plans and criteria for hiring teaching staff. Thus, it can better differentiate itself from other organizations with which it competes, while being more efficient in its social duties. However, this is not a simple task, since it is necessary to clarify priorities in the event of a conflict between research and teaching, Furthermore, within teaching, it is necessary to establish whether this should focus on the general fields of knowledge or rather be geared towards specific and specialized aspects of training for professional practice. Space in the educational model must also be allotted for the values that characterize the university spirit (i.e., search for knowledge, a critical spirit, openness of mind, respect for diversity, study habits, dedication, social sensitivity and solidarity).

Another significant difficulty emerges when it comes to specifying who "the customer" is. Bearing in mind that the university is not an end in itself, but rather a means of improving the society which it serves and which is made up of multiple institutions. It becomes necessary to distinguish between the students that receive university services and contribute the time and effort required to assimilate knowledge; the students' families, who usually choose the school and pay the expenses; the companies and institutions that give practical value to the knowledge acquired by offering jobs to graduates in addition to collaborating with the university in a variety of ways; and, of course, the public authorities which, in the case of Spanish public universities, contribute most of the necessary financial resources. In addition to these "external customers", we must also add the "internal customers", because like any organization offering services to the market, the quality of university services will basically be determined by the attitudes and skills of the people providing them; in the case of universities, these include teaching staff, research staff and administrative staff. Simultaneously addressing the needs and interests of such a diverse audience is undoubtedly one of the main challenges when trying to incorporate a market orientation in universities.

However, the most important obstacle could well be trying to change the university's organizational culture in a way that integrates all the people that are part of the organization (teachers and non-teaching staff), and having them accept and incorporate the market orientation into their mental framework and their working style. In this sense, Spanish public universities are faced with an additional difficulty, since

their governing bodies are made up of teachers elected by the teaching, research, and service staff as well as students. The result of this government system is that objectives, decisions and actions taken by the university usually aim to satisfy the interests of internal customers, and tend to neglect the needs of students, families, companies and government institutions. Undoubtedly, effective incorporation of the market orientation into Spanish universities will require significant reform in its system of government as well as its culture and organizational structure in order to achieve greater flexibility, decentralization and professionalization of its management. In that way can, like any organization that aspires to being effective and providing quality services in an increasingly dynamic and changing environment, become closer to external customers and better adapt to their needs[1].

In this sense, we should point out that Spanish universities have made a significant effort in recent years to incorporate a market orientation into their management by expanding the advisory and supervisory role of the Social Council, which represents the society served by the university. Nevertheless, it is still far from becoming a genuine driving force of university dynamics, which would mean advising and making decisions on major strategies to guide university policy. In addition, though more tentatively, an attempt has been made to enhance the role of the General Manager, a professional manager who coordinates the activities and services provided by the university. However for the moment this role is still limited to the administrative apparatus, with little involvement in the organization of teaching, i.e. with hardly any influence on the most important and basic service provided by the university.

With the launch of the European Higher Education Area (Bologna Process), Spanish universities have tried to modernize and bring their teaching closer to the market. The most significant change of this reform has been that former engineering degrees and five-year bachelor's degrees have been transformed into four years of undergraduate and one or two years of Postgraduate or Master's Degrees. These new official postgraduate programs or simply official master's degrees have been added to the selection of master previously offered by Spanish universities since the 1980's (university own master's) [2]. However, the two are quite different, particularly in terms of their market orientation.

On the one hand, there is a considerable difference in the student profile to which each is targeted. Students in official master's courses are mostly recent graduates who wish to supplement their bachelor's degree and usually do so on a full-time basis with a class schedule that is not compatible with a job. On the other hand, the university-

[1] It is surprising that in the 21st century many purely technical and professional decisions are made by assembly of the university community or that the head administrators of the institution are democratically elected from among the members of a certain academic level. It does not seem that the skills to be a good manager are directly related to being a good professor or researcher in a very particular area of scientific knowledge, it is not even exclusively related to political leadership within the organization itself.

[2] "Official" refers to programs run by the Spanish Education Ministry and are statewide, while "university-own" refers to programs organized by individual universities.

own master's are mainly targeted at engineers or graduates with work experience who wish to complete their training for professional advancement, and classes are often held so as to be compatible with working hours. However, the most significant difference between the two types of master's is in the teaching staff, which in turn affects program orientation and methodology. While teachers in official programs are almost all from the university and have a strictly academic background, in the university-own master's nearly 70% of teachers are from the professional world and have broad and accredited experience. Thus, the official master's are more academic while the others are professionally oriented. The fact that teachers in the university-own master's are from outside the academic world and are involved in professional activity, both the orientation of these programs and their methodology bears closer relation to the labor market and employment practice.

These differences tend to become accentuated by the evolution of public universities in Spain, as the situation that has been produced makes it virtually impossible for university professors in Spain to have professional experience. The enactment of the Incompatibilities Law at the beginning of the 1980's was a turning point in the profile of Spanish university professors. Until that time, the prestige and qualifications that many professors contributed to their university stemmed form teaching quality as well as professional reputation and know-how. However, after this law was passed, many teachers who had been combining both activities had to choose and often ended up leaving the university. In addition, successive reforms of the Spanish university system were introduced, culminating in the University Regulation Law (LOU — *Ley de Ordenación Universitaria*). This lead to the establishment of a system of teacher selection and promotion where professional practice is considered to be irrelevant, and where the typical profile of the university is that of a young person who has completed their degree with a PhD, and subsequently devoted themselves exclusively to teaching and researching, but who lacks practical professional experience. It could be said that today's university professor is born, grows up, develops and retires inside the university (Pavón 2010). Thus, the current university system based on a system of incompatibilities, requiring exclusive dedication to the university, and an academic qualification criterion that almost exclusively takes into account publications in scientific journals, has led Spanish universities to a gradual distancing from the reality and needs of the professional world.

To a great extent, these difficulties explain why the majority of Spanish universities have not yet adopted the market orientation in either their organizational culture or their management processes. The feeble signs of wishing to apply marketing to management are limited to certain communication techniques for improving their corporate image in order to attract more students, or carrying out student surveys to evaluate teachers and determine the level of satisfaction with the subjects they are studying. However, applying the market orientation to the university involves much more. It involves studying and systematically investigating the environment, student demand, company requirements, professor satisfaction, alumni assessment of their

university experience, as well as keeping in mind how companies assess the graduates they hire. All of this should result in periodic updating of the educational offer, teaching methodologies, research activities, as well as the services provided (grants, housing, etc...) and communication activities in order to adapt to the ever more abrupt changes taking place in society, thereby attracting the best teachers and students, as well as corporate and institutional collaborations.

## 3. Master in foreign trade management

In 1986 Spain joined the European Economic Community (EEC) and in January 1992 the European Common Market began to operate, causing great concern among Spanish companies and institutions regarding the need to prepare themselves to face the new situation. This concern was felt even more strongly in Galicia[3], which was then one of the most economically backward Spanish territories with the least international development. It is in this context that the Master in Foreign Trade Management (MASCOMEX-*Master en Dirección y Gestión de Comercio Exterior*) was created. It is a university-own master, launched in the 1991–1992 academic year when the Government of Galicia, responding to the need expressed by Galician companies for qualified personnel, sought to collaborate with the University of Santiago de Compostela (USC) in the creation of a postgraduate course to trainning managers and technicians specialized in international trade. Given the total lack of specialized training that existed in Galicia, the hope was to foster the development and international expansion of Galician companies in foreign markets.

Management of the course was entrusted to Mr. José Carlos de Miguel Dominguez, a university academic with extensive experience and Dean of the Faculty of Business and Economics Sciences, and Mr. Miguel Angel Otero Simon, a young professor of Foreign Trade, who had only two years of teaching experience at the university, but had been a manager for 6 years at several companies, some with an international presence. Together with Mr. Francisco García-Bobadilla, Director General of Commerce for the Galician Government, they designed a training program tailored to the needs identified in Galician companies at that time.

The development of MASCOMEX has undergone two distinct stages. An initial stage, spanning the first five years, which was exclusively aimed at managers and trade professionals who needed to update and improve their skills. This first stage, which included a total of 116 graduate students, made it possible to retrain a large number of managers and technicians from Galician exporting firms. Although they had vast

[3] Galicia is one of the 17 autonomous communities that make up the Spanish state. In recent years it has stood out as one of the most dynamic communities in terms of exports, giving rise to prominent multinational companies such as: INDITEX, ADOLFO DOMINGUEZ, PESCANOVA, COREN, FINSA, TELEVES, and BLUSENS.

experience in foreign trade, these participants lacked technical expertise in this area. To make the course compatible with their professional activity, it was designed in a "part-time" format consisting of 320 classroom hours held on Thursday and Friday afternoons. This experience and continuous interaction with this type of students brought the university significantly closer to the real needs of Galician companies and trade professionals, making it possible to continually adapt the curriculum and make it more practical and useful for professionals.

This experience led to a second stage in the evolution of the master which had a more ambitious goal: transformation into a full-time course. This decision was justified by the fact that a large number of managers and professionals active in Galician exporting companies had already been retrained, and it was necessary to train new generations of specialists who would be able to take over the work of their predecessors with a greater level of skill and more advanced management technology in order to boost the international activity of the Galician companies. The new "full-time" design would require complete dedication with daily classes from Monday to Friday, and was aimed at a different student profile, usually with less work experience but with a strong academic background, knowledge of languages and a clear international vocation.

Starting in the academic year 1996–1997, the number of class hours was extended to 700, allowing us to delve deeper into all areas of foreign trade and provide more comprehensive training. It also meant a significant change in terms of content and methodology. In this sense, student's personal work was increased through the introduction of case studies and projects. New teaching methods were introduced, such as computer simulators that exposed students to decision making processes, internationalization projects for exporting companies supervised by external consultants and company managers, as well as internships in exporting companies upon completion of classroom work. In addition to completing the students' practical training, this methodology keeps us in close and permanent contact with collaborating companies.

In order to continue meeting the training needs of managers and professionals in a way that is compatible with their work responsibilities, the master's program has been structured in modules. Thus those who have a job can complete the program by taking the various modules at their convenience over a number of years. It is also possible to focus on one particular module of the master, thereby receiving shorter but fully specialized training in a particular area of interest. In this line, a new blended learning option will be launched in 2011 which combines on-line training tools with classroom instruction by experienced professionals, making it easy and comfortable to complete for working people.

It is worth noting that 75% of the master's teaching staffs are managers and professionals actives in the workforce, making it possible to provide training that is more practical and adapted to the constant changes in the international activity of Galician companies. Keeping in mind that its ultimate goal is to provide Galician companies

with the specialized personnel they need to expand internationally and given the international nature of the master, a third of its teachers are foreign and one third of student enrolments are reserved for foreign students.

MASCOMEX has been a pioneer in Galicia[4] and one of the first in Spain to offer specialized training in foreign trade and is now considered a reference in the field of international business training, not only in Galicia, but also in Spain and internationally. This is confirmed by the growing number of foreign applicants from increasingly diverse and distant countries. Furthermore, since the appearance in 2004 of the only comprehensive quality ranking of the master's programs in Spain published by "El Mundo" newspaper, MASCOMEX has been ranked 2nd for five consecutive editions. Finally, we would like to point out the excellent job placement record of our students among Galician companies. After completing their internship, more than 90% of our students have been hired by those same companies[5]. This is perhaps the clearest sign of the quality of the master and the clearest testimony of our service to Galician companies. By providing the personnel needed for international expansion, we contribute to Galicia's economic development. We are working to provide highly qualified personnel with all the skills for their professional development in the field of foreign trade and international business, and to provide them with training that is adapted to the needs, idiosyncrasies, and peculiarities of Galician companies.

## 4. Analysis of the impact of Mascomex on the internationalization of the Gallecian economy

There are currently no doubts to the crucial role played by foreign trade and globalization in growth, profitability and business survival. Consequently, it is also vital for economic development and welfare of countries. Many studies have examined the factors that determine export success both from a business perspective and national economy perspective. Regardless of their scope, the conclusions of these studies coincide insofar as the determinants of export capacity, finding that export capacity can be generated by offering products that are more competitive in terms of price and/or more differentiated in terms of performance, functions or usefulness to the consumer.

[4] Despite there being three universities in Galicia, the University of Santiago de Compostela was the only one to offer specialized training in foreign trade up to the year 2008, when the University of Vigo launched an official master with a similar name. Its methodology is considerably different from MASCOMEX. Being an official postgraduate program's or official masters, it functions quite differently from a university-own master's program. All aspects of how it works differ significantly: the criteria for selecting students, teacher profile, work methodology, evaluation criteria, etc…

[5] This is a particularly difficult goal in Spain, which is at the top of world unemployment rankings. This is especially true when it comes to university graduates under 30 years of age, whose unemployment rates have risen from 25% in the economic "boom" years to 40% during the current economic crisis.

At an aggregate level, the economic literature has highlighted the fact that a nation's export capacity is conditioned by supply and demand factors. External demand depends on the income of foreign consumers, thus, as it increases so does demand for domestic and imported products, in turn leading to export growth of their suppliers and vice versa[6]. In addition to income, other factors such as geographical distance, cultural affinity, or the existence of liberalization agreements may also affect external demand[7]. However, in an increasingly competitive environment, a country's ability to take advantage of developments in external demand will depend primarily on the characteristics of its supply, i.e. its competitiveness, understood as the ability of a country to create, produce and distribute products and services in the international market. For this reason, an increasing number of studies have incorporated the influence of supply factors in the determination of export flows (Gagnon, 2007).

Among these factors the relative price of exports with respect to substitute products from the rest of the world is to be highlighted (Obstfeld, 2002). Overall, these prices are determined by the cost/price evolution of exported products (usually measured by the consumer price index) and the nominal exchange rate of the exporting country. Thus, increases in production costs or rising exchange rates would increase the relative price of exports, making them less attractive in international markets. In the literature, the net gain of a country in terms of relative prices is usually called export "price competitiveness".

Another group of supply factors have to do with the ability to positively differentiate export products in international markets through innovation (Bernard, A. and Jensen 2004). The way to achieve this differentiation is usually related to the technological effort made by domestic firms to improve their production processes and the products they sell internationally. This is normally reflected by the level of expenditure on R&D. In the literature, this is usually called "structural competitiveness."

Finally, direct investment is also included among the determinants of export capacity, whether it be inbound or sent abroad (Head and Ries, 2001). The foreign direct investment received is often a stimulus to exports, because the aim of multinationals that undertake these investments is often to set up a platform for exporting to third countries. Thus, the foreign investment received acts as an export generator. A similar situation may occur when a domestic firm makes direct commercial investments abroad to enhance its presence in that market, or when some phases of production are relocated to lower cost countries with the hopes of improving production efficiency. Indeed, export potential is enhanced in both cases. In the case of developed countries, direct investment, whether received or sent abroad, can be expected to contribute to improving exports of differentiated products. It is to be expected that activities generating greater added value and contributing most to product differentiation through attributes like image, branding, design, and features will be located in these countries.

[6] Pioneering research on these factors has been done by Balassa (1979).

[7] The analysis of these variables has led to so-called gravity models of trade (Anderson 1979).

Empirical studies on the behavior of Spanish exports have confirmed and clarified the impact of these factors. These include the research by Gracia (2000) and Gordo *et al. (*2008), focusing mainly on the study of the components of demand for Spanish exports; the work by Donoso and Martín (2007) analyzing income elasticity and price elasticity for Spanish exports; the work by Bass and Montero (1999) as well as Duran *et al.* (2007) investigating the effect of foreign direct investment on Spanish exports; and the research by Cassiman *et al.* (2010) which looks at the effect of innovation on Spanish exports. However, neither the domestic nor the international economic literature has analyzed the impact of specialized foreign trade training on a country's exports.

The influence of human capital on economic and business performance has repeatedly been demonstrated in the literature. Human capital is one of the factors that has been attributed the capacity of generating higher income and sustainable competitive advantages at the company level (Lado and Wilson, 1994, Becker and Gerhart, 1996, Wilcox and Zeithaml 2001; Hitt *et al.,* 2001), and, therefore, is a determinant of national competitive advantage (Porter, 1991). Numerous empirical studies confirm the importance of this factor in companies export activity (Aaby and Slater, 1989; Reid, 1981; Samiee *et al.*, 1993, Cavusgil and Zou, 1994, Leonidou, *et al.*, 1998). Among the personal characteristics of managers that affect a company's international activity, training has been cited by several studies as being a determiner of the likelihood of exporting (Simpson and Kujawa, 1974, Daniels and Goyburo, 1976, Garnier, 1982; Dichtl *et al.*, 1990)[8].

We empirically analyze how the development of a specific resource, human capital with specialized foreign trade training, in other words, graduates from the Master in Foreign Trade Management, may partly explain growth of Galician exports[9]. We clearly demonstrate how the market orientation implemented in this training program has been able to provide a satisfactory response to the calls from Galician companies and government for managers and technicians with adequate training to contribute to international expansion.

Here we present a proposed model stemming from the theoretical considerations described in the previous sections (Figure 1). It is a structural equation model with which we aim to compare the possible causal relationship between Galician exports (explained variable) and measures of price competitiveness, differentiation and human capital (explanatory variables). Below we briefly described the latter variables:

[8] Noteworthy is the study by Dichtl, Koglmayr and Mueller (1990) which analyzed a sample of exporting and non-exporting German companies and found that a considerable number of potential, but yet not active, exporters had similar characteristics to exporting firms except for manager characteristics; reaching the conclusion that manager characteristics may act as inhibitors to exports.

[9] Initially, stock of human capital with economic and business knowledge as measured by the aggregate of Economics and Business Administration graduates from the 3 Galician universities (Santiago, Vigo y Coruña) was also included as an independent variable. However, this variable was later discarded from the model as it did not turn out to be significant.

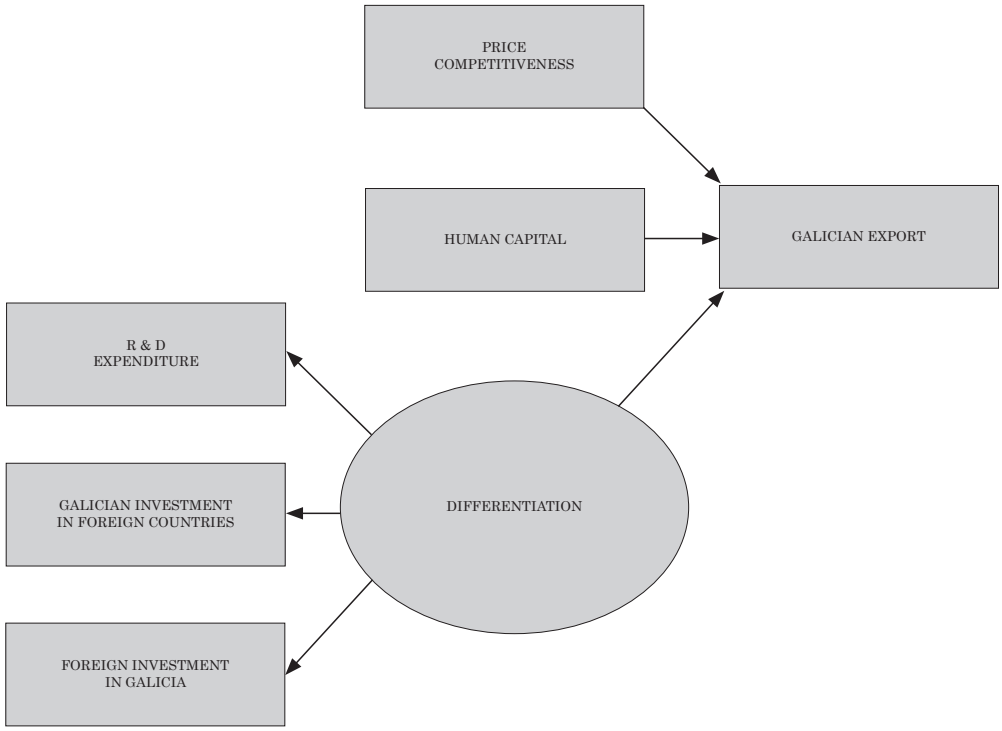


Figure 1. Proposed Model.

*The Price Competitiveness variable* is measured by the competitiveness tendency index, an indicator compiled by the State Secretariat for Commerce, which analyses how prices and costs in the Spanish economy evolve in comparison to the group of OECD countries, which are Spain's main trading partners. It is derived from a relative price index (which reflects inflation) and an exchange rate index. In accordance with the methodology with which it is built, an increase in value reflects an appreciation of relative price of Spanish exports, which means less competitiveness for the Spanish economy with respect to the other countries included in the index[10]. Thus, we would expect a negative relation between this index and exports.

The *Differentiation variable* is constructed as a factor consisting of the following indicators: annual expenditure in R&D in Galicia, annual Galician investment abroad and annual foreign investment in Galicia[11]. A positive relationship is to be expected between each of these elements and the overall variable, as well as between the variable and exports.

The *Human Capital variable* is constructed via the stock of human capital with expertise in foreign trade as measured by the aggregate of graduates with a degree in

[10] The methodology for its elaboration can be found in the Ministry of Industry, Tourism and Commerce (2010).

[11] Like exports, measured in constant (1992) thousands of Euros.

Foreign Trade Management from the University of Santiago de Compostela. A positive relationship is also expected between this variable and exports.

All available data are annual and correspond to the period 1992–2008 (seventeen years)[12]. The statistical calculations have been made with SPSS and AMOS software packages.

Table 1 shows the results of testing the model by means of covariance structure analysis[13].

Table 1. Standardized factor loadings, regression weights and fit measures of the proposed model

| Relation | Factor loadings | Regression weights |
|---|---|---|
| R&D expenditure ← differentiation<br>Galician investment in foreign countries ← differentiation<br>Foreign investment in Galicia ← differentiation | 0.996[a]<br>0.811[a]<br>0.202 | |
| Competitiveness → exports<br>Differentiation→ exports<br>Human capital → exports | | –0.109[b]<br>1.005[a]<br>1.000[a] |
| [a] *Statistically significant at the 0.01 level.* [b] *Statistically significant at the 0.05 level.* | | |
| **Model fit:**<br>Chi-square (degrees of freedom) = 5.486 (7), p-value = 0.601.<br>CFI = 1. TLI = 1.038. RMSEA = 0. Normed chi-square = 0.784. | | |

Firstly, we would like to point out that the model presents a good level of fit. The chi-square test has a p-value of 0.601, well above the 0.05 usually taken as a reference for acceptable level of fit. Likewise, the Comparative Fit Index (CFI), that reaches its maximum value (Bentler, 1990), the non-normed Tucker-Lewis Index (TLI), with a value of nearly 1 (Hair *et al.*, 1999), the Root Mean Squared Error of Approximation (RMSEA), with its minimum value (Browne and Cudeck, 1993), and the Normed chi-square parsimony measure, with a value of less than 2 (Kline, 2010), all reflect a very good level of fit.

Table 1 also shows the results of the causal analysis. The three independent variables present regression weights that are significantly different from zero and have the signs expected according to economic rationale. Although the price competitiveness index is clearly the variable which least explains out of the three, it can be concluded that all of the variables seem to contribute to explaining the level of Galician exports.

Notwithstanding the above, it is important to pay attention to the *differentiation* factor. The three indicators that were thought to compose it present positive factorial loads, as seemed reasonable, but it was not statistically significant for one of them, *foreign investment in Galicia*. This may be due to the presence of extreme values in the series, reflecting the irregularity of foreign investment in the region. However, the measures of composite reliability (0.755) and average extracted variance (0.563) of

[12] All the data are available in the web of Ministry of Industry, Tourism and Commerce: http://www.mcx.es/

[13] A multivariable analysis technique popularized by Jöreskog (1970), Bagozzi (1977) y Bentler (1980), among others.

the factor, exceed the recommended values of 0.7 and 0.5, respectively (Hair *et al.*, 1999), thus indicating internal consistency among the constituent indicators.

We could try eliminating the *foreign investment in Galicia* indicator to benefit the parsimony of the model and observe the resulting findings. They do not differ from the previous ones in terms of factor loadings, regression weights and t-values, and only differ in terms of the indexes for the model's goodness of fit and reliability (0.903) and extracted variance (0.824) of the *differentiation* construct, which turn out to be even better and provide firmer support for acceptance of the proposed model (see table 2):

Table 2: Standardized factor loadings, regression weights and fit measures of the adjusted model

| Relation | Factor loadings | Regression weights |
|---|---|---|
| R&D expenditure ← differentiation<br>Galician investment in foreign countries ← differentiation | 0.996[a]<br>0.811[a] | |
| Competitiveness → exports<br>Differentiation → exports<br>Human capital → exports | | –0.109[b]<br>1.005[a]<br>1.000[a] |
| [a] Statistically significant at the 0.01 level. [b] Statistically significant at the 0.05 level. | | |
| **Model fit:**<br>Chi-square (degrees of freedom) = 0.741 (3), p-value = 0.864.<br>CFI = 1. TLI = 1.094. RMSEA = 0. Normed chi-square = 0.247. | | |

## Conclusions

Market orientation has become a key feature for any organization to achieve and maintain their competitive advantage. The Master in Foreign Trade Management (MASCOMEX) has sought to implement this approach from the outset. This is not a training proposal arising from the university itself in an effort to market to students the knowledge and resources it already possesses, but rather, since its inception is has tried to adapt its offer to the demands expressed by companies for appropriate training resources. In this way, priority has been given to the needs of the employer, rather than the student, based on the awareness that, in the end, what students most desire is training that will help them join the labor market under optimal conditions. In order to provide a truly practical learning experience, companies themselves together with students are included in the process through their participation in the design of the training programs, as well as the implementation of internationalization projects and internships in international departments. Furthermore, company managers contribute their knowledge and experience by being included as members of the teaching staff.

Throughout its development, this approach has been refined to such an extent so as to significantly contribute to the expansion of Galician exports, provide successful job placement for all graduates, and become one of the highest ranked programs in Spanish higher education. The empirical analysis of the determining factors of Galician

exports confirms the positive and statistically significant impact between the growth in the number of graduates in this Master and the growth of Galician exports.


## Abstract

The university is not an end in itself, but rather a means of improving the society which it serves. A society is made up of multiple institutions, which must to distinguish between students, their families, the businesses that employ them, and of course, the public authorities which, in the case of Spanish public universities, contribute most of the funds necessary for the university's financial resources. Trying to satisfy the needs and interests of such a diverse audience is undoubtedly one of the main challenges when trying to introduce a market orientation in universities.

There are currently no doubts as to the crucial role played by foreign trade and globalization in growth, profitability and business survival. Consequently, it is also vital for economic development and the welfare of countries. The Master in Foreign Trade Management (MASCOMEX-Master en Dirección y Gestión de Comercio Exterior) of the University of Santiago de Compostela (USC) arose with the objective of trainning managers and technicians to be specialized in international trade in order to foster the development and international expansion of Galician companies in foreign markets. After 20 years of successfully achieving this objective, it is a good example of how market orientation gives universities important instruments for improving the quality of teaching and research, and fostering innovation in curricula and all services provided. This is achieved by better adapting the educational programmes to the needs of their multiple customers and society whole. The empirical analysis of the determining factors of Galician exports confirms the positive and statistically significant impact between the growths in the number of graduates in this master and the growth in Galician exports.



## Keywords

Market orientation of the University, Master in Foreign Trade Mangement, MASCOMEX, Spanish Universities, internationalization of the Galician economy, University of Santiago de Compostella.

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