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OFFSHORING IN SPANISH MANUFACTURING FIRMS: A CASE STUDY

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Abstract

This paper aims to analyse whether Spanish manufacturing firms are changing their decisions on the organisation and location of the activities in their value chains by starting to transfer them to foreign countries. To do so, qualitative research was carried out using case study methodology to analyse the offshoring experience of Spanish manufacturing firms. A study was made of the activities that these firms outsource to foreign suppliers (offshore outsourcing) and/or that they have decided to relocate to other countries while maintaining ownership (captive offshoring). The conclusions indicate that the firms analysed transfer some of their activities to foreign countries, mainly through offshore outsourcing. They choose countries in which they obtain not only lower costs but also access to new markets and relevant resources.

JEL classification: M16; F23

Keywords: captive captive offshoring, offshore outsourcing, Spain, case study

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1. INTRODUCTION

Today firms compete globally. This globalisation, together with the dynamic nature of today's markets, fast technological change (especially in communications) and increasing competition from new international players, particularly from emerging countries with lower income and wage levels, are creating a turbulent environment which is placing great pressure on economic agents.

Firms are introducing changes in the organisation and location of their activities in response to this pressure rather than as a differentiating strategy. On the one hand, a more global world provides them with opportunities to address a larger number of markets, and to gain access to a large number of raw material and component suppliers. On the other, the constant technological revolution is breaking down the barriers associated with physical, cultural and/or time differences (Kedia and Mukherjee, 2008). These two circumstances allow firms to fragment their functions and transfer them to foreign countries that have started opening up their markets and that have unique resources and capabilities. This phenomenon of using resources that lie in foreign countries is commonly known as offshoring.

In today's new situation, firms have to decide how to combine the resources and capabilities they have with those available abroad. Since a firm's competitive edge is not based on its actual products but rather on its capabilities for carrying out certain functions, that is, on what it can do well as a result of interaction among a set of resources (Grant, 1991), firms choose to specialise in their core activities, assigning any others to more efficient firms, many of which are located in other countries. Fernández (2007) states that firms adopt global strategies to obtain competitive advantages from carrying out the different activities of the value chain simultaneously in several

countries. Such activities may be carried out by independent firms with which they have agreements for collaboration or by the firm's own subsidiaries.

The trend towards this "modular approach" in business is leading to a world scenario of value chains that are fragmented into different specialised activities such as innovation, component design, industrial design, logistics, manufacturing, marketing and after-sales service. These may be carried out by different firms in different parts of the world, giving rise to international production networks. Market globalisation has led to globalisation of production and, as stated by Ghemawat (2008), the taking up of opportunities for cultural, administrative, geographic and economic arbitrage is a reason why firms expand production outside their national frontiers. Arbitrage implies exploiting the differences amongst countries instead of treating them as limitations that should be changed or overcome, and may lead to savings through international specialisation.

The purpose of this research is to analyse whether Spanish manufacturing firms are participating in this process of international production fragmentation and therefore changing the organisation and location of some of the activities in their value chains, transferring them to foreign countries. The aim is to identify, on the one hand, which activities are outsourced internationally instead of being carried out internally and, on the other, which activities are carried out internally but offshore. We also consider the reasons that lead firms to take such decisions and the results they obtain. The research design we use to achieve this goal is of a qualitative nature, using case study methodology to analyse the experience of four Spanish manufacturing firms. These firms are relatively small in size and some of them are family-run, so they are representative of the Spanish economy (which mostly comprises small and medium

enterprises). This marks a difference with previous studies which in general have focused on the analysis of large, multinational groups.

The remainder of the paper is structured as follows. After this introduction, section two defines offshoring and summarises the main reasons for firms to offshore their activities and the benefits they obtain from it. Section three describes the methodology adopted in the empirical research, based on case studies. We then present the findings of the study. Finally, the conclusions of the research are given.

2. OFFSHORING

2.1. Offshoring: Definition and different types

On the new world scenario, many firms are forced to take key decisions on the organisation and location of the activities in their value chain. Organisation refers to deciding which activities are to be carried out internally (in-house) and which sub-contracted to other independent firms (outsourced). Location refers to deciding where the activities are to be located, either within the headquarter country or abroad.

When we consider the transfer of activities to a different country, either to the firm's fully-owned foreign subsidiaries (captive offshoring) or to independent firms (international outsourcing or offshore outsourcing)[1] together (**Table 1**), this is the phenomenon known as offshoring.

[1] Although the above-mentioned distinction is used in this paper, offshoring can also be classified by distance rather than by ownership, in which case a distinction must be made between offshoring –if the chosen country is very far from the country of origin– and nearshoring –if the country is not far away.

Table 1. Organisation and location of value chain activities

	Where the activity is carried out	
Who carries out the activity	**In the country of origin**	**In a foreign country**
The firm	In-house location	Captive offshoring
An outside supplier	Domestic outsourcing	International outsourcing / Offshore outsourcing
		OFFSHORING

Source: Drawn up by the authors

According to this definition, the term offshoring should not be confused with outsourcing. Offshoring includes outsourcing, specifically international outsourcing, that is, the outsourcing of activities to firms in foreign countries. But it also covers the transfer of activities towards foreign countries so that they can be carried out internally without the firm giving up either ownership or control of them. This definition of offshoring is in line with that given by Grossman and Rossi-Hansberg (2006), and by Alonso (2007).

Whether or not a firm resorts to *offshore outsourcing* or *captive offshoring*[2] depends on the relative advantages it can expect from carrying out the activities internally rather than outsourcing them, in combination with the advantages of moving, in both cases, to a foreign country. In *offshore outsourcing*, firms clearly recognise the advantages of fragmenting the activities in the value chain - both the possibility of focusing their own efforts on key competencies and that of resorting to the larger capacities of specialist suppliers. In this type of offshoring, cost, quality and organisational learning benefits make up for the related transaction costs. But in *captive offshoring*, the advantages of

[2] Some authors, such as Jahns *et al*. (2006), consider an intermediate hybrid possibility – working in a foreign country through a joint venture. This study, however, focuses only on the extreme options – in-house location or international outsourcing.

fragmenting production are limited. When transaction costs (mainly opportunism), the possibility of loss of management control and risks associated with knowledge spillovers to external suppliers are too high, then firms prefer to retain activities in-house while reaping the benefits of the more extensive resources to be found in foreign countries. In these cases, the advantages of setting up firm-owned operations in foreign locations make up for any location-specific risk factors (Kedia and Mukherjee, 2008).

2.2. Reasons for offshoring

By combining the fragmentation of the production system with the opening-up of the international economy, firms can transfer part of their activities to foreign countries. The decision to transfer them by means of outsourcing or setting up fully-owned subsidiaries will depend on the following considerations.

Firstly, international outsourcing by subcontracting to independent suppliers is generally chosen to counter demand volatility, harsh competition from new global agents, institutional pressure and increased costs. With outsourcing, firms can transfer the burden of capital investments and the risks of over-production to third parties, save on labour costs by freeing themselves from processes that are labour-intensive, re-direct crucial resources to key areas, take advantage of other firms' larger and specialised capabilities, increase their organisational learning by sharing information and resources with other firms, make up for the firm's own shortcomings, gain access to new unique resources, gain in flexibility and improve manufacturing efficiency. When resources are neither scarce nor difficult to imitate and/or replace, great advantages can be obtained in cost, time and quality through outsourcing (Lankford and Parsa, 1999).

Obviously, the final decision on whether or not to outsource will depend on whether the advantages are greater than the costs and risks involving in setting up transactions with other firms. It is of interest to note that in many of the countries to which activities are

being outsourced, the legal systems are beginning to be aligned with western standards and to provide a degree of protection. This means that the costs of guaranteeing confidentiality are now becoming comparable to those in industrialised countries. So information and coordination costs are decreasing (Robinson and Kalakota, 2004), making such countries much more attractive, and the reduction of transaction costs is facilitating cross-border trade.

There are also a variety of reasons for transferring activities to foreign countries by setting up fully-owned subsidiaries. Firstly, many firms transfer production to other countries because the costs of labour – both technical and for services – are cheaper. Considering that labour costs are often a large proportion of a firm's operating costs, firms transfer their activities to this type of country in order to obtain large savings. Some firms are interested in gaining access to specialist labour which is scarce in their countries of origin (Lewin *et al.*, 2009). In these cases, the human capital advantages are not only in cost or capabilities but also in time. Having people in locations in different time zones means that work can be carried out non-stop, thus substantially increasing total productivity and speeding up work (Kedia and Mukherjee, 2008).

Although the low cost incentive is very important, this is not the only reason for transferring production to a foreign country. A frequent reason is the need to be in a specific country in order to sell there, either to access new markets in which consumers are beginning to have purchasing power or because large numbers of potential consumers will only materialise when jobs, regular wages and opportunities are available in the country (Berger, 2006). So potential locations for offshoring should not be seen only as interesting markets for suppliers but also as important sources of consumers in the future, offering a privileged market position which may become a competitive advantage (Jahns *et al.*, 2006). Also, working in the country to be served

makes it easier to understand local consumers' needs, tastes and trends, allowing firms to prepare themselves for the future market.

The type of product made might also be a reason for outsourcing to a different country (Berger, 2006). Locating production near markets is especially relevant in the following cases: products that must meet national specifications, products requiring tenders, perishable goods, fragile goods that might be damaged during transport to their final destination or market, and heavy or large-volume products.

In other cases, it may be fashion or emulation that prevails in the decision, with a firm deciding to invest outside its own country because it has seen other firms do so (Henisz and Delios, 2001). But a more usual reason is for firms to seek resources they cannot find in their own countries. Indeed, some studies point to asset-seeking motivation as a driver of internationalisation in general (Kogut and Chang, 1991; Shan and Song, 1997; Wesson, 1999). The lack of industrial land, capital, labour, capabilities, knowledge or any other resource may be resolved by international outsourcing. Offshoring may serve as a means for firms to enter countries by directly acquiring unique emerging resources, gaining more direct control over them. The first firms to move may gain a competitive advantage by taking up such potential.

2.3. Positive consequences of offshoring

Firm internationalisation by fragmenting the activities of the value chain in a coordinated fashion can bring many benefits. In addition to cost savings, it means that advantages can be gained from specialisation and specific locations. Firms can specialise in the activities that they are best at and focus on the competencies that set them apart. Limited, but valuable resources can be re-directed towards areas of the firm that generate value for consumers, in which they have a competitive advantage. Also and in line with the arguments of the eclectic paradigm of Dunning (1977), firms can

locate operations wherever they find the most appropriate conditions. They can find the best location for each of the phases of their value chain, in places where costs will be comparatively lower, provided that the environment is appropriate (transport and communication infrastructure, political and economic stability, access to international markets, etc.). By transferring to a different country the parts of the production process that are less efficient and concentrating on the most productive phases of production, productivity can be raised (Gandoy and Díaz, 2007).

Moreover, dealing with distribution in a strategic way and coordinating the activities of the value chain globally can increase flexibility and learning, which are essential in an increasingly dynamic environment. Fragmentation provides organisational flexibility allowing firms to be more receptive and to respond faster to unexpected opportunities or threats in the environment. Offshoring enables firms to improve their knowledge of technologies and sectors, to gain access to better processes or improved efficiency, to obtain greater knowledge, skills and experience and to generate organisational learning, all of which lead to innovative, fast, specialised, integrated solutions.

Another advantage is that, by producing for several brands, suppliers can attain the efficient minimum size more easily and, where possible, take advantage of economies of scale. At the same time, brand owners can reduce the amount invested in new facilities and the risk involved.

International fragmentation also promotes innovation and quality improvement initiatives by allowing firms that participate in global networks to mobilise and exploit internationally-disseminated knowledge. In outsourcing, a firm's product development capabilities may be complemented by the production innovation capability of their distant partners. It also obliges firms to develop capability for transferring R&D among foreign partners, thus avoiding the loss of innovation capacity. In offshore location,

ownership can be a method for not allowing ideas to spill over to third parties (Kotabe, 1990).

When innovation, design, manufacturing and distribution are separated, fast launching becomes possible with a relatively small investment. Fragmentation brings in new agents and allows products to reach the market faster than ever before (Berger, 2006). This reduced product development time increases the capacity for meeting customer requirements and improves timing.

3. RESEARCH METHODOLOGY AND DESIGN

As stated above, the main purpose of this research was to analyse and reach conclusions on the experience of Spanish firms in offshoring. The analysis focused on determining the following:

- Which activities, of all those involved in the firm's value chain, were outsourced to foreign suppliers and which were transferred to other countries through fully-owned subsidiaries
- The main reasons for firms to take such decisions
- In what way has the firm benefited from offshoring of either type

The case study research methodology was used as it allows study of a phenomenon in its context, using different sources of information and analysing a large number of variables. This methodology is appropriate for the first stages of research (Eisenhardt, 1989), when the aim is to study unusual phenomena on which there is no consolidated theoretical basis or when causal explanations are sought (Yin, 1989).

The study was carried out in four Spanish firms having a strong international projection, all of which were known to have transferred one or more of their activities to foreign countries.

The field work was carried out from March to July 2009. Semi-structured interviews were held with the owners, managers and workers in the headquarters of each firms. All the researchers participated in all the interviews.

To complement the information gained from the interviews, the press was used and the respective corporate websites were consulted. Once the report on the experience of each firm had been drawn up, the document was sent to the interviewees so that they could check that it was accurate and reflected the situation described during the visits and make any amendments they considered appropriate. The information obtained is presented below.

4. CASE STUDY RESULTS

This section presents the main results of the empirical research. Firstly, the organisation of the value chain of the firms involved is described, stressing the activities that have been transferred to foreign countries, either by outsourcing them to other firms or by setting up fully-owned foreign subsidiaries, and the reasons why they had taken this step. Secondly, a comparative analysis is made.

4.1. Offshoring in Alfa[3]

Alfa is a 100% family-owned group of firms, which started out in 1978 and today is mainly competing in three sectors – open air toys, sports and food. It exports products to more than 70 countries.

[3] Names of firms have been changed for confidentiality reasons.

The activities in the firm's value chain are the following: R&D+Innovation / design, logistics (purchases, transport and stocks), manufacturing, quality, administrative processes (administration, human resources, treasury…), marketing and after-sales services.

Alfa carries out many of its activities internally, mostly in its region of origin. It has, however, transferred some tasks to Hong Kong, where it has located the materials purchasing department and coordinates some of its sales and transport logistics. For this purpose it has set up a trading subsidiary, through which it sells its products in markets in Asia, America and Europe.

Alfa also outsources some activities to independent suppliers. Both human resources administration and the majority of manufacturing activities have been outsourced. Human resources management and administration have been outsourced to a local firm (domestic outsourcing), whereas manufacturing –except for 16% which is carried out internally (in its region of origin)– is outsourced to various Chinese manufacturers and one in Taiwan (international outsourcing).

Of all the outsourced production, 65% comes from a Chinese manufacturer which, though not owned by Alfa, was set up to comply with its operating patterns and supplies it exclusively. For the rest of the outsourced manufacturing, Alfa has a portfolio of about 30 suppliers selected for their machinery, know-how or other resources that neither the exclusive supplier nor other potential suppliers have. For example, it works with a firm located in Shanghai that is one of the world's best suppliers for high-technology traction.

All the suppliers carry out only the physical manufacturing of the product because all activities relating to design and development (R&D+Innovation), considering their

importance for the firm, are still carried out internally in Alfa's headquarters. Such activities have actually led to the creation of an independent firm within the group.

In spite of this high level of outsourcing of production and as already stated, Alfa continues to carry out about 16% of its production in the plant located in its region of origin. The main reason is that Alfa considers there are certain high-technology products that cannot be left to other firms either because they do not have the necessary manufacturing capabilities or because of the risk of losing knowledge and know-how. In other words, Alfa has decided to outsource routine, standardised activities that are labour-intensive, involve large volumes, have a limited technological component and are not based on secret information. So Alfa can be said to take labour to China, leaving in its headquarters the firm's "brain", which is what really adds value to its products.

Alfa chose China for the following reasons:

- It was not an unknown country for the firm. The Chairman had been in contact with China since 1985.
- Not only does Chinese labour have the necessary skills but it is productive and cheaper.
- The Chinese government guarantees protection of foreign investments.
- Many of the firm's competitors and important customers are in China (the latter are in Hong Kong, the "hub" for business in the toys sector).

The main advantages obtained by Alfa from outsourcing production to China are: a) cost savings, b) organisational learning, c) improved sales volume and market share, and d) improved profitability markers.

In light of the above, it can be concluded that Alfa is a clear example of offshoring, in particular to China. It also uses the two types of transfer analysed – international

outsourcing (mainly for manufacturing and to China) and captive offshoring (for purchasing, and coordination of some sales and transport logistics).

4.2. Offshoring in Beta

Beta, which started out as a small trading office in 1978 is now a business holding that works in the fields of electricity, electronics and control of industrial and domestic facilities, manufacturing products, offering advice and carrying out commercial distribution.

All Beta's administrative processes– tax management, accounting, human resources, etc. – plus distribution and sales are carried out internally in each of the firm's facilities.

Other activities are also carried out internally but centralised for the whole group. This is the case of R&D+Innovation, which takes place in the firm's own technology centre in its region of origin. This is because in this region the firm has a particularly strong position in that it maintains close links with the University, with several regional technology centres and with the regional government.

Some of the firm's manufacturing is still retained in its facilities in the region of origin because of the know-how and technological and intellectual capital required for certain products. But the production activity in electronics has been relocated and outsourced to China, mainly for products that complement those made in Spain. At the start, all such production was outsourced but now Beta carries out some of it with the intention of internalising it altogether. This replacement of outsourcing by in-house production has been gradual, involving a learning process in which the firm has gradually acquired experience in the development of its product. Although outsourcing was originally the only alternative because know-how on electronics production was essentially in the hands of Chinese producers, Beta has now gained the necessary knowledge and

considers it will be more competitive if it carries out the production itself rather than outsourcing (because of better control of costs, labour and overheads).

At present the only production outsourced by Beta is for very new, final products (the firm does not outsource parts or components to be included in other products). When Beta detects products with potential but for which it does not yet have the necessary know-how or technology, it usually outsources to Chinese manufacturers. So, for certain products, Beta takes advantage of the Chinese firms' greater capabilities but meanwhile it learns, so that in future it can manufacture the products in-house.

Beta's reasons for outsourcing its electronics products to China are the following:

- Access to electronics know-how, China being one of the world's leading centres for electronics production.
- Beta wishes to sell in China, which is not only the world's largest market but one with suitably-developed infrastructure for distribution. The group considers that, in order to sell in China, it is necessary to produce there.
- Cost savings. The cost of producing in China is much lower than in Spain. Labour is a large proportion of the end cost in electronics components (the processes are very labour-intensive) and it is cheaper in China. But it should be stressed that in the case of Beta, this is not the only reason. As stated above, the firm decided to go to China to sell there, not to bring cheaper products to Spain.

Essentially, Beta sees China as a country that offers great opportunities, not only technological or industrial but also commercial and, by transferring its activity there, it can obtain the following benefits –new markets, better knowledge of local consumers, cost savings and learning.

So, it can be concluded that Beta offers another example of offshoring. The firm chose China and it uses the two transfer methods analysed. It set up subsidiaries in China, and also outsources to a number of local Chinese suppliers.

4.3. Offshoring in Gamma

Gamma is a footwear firm. Of all the activities in this firm's value chain, the following are carried out internally and in Spain: R&D, engineering, design, production of prototypes (the first shoe), a part of the end product manufacturing, most of the logistics, many of the administrative processes, marketing and after-sales services.

However, in respect to manufacturing, only 10% is carried out internally by a firm belonging to Gamma. Although this plant is not profitable, at least it is not losing money. The firm maintains this plant because of its social commitment (to keep jobs), to preserve part of the firm's history and to have a place to carry out all type of manufacturing tests.

The remaining 90% of manufacturing is outsourced to Spanish or foreign firms. Such a large proportion of outsourcing enables Gamma to focus on its core competencies, on its strengths –its brand, distribution and design–, thus leaving in hands of specialists all other activities out of its core, such as manufacturing. Basically, Gamma outsources activities in which economies of scale are possible and which are labour-intensive.

If we focus only on international outsourcing, what initially was a strategy has today become a necessity. For cost reasons, it would no longer be feasible to carry out all the manufacturing in Spain. The production cost is therefore one of the main reasons why the firm outsources internationally. But it is not the only one. Gamma has also started outsourcing an increasingly large proportion of its production to foreign firms for reasons of technical capability and manufacturing capacity that, for example in China, is

abundant. Also, in this firm's sector, the existence of auxiliary industries is fundamental. Industry evolution has been such that in Spain, over the years this supporting business fabric has been lost. So firms have searched for locations where this auxiliary industries still exist. Transport costs still have to be taken into account, as does product quality, which Gamma monitors when it outsources to guarantee uniform quality in all its products. Monitoring is done by firm staff who check that suppliers meet all the requirements (for materials, processes, etc.) established by the firm.

So cost is by no means the only consideration taken into account by Gamma when deciding on international outsourcing. In other words, the price variable is not sufficient for determining supplier location.

In respect to the countries in which Gamma outsources its production, those are currently China and India. The firm is also carrying out trials in Morocco.

In each case, the country selected for outsourcing depends on the product sales volume and on its technical manufacturing characteristics as footwear producers tend to specialise in certain specific technical requirements. For example, in China, a factory must have a large production volume. So it is only possible to outsource footwear production to China when the sales volume is large because, otherwise, the manufacturer would not be interested. In India the situation is different. Very good prices can be achieved even for small product lines, so large volumes are not necessary.

When deciding on the outsourcing location, other considerations are manufacturing and transport times. Seasonal products (those for which orders are placed months in advance) can be outsourced to distant countries. But fashion products (to be supplied in a matter of days) must either be manufactured in-house or outsourced domestically to reach the market in time. This would not be possible, for example, if they had to be sourced from China.

The main benefits Gamma has obtained from international outsourcing are: cost reductions, less capital investment, greater flexibility to adapt to demand fluctuations and a degree of organisational learning relating to management of the chain of suppliers. International outsourcing has also led to improved profitability and productivity.

All the above indicates that Gamma is an example of offshoring, although only through international outsourcing, not through captive offshoring. It has not transferred any production facilities from Spain to other countries as this would not bring advantages over outsourcing.

4.4. Offshoring in Delta

Delta is a toy manufacturing firm from the same region as Gamma. Although it has several other product lines, educational toys and articles related to baby safety are the main ones. The description below refers to these two.

The firm's value chain comprises the following activities: R&D, design, purchasing, manufacturing, logistics, administration, marketing, sales and after-sales services.

Some are carried out internally in its facilities in Spain –these are design, purchasing, logistics, administration, sales and after-sales services. Others, such as marketing and assembly, are outsourced to other local firms. And for production several alternatives are used simultaneously –in-house development in Spain, domestic outsourcing and international outsourcing. The choice depends on the type of product: educational toys or baby safety articles.

For toys, the firm uses the three alternatives mentioned above. Approximately 50% of production is carried out in Spain, with the firm internalising a small proportion and outsourcing the rest to other Spanish manufacturers. The remaining 50% is outsourced

to foreign firms –70% to China, 20% to Taiwan, and 10% to Korea, Thailand and Malaysia.

For the baby safety line, all production is carried out in China (mostly in Hong Kong) and in Taiwan. This is because of the technological content of these products which, unlike the toys, include electronic components. Delta is not a technology firm so this is not one of its strengths, and the firm does not have the necessary resources and capabilities to be able to produce such products. Also, considering the speed of technological change, it is preferable to resort to manufacturers who have experience to ensure that products reach the market on time. Nevertheless, Delta produces the functional (exterior) design of these products and, in some case, requests the manufacturer to develop a personalised product having certain specific characteristics (such as screen size, sounds, etc.) which affect the end design of the product and subsequent sales.

Design is always carried out internally for the toys. Because of their educational nature, quality (and the technical specifications of the product) is the main criterion for deciding who should manufacture the product and where.

So cost is by no means the only, nor the main criterion in outsourcing decisions. Quality is the prime consideration. In fact, the firm produces certain products internally because it does not want to lose control over their quality and technical characteristics. Other reasons for subcontracting to other countries are related to the capabilities and experience that are necessary for production. In some cases, the manufacturers of certain technologies are concentrated in a specific part of the world (such as China) so it would not be feasible to produce anywhere else. And sometimes the firm outsources because it would not be possible for it to gain the necessary experience in time.

In conclusion, Delta is another example of offshoring with international outsourcing but no relocation (captive offshoring).

4.5. Comparative analysis of the cases studied

Table 2 compares the reality of the firms studied regarding: a) the activities in the value chain that are internationally outsourced, 2) the activities that are carried out internally but are located in a different country, 3) the destinations chosen and 4) the reasons for choosing these destinations.

Table 2. Comparative analysis of offshoring decisions by Alfa, Beta, Gamma and Delta

	Activities involved in the value chain	Activities offshored (partially or fully)	Method of transfer (outsourcing/ subsidiary)	Country chosen	Reasons to chose that country
ALFA	R&D+Innovation/ Design				Is not an unknown country.
	Logistics	Purchasing	Owned facilities	China	Has the necessary infrastructure
		Transport (partial)			
	Manufacturing	Manufacturing (84%)	Outsourcing	China	Possesses qualified, productive, cheap labour
	Quality				
	Administrative processes				Guarantees protection of foreign investments
	Sales and after-sales services	Sales (partial)	Owned facilities	China	Competitors and customers are in this country
BETA	R&D+Innovation				Possession of know-how on electronics. Desire to sell in China. Lower manufacturing costs because of cheaper labour
	Manufacturing	Electronics products: latest technology, manufacturing and quality control	Owned facilities	China	
		Very new products	Outsourcing	China	
	Administrative processes				
	Distribution and sales				
GAMMA	R&D				Lower production costs. Existence of auxiliary industry. Productive capacity. Technical capability. Production time
	Engineering				
	Design				
	Manufacturing	Manufacturing (90%)	Outsourcing	China and India	
	Logistics	Logistics (partial)	Outsourcing	China	
	Administrative processes				
	Sales				
	After-sales services				
DELTA	Design	Electronic design (baby)	Outsourcing	China	Lower production costs. Concentration of world manufacturers. Know-how and
	Purchasing				
	Manufacturing	Manufacturing (50%) (baby and toys)	Outsourcing	China, Taiwan,	

			Korea, Thailand, Malaysia	experience
Logistics				
Administration				
Marketing				
Sales				
After-sales services				

Source: Drawn up by the authors

Analysis of the above information shows that in the firms considered, offshoring is mainly limited to production. This function is in general internationally outsourced, though some investment in foreign fully-owned subsidiaries is also observed. However, neither of the firms has transferred their R&D+Innovation to another country. This is because of the strategic importance of such activities for all of them. For both Alfa and Beta, research and development and especially innovation are a strategic priority and one of the keys to their success; for Delta, given the educational nature of its toys, design becomes a priority in order to guarantee their quality and pedagogical features; finally, for Gamma design is one of its core competencies. For these reasons none of these firms seem to be willing to accept the high risk of outsourcing such activities (possible undesired dissemination of know-how to other firms and/or lack of control over these activities) nor the operating difficulties of locating them in another country (management of the flow of information and coordination with other activities in the value chain).

In respect to offshore destination, China is the preferred country for the four firms, though they also outsource in India and other countries of south east Asia. One of the main reasons to chose China is cheaper labour costs. In fact for Alfa and Gamma moving to China has been a necessity, as long as their cost structures in Spain limited

their competitiveness. Thus, offshoring has been key for these firms' survival. Of course, Beta and Delta have also benefited from lower production costs in China than in Spain.

Aside from costs, aspects such as market size, industry trends, production capacity, the existence of auxiliary industry or the possibility of gaining access to better technology and/or products were key in the choice of China. For example, Beta has not only collaborated in the development of technology with Chinese firms but has been able to access know-how and more advanced technology. For Alfa both its main competitors and customers are present in China so it was practically essential for the firm to enter this market if it wished to remain in the industry. Similarly, suppliers of electronic technology for Delta's baby product line are concentrated in China, so there is no option for the firm to outsource production for these products anywhere else. And for Gamma what is relevant about China is the concentration of firms from auxiliary industries, necessary for footwear manufacturing. Consequently, concentration in the same location of those economic agents relevant to the firm (competitors, clients, suppliers) emerges as a powerful factor in the selection of where to offshore.

5. CONCLUSIONS

This paper analyses offshoring by Spanish industrial firms. More specifically, it studies the type of offshoring carried out, the countries preferred and the reasons leading to this type of international fragmentation, as well as the advantages it brings. Qualitative research was carried out in four small- and medium-sized firms in Spain.

Regarding offshoring, the case studies provide evidence that Spanish firms use the two options analysed for transferring activities to another country –international outsourcing and captive offshoring–. Nevertheless, offshore outsourcing is the option more commonly used.

Moreover, the evidence from the cases leads to conclusions about each of these two options.

For international outsourcing, the case studies seem to show that the activities that are most likely to be outsourced are those that can be considered routinary and standardised, those that are labour-intensive and high-volume (and thus may benefit from economies of scale), and those that are not based on secret information. Such characteristics minimise the associated transaction costs, making it easier to pass these on to other firms.

The reasons for outsourcing such activities seem to be cost savings (which in some cases have been the key to firm survival), a lack or shortage of resources for carrying them out internally (so that firms prefer to take up the superior capabilities of other organisations) and the concentration of consumers, competitors and suppliers.

The analysis also indicates that the main advantages of international outsourcing are cost savings, a high level of organisational learning, increased sales volume and market share and improved profitability and productivity.

For captive offshoring, the conclusions that can be reached from the case studies are as follows. Firstly, the main reasons for a firm to locate its activities in a foreign country are cost savings (especially cheaper labour), access to that country's potential market (for sales there), access to know-how or skilled labour and maintaining competitiveness. The main advantages gained are cost savings, increased sales in new markets, better knowledge of local consumers and increased learning.

Regarding the choice of country for offshoring using either of the two methods, this case study shows that it seems to be based on criteria including the following: labour skills and costs, the existence of the necessary infrastructure, availability of resources,

government attitude and, sometimes, knowledge of the country because of prior strategic contacts and/or a facility already located in it.

It can therefore be concluded, although precaution should be taken when generalising the findings of just four cases, that Spanish firms are involved in the process of international fragmentation that is taking place all over the world. By offshoring, they are able to take up the advantages of specialisation and specific locations, improving their competitiveness but essentially guaranteeing that their survival. The offshoring process applies mainly to production (and to a lesser extent to supplies and sales), with firms tending to maintain R&D+Innovation and design in their home country.

It may also be noted that although the number of cases described in this paper is rather small, research continues and additional cases are being studied.

In future research, on the basis of the general conclusions reached from case studies, the aim is to draw up specific hypotheses to be tested on a large sample of firms. Research will also continue to analyse to what extent offshoring processes are leading Spanish firms to join international networks.

It is hoped that the information resulting from this qualitative study will serve not only as a starting-point for broader research but will also be useful for business managers involved in offshoring processes or considering them for the future.

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