Growth of the Spanish Multinational in Latin America during the 1990s

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ABSTRACT
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During the 1990s, Spain changed from a net recipient of foreign direct investment (FDI) to one of the most important investors in Latin America. Fieldwork in this article identifies trends and directions of Spanish acquisitions, with an emphasis on the 1990 to 2001 period. An overview of the emergence of the Spanish MNC is followed by statistical analysis of their competitive (i.e. ownership) advantage as measured by the relative strength of market size, wage differentials and cultural affinity. This analysis helped in explaining the link between strategic decisions of the Spanish MNCs and their choice of geography and industrial sector. Empirical analysis finds Spanish MNCs responded to privatisation opportunities and to gain access to specific foreign markets rather than to an attempt to create global export platforms.

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ABSTRACT
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1. INTRODUCTION

A major and long-standing focus of scholarly research in international business has been the identification and evaluation of determinants of the location of international production (Dunning, 1993; Caves, 1996). Most studies in this area attempt to identify and evaluate the most significant determinants of inward and outward foreign direct investment (FDI). These empirical studies have generally carried out at the industry and country levels, while concentrating on overall FDI flows without distinguishing different modes of FDI (i.e. ‘greenfield’ investments or acquisitions). Highly aggregated FDI, used in virtually all previous empirical studies, resulted in little possibilities to ascertain differences between Dunning’s (1993; 2000) resource-seeking, market-seeking and efficiency-seeking FDI.

FDI is alleged to be superior to other forms of external capital inflows. It is argued that FDI will have a more stimulating and long-lasting effect on economic growth because it is less volatile and can provide access to modern technology and know-how. Studies using highly aggregated FDI data, however, have thrown inconclusive evidence on the effects of FDI over economic growth (Caves, 1996). Among other things because the potential for transferring technology and know-how is strongly related to the mode of FDI in which industry participants are engaging in FDI (Nunnenkamp and Spatz, 2003).

There are relatively few systematic studies documenting the mode of FDI and specifically looking at cross-border mergers and acquisitions (Ietto-Gillies et al., 2000; Amann and Ferraz, 2002; Evenett, 2003; Golberman and Shapiro, 2004). This in spite the fact that most FDI has increasingly being is created through cross-border mergers and acquisitions (M&A). Research in this article identified systematic differences in the trends and directions of Spanish acquisitions in Latin America. These trends reflected strategic decision-making with regards to targeted industrial sector and targeted geography while, at the same time, allowed testing for competitive (i.e. ownership specific) advantages in the international expansion and growth of Spanish MNCs. The assessment then provided a basis for some speculation about the evolution of Spanish firms as multinational corporations.
The document proceeds as follows. Section 2 reviews the context explains the emergence and growth of Spanish multinational companies in Latin America during the 1990s. Section 3 details the data set and research methods. In particular this section offers a statistical assessment of trends and directions mergers and acquisitions involving Spanish MNCs in Latin America from an industry, country and individual company perspectives. Section 4 is the final section offering a summary, tentative conclusions and potential for future research.

2. THE RISE OF THE SPANISH MNC

2.1. The Spanish Economy in the 20th Century

The modern industrialisation of Spain dates to 1959 when the Franco regime abandoned its policy of economic autarky and introduced an economic recovery plan (Harrison, 1985). This plan also aimed to retake the path of industrialisation, which had abruptly stopped in 1939. The reform of 1959, however, did little to foster growth of entities beyond Spanish borders. By 1970, Spain (together with Portugal) was one of two of the worst performers, in terms of international trade, among Western European countries as it had a rather high level of protection – as measured by an index of estimates of nominal tariff levels for manufacturers (Little et al., 1970). The return to a democratic government (effective with a new Constitution in 1978) continued with many of the industrial policies of the Franco regime. Although economic policy then successfully articulated a social pact (around the Fuentes Quintana reform of 1977), regulatory changes were unable to withstand the second oil-crisis of 1979 and a deep economic recession ensued – which included the crisis of and increase concentration in the commercial bank sector. However, the ascension to the European Union (1986) brought about renewed growth with the Spanish economy ‘booming’ at an average rate of five percent per annum between 1986 and 1990.

Throughout the 1980s and as documented in Salmon (1997), López Duarte and García Canal (2002) and Rodríguez (2002), trends and directions of investment in Spain were influenced by the globalisation of the world economy (i.e. deepening integration of international commercial and financial activity), ascension to the European Union, and the role of the public sector (increasing Spain’s exposure to international markets on the
back of European integration and working towards the adoption of a single European currency but, at the same time, pursuing industrial policies of ‘national champions’). These trends portray the changing character of the economic environment in the last quarter of the 20th century resulting in a continuous process of restructuring in the Spanish economy (mediated through structural and regulatory innovations). From 1980 onwards, these trends resulted in Spain (together with Portugal, Greece and Ireland) gradually moving from a position of being overwhelmingly a host country of foreign investment to an intermediate status (Chesnais and Simonetti, 2000, p. 9).

Although the internationalisation of Spanish firms accelerated during the 1990s, both Tolentino (1993) and Lall (1996) identify Spain as ‘late investor’. In other words, given the relative size and growth of Spain’s Gross Domestic Product (GDP), there should have been greater stocks of investments abroad than the level observed at the turn of the Millennium. Some arguments traditionally put forward to explain ‘late investor’ include limited technological capacity, barriers to international trade, low skills, and poor labour mobility. Among others Canals (1991) and Cazorla (1997a, b) identified a lack of financial sources as the main obstacle to the internationalisation of Spanish firms, particularly for small and medium-sized companies which were often marginalised from government support promoting foreign investment.

Table 1 illustrates the country distribution of Spanish FDI during the 1990s as measured by highly aggregated data and grouped by members of the élite Organisation for Economic Co-operation and Development (OECD), Latin America and the Rest of the World. According to Fernández and Norniella (1998), a stable macro-economic policy at home and the inclination of Spanish entrepreneurs towards an ‘international culture’ played an important role in the steep increase of FDI activity at the end of the 1990s.

[Table 1 here]

As measured in nominal prices and as a percentage of total cross-border investments, most Spanish investments abroad aimed at OECD countries and Latin America, with a sharp fall in that oriented to the rest of the world since 1995. Trends in Table 1 shows that Spanish FDI in Latin America peaked in 1999 at 35,504 million euros (57% of total Spanish FDI for that year). Trends in Table 1 were consistent with systematic analysis by Ietto-Gilles et al. (2000, p. 60), which documented evidence of
Spanish FDI (together with that of Portugal and Greece) observing a preference for global links rather than greater integration within the European Union (EU). This was indeed surprising given the Spanish government’s policies promoting greater integration with European markets and creating Spanish ‘national champions’ - entities expected to do well in European markets.

[Figure 1 around here]

Data emerging from cross border mergers and acquisitions (M&A) transactions were consistent with trends described by highly aggregated data. A focus on acquisitions as mode of international expansion assumes that the acquiring firm perceives greater net benefits from internalising foreign production rather than engaging through open markets or licence the right to do so (Dunning, 2000). Data on cross border M&A has the added advantage of giving insights to the market for corporate control. For instance, the possibility that FDI investments pursued more than production facilities and sought non-tangible assets (such as brand names, management skills and local know-how). Geographic distribution of Spanish cross border M&A transactions raised questions as to the concentration of Spanish investments in Latin America around a handful of countries. As summarised in Figure 1, Argentina (87 transactions), Brazil (72 transactions), Mexico (50 transactions) and Chile (44 transactions), were the preferred markets for acquisitions of Spanish entities in Latin America. These four countries represented 75% of total cross-border acquisitions in the region (253 transactions), with activity in other 13 Latin America countries accruing 25% (84 transactions) of the total.

Succinctly, growth of Spanish MNCs in Latin America through cross border acquisitions is an interesting phenomenon and one in need of systematic attention. Spanish trade in that region involved relocating non-trivial quantities of resources. For individual entities this processes represented the greatest level of internationalisation. Anecdotal evidence of trends and directions in aggregate flows of Spanish FDI into Latin America would suggest that the competitive advantage of Spanish entities abroad is different from that at home, pointing to the need of examining the sources of competitive advantage for the Spanish MNC. However, inferences on FDI decisions from highly aggregated data risks biased results because aggregate data offers little
insights as to who owned the assets, who undertook the investments or what was the motivation to pursue such investments.

2.2. Latin America at the End of the 20th Century

Whereas Spanish entities have been grouped together with those of France, Italy, Portugal and Belgium in a cluster of 'Latin European' countries (Ronen and Shenkar, 1985), those in Spanish speaking America have been grouped in a related but somewhat different cluster. With the exception of Brazil, which was considered an 'independent', and the Guyanas; entities in continental Central and South American economies have been grouped into a Latin American cluster, that is, grouped into a meaningful category based on shared features such as geography, language, religion and management practice (idem).

By 1970 a widespread policy of industrialisation and substitution of imports for local products implemented in the decades that followed the Second World War resulted in many Latin American countries observing a level of protection that surpassed that of Spain – as measured by an index of estimates of nominal tariff levels for manufacturers (Little et al., 1970). An increasingly protectionist stand did not preclude, however, the entry of multinational companies from the US (e.g. Coca Cola, Procter and Gamble), Europe (e.g. Glaxo, Volkswagen, Danone, Phillips) and Japan (e.g. Sony, Honda, Nissan) into Latin American countries. During the 1970s many Latin American countries benefited from high international commodity prices. Economic growth rocketed for the likes of Ecuador, Mexico, Venezuela and Brazil, which had been endowed with considerable oil reserves as ever increasing oil prices meant increasing revenues for oil producing countries. Unable to invest all the oil revenues at home, countries such as Venezuela, Nigeria and Kuwait made large deposits in international banks. A number of international banks found themselves sitting on large pools of money looking for a ‘home’, which they found by lending to governments and large corporations in emerging markets such as Mexico. At the time, the prospect of higher rates of economic growth on the back of rising commodity prices (particularly in oil producing countries) suggested there were attractive growth opportunities for entities located in Mexico and Latin America. Trade protection and in particular cumbersome procedures for FDI suggested local entities had greater chance of success in capturing those growth opportunities than foreign firms. Thus, it seemed a good idea for local
entities in Latin America to get indebted. The problem was that this was overwhelmingly short-term debt (i.e. with maturity of less than a year).

The price of oil collapsed when the main oil producing countries failed to reach a production agreement. This came on the back of economic recession in many industrialised countries and the subsequent drop in international commodity prices due to the lack of demand. Many Latin American countries then did not have enough money to service its foreign debt. As an alternative to withholding all payments, in August 1982 the Mexican government requested international debtors to reschedule the commitments of state and private companies. Other measures involved the nationalisation of the private banking system, a major devaluation of the currency and the setting up of strict exchange controls. A preferential exchange rate was set for imports and payments of international claims. Another rate (50% above the preferential rate) was set for exports, tourism and repayment, to Mexican retail clients, of deposits in dollars in Mexican banks. The move by Mexico was match or even surpassed by others (for instance, non-agreed moratoria on their international obligations by Brazil and Argentina) and a decade long period of economic and political turmoil then ensued.

The collapse of international commodity prices (including oil) brought about a severe economic recession from 1982 onwards (the so called ‘lost decade’) as well as a programme of internal reform which dominated the agenda of most Latin American countries well into the 1990s. Loan agreements with the International Monetary Fund and the World Bank led most countries to abandon protectionism and embrace market reform (including the promotion of international trade). Debt negotiations with international consortia of international banks (such as Citibank from the US and Lloyds Bank from the UK) effectively withdrew most countries from international debt markets. At the same time, highly volatile growth, uncertainty around debt negotiations and internal reform resulted in the dearth of international investments from ‘traditional’ sources such as the US, Japan and Western European countries. However, by 1995 regulatory changes in most Latin American countries had resulted in extensive privatisation of public enterprises and substantial investments from firms whose headquarters were established outside that region (for instance R. La Porta and López de Silanes, 1999; Love and Lage-Hidalgo, 1999a; 1999b; 2000; Calderón et al., 2002; Len et al., 2002).
In summary, the ‘lost decade’ of the 1980’s lowered the overall attractiveness of Latin America as a destination for cross-border investments. Multinational corporations (MNC) based in countries with high FDI stock in the region (i.e. the US, Japan and Western European countries such as UK, France, Germany, Italy and the Netherlands) in many cases completely withdrew their operations and even refused to work through agents or licensing agreements. Some sectors and in particular international financial services were unwilling or unable to capture opportunities within the region. Thereby, key players that otherwise would have competed against the Spanish MNC (such as the banks) were totally absent.

2.3. Trends and Directions of Spanish Acquisitions in Latin America

Figure 2 summarises the sector distribution of Spanish investment in Latin America during the 1990s. Investments in financial services (41% of total) and utilities (namely transport and communications at 36%) stand out from investments made in other sectors. Targets of Spanish foreign operations in Latin America during the 1990s were quite different from economic activity in Spain, whose exports were dominated by tourism, textiles and apparel (including footwear), agri-business, machine tools, medical equipment, shipbuilding, clay and refractory products. Sector distribution of FDI during the 1990s also showed marked differences with cross-border growth of Spanish manufacturing during the 1980s as documented by Nohria and García Pont (1991), Rubalcaba and Gago (2001) and Bajo Rubio and López Pueyo (2002).

[Figure 2 here]

Figure 2 summarises M&A activity in Latin America per industrial sector (measured by two-digit SIC Code of target firms). These figures show the most popular sector was Depository Institutions (two digit SIC Code 60) with 48 transactions; followed by Electric, gas and sanitary services (49) with 45 transactions, Communications (48) with 38 transactions, Business Services (73) with 27, and Insurance carriers (63) with 25 transactions. Together these five sectors represented 183 transactions or 54% of total, with 46% of activity in other 21 two-digit sectors (averaging 6.4 transactions and standard deviation of 3.47). The absence or low incidence of transactions in sectors such as pharmaceuticals, education, chemicals, information technology and others in high technology areas were not surprising as
Spain, given its status of ‘intermediate’ country, required significant FDI (and its associated transfer of ‘know how’) by MNC based in ‘Triad’ countries during the 1980s and 1990s.

At an international level, growth of Spanish financial service MNC's was atypical. Similar organisations in other OECD countries (and particularly for US-based banks) usually ‘lagged’ rather than ‘lead' manufacturing firms in their degree of internationalisation (Tschoegl, 1987; Focarelli and Pozzolo, 2001; Tschoegl, 2002). Moreover, data for US companies supported the idea that banks and other financial organisations ‘followed’ manufacturers outside the US, and while financial services firms may not locate in the same country they would establish in the same region (see further von der Ruhr, 2000). However, the ‘debt crisis’ of the 1980s resulted in a number of financial institutions in the US and Western Europe unwilling or unable to grow across borders while Japanese banks also abandoned the international scene thanks to a long-running recession in their home markets during the 1990s. As a result, between 1980 and 1990 there was greater integration of international financial markets thanks to technological developments rather than through the geographic diversification of banks.

Table 2 summarises cross-border acquisitions of individual Spanish firms in Latin America. Data in Table 2 suggested Spanish MNC activity in Latin America could have been the result of a handful of companies as by financial services and utilities stand out from investments made by other sectors. However, an average value per transaction of US$426 million for all 228 transactions (with details regarding the transaction's value) suggested that, although most Spanish firms had been involved in six or less transactions, M&A activity between 1987 and 2001 distributed throughout a broad range of sectors. This was corroborated in Table 2 which shows Spanish firms sought equity control in their cross-border growth although the size of individual investments was wide ranging (from US$18 million to US$1,420 million).

[Table 2 here]

Trends and directions of Spanish in cross-border M&A in Figure 1 and Table 2 would suggest that there was a preference for a reduced number of sectors in a limited number of countries, concentration which did not seem to have played at the strengths
of the home country and which suggested that the competitive advantage of Spanish firms abroad was different to that at home. Under the light of not playing on home country strengths, growth of the Spanish MNC through acquisition would suggest that Spanish multinationals were driven by the search of new market opportunities (such as unsatisfied demand abroad) or responding an excess installed capacity in Spain.

However, the emergence of the Spanish MNC was embedded in a more complex setting. Specifically, the atypical geographical (i.e. Latin America) and sector (i.e. predominance of banking and utilities) distribution of Spanish cross border investments responded to the inability (and unwillingness) of MNCs from the so-called ‘Triad’ countries (US, Japan and Western Europe) to increase their stocks of FDI in Latin America. Some sectors where Spanish MNCs were absent in Latin America (such as consumer goods and pharmaceuticals) were part of the global dominance of MNCs based ‘Triad’ countries and this dominance also helps explaining geographic and sector concentration of Spanish acquisitions in Latin America. However, along side the apparent concentration of Spanish acquisitions in Latin America being limited to a few countries and few markets, trends in cross border mergers and acquisitions involving Spanish firms also suggested there were significant investments in Latin America by Spanish MNC, which went beyond utilities and banking. For instance, there were significant investments in many other areas such as railroads, road construction, oil and gas, etc. In the following section these trends are reassessed to examine the statistical significance of the determinants of FDI investment decisions. In this process, the analysis will shed light as to whether the competitive advantage of Spanish firms in Latin America was different from that at home and the extent to which these decisions responded to Dunning’s (1993; 2000) resource-seeking, market-seeking and efficiency-seeking FDI as measured by market size ($M_{ij}$), wage effects ($W_{ij}$) and 'cultural affinity' ($C_{ij}$).

3. STATISTICAL ANALYSIS

3.1. Analysis Framework

Assessing the determinants of individual FDI decisions ($S^n$) is still full of challenges and an area worthy of attention. Empirical research is inconclusive as to the links between international diversification and superior financial performance (Palich,
Cardinal et al., 2000; Palich, Carini et al., 2000; Martin and Sayrak, 2003) while debate also prevails as to the accuracy of constructs to measure international diversification (Nayvar, 1992; Sambharya, 2000; Hyland and Diltz, 2002). The nature of FDI decisions also grew in complexity when, as a result of changes in the world economy during the last quarter of the 20th century, multinational corporations (MNC) were encouraged to expand into emerging economies (Arnold and Quelch, 1998; Luo, 2001; Amann and Ferraz, 2002; Nunnenkamp and Spatz, 2003). Emerging markets were perceived to offer significant growth opportunities for MNCs as inefficient markets for corporate control in less developed countries suggested there were opportunities for a foreign buyer to pay a price not fully reflecting the prospects of a new unit. Indeed, entities from countries lower down the technological ladder can develop transferable advantages relative to firms (existing or potential) in even less developed countries since the former could benefit from advantages associated to a more advanced stage of development and industrialisation (Hu, 1995, p. 84). Possibilities to exploit market-value and operational differences emerge as in less developed countries large companies are few, financial resources are less abundant and professional management is scarce (Porter, 1987, pp. 49 and 52; Hu, 1995, pp. 84-5).

Growth into emerging markets, however, could pose strategic questions that established frameworks could not resolve (Arnold and Quelch, 1998; Cuervo and Villalonga, 2000; Dharwadkar et al., 2000) and hence attraction of looking at individual decisions of FDI through acquisition. Namely, the potential to learn more about who owns the assets, who is making the investments or what is the motivation to pursue such investments. As mentioned above, the assessment of FDI acquisition decisions is often based on aggregate data and fieldwork typically assumed that all firms in one country and/or in one industry were equally likely grow across borders and for similar reasons. The research that follows compares and contrasts individual and aggregate MNC behaviour. FDI acquisition decisions into less developed countries were explored by looking at the interaction between idiosyncratic elements of individual transactions ($s^n$) with demand ($M_{ij}$), wage ($W_{ij}$) cultural affinity ($C_{ij}$) effects.

$$S^n = f(s^n, M_{ij}, W_{ij}, C_{ij}, \tau_{i-j})$$

(1)

where

$S^n$ Value of FDI decision.
It is worth noting that empirical research around FDI decisions into less developed countries has emphasised cross-border growth into Asian economies (e.g. Chen and Chen, 1998; Luo, 2001; Makino et al., 2002; Wong and Ellis, 2002), former communist countries in Eastern Europe (e.g. Uhlenbruck and De Castro, 2000; Buck et al., 2001; Beyer, 2002; Meyer, 2002) or US investments in Latin America (e.g. Grosse, 1992; Love and Lage-Hidalgo, 1999a; 1999b; 2000; Len et al., 2002). As a result, a neglected area of research has been to consider and explore diversification decisions of firms in 'recently' industrialised countries into even less developed countries as portrayed by growth of Spanish firms into Latin America. Moreover, this approach provided an opportunity to document the process of emergence and growth of the multinational corporation outside of the US. An interesting example of this process is the ‘late’ arrival of the Spanish MNC and the predominance of their FDI decisions throughout Latin America during the 1990s (Cazorla Papis, 1997a; Ietto-Gillies et al., 2000).

3.2. The Data Set

Since the late 1980s and by the mid-1990s three quarters of the world’s FDI took the form of mergers and acquisitions (M&A). Given that only a quarter of world-wide cross-border growth takes the form of new ('greenfield') investment, one could take the view that FDI pertains more to changes in the ownership of capital and to industrial restructuring than to the accumulation of capital (Chesnais and Simonetti, 2000, p. 5). This is consistent with the view by Kogut (1983; 1991), Buckley and Casson (1998) and Meyer and Estrin (2001) which considers FDI acquisition decisions as leading to the creation of growth options ex ante and sequential growth ex post. For these reasons the
research on the growth of Spanish FDI focused on M&A activity of Spanish firms in Latin America.

However and as noted by Calderón et al. (2002, p. 6), direct comparison of FDI data compiled from balance of payment sources with M&A figures is subject to a number of caveats namely the timing of the transaction, their scope, and the definition of target and foreign countries. First, while FDI is measured on an accrual basis by national accounting systems, M&As are recorded at the time of announcement or closure of each specific transaction. Second, individual transactions may include a sequence of payments over several years. Third, traditional FDI accounting considers net financial flows, that is, outward FDI from a given country is adjusted by the dis-investment abroad undertaken by firms from that country. Unlike FDI accounting, M&A transactions report only the total value of the acquisition abroad, without subtracting any possible sales of foreign affiliates (which would be reported as an independent transaction). Fourth, data on cross-border M&A may include funds raised in local and international financial markets which would not qualify as FDI. And fifth, there may be methodological differences between M&A and FDI accounting regarding the country of origin and destination. Namely, FDI flows are usually compiled on the basis of *immediate* host and *immediate* home countries, whereas data on cross-border M&A may use different combinations of *immediate* and *ultimate* country. All these facts suggest caution when comparing cross-border M&A and total FDI for a given country. However, trends and directions of FDI flows and cross-border M&A transactions reach the same conclusions as to the direction of change rather than its magnitude (Chesnais and Simonetti, 2000, p. 5).

Empirical analysis presented below is based on a data set created from the SDC (2002) and sorted by Standard Industry Classification (SIC) criteria of the US Department of Labor. Data was available between January 30th 1987 to December 31st 2001. A total of 512 cross-border acquisitions involving Spanish and Latin American1 firms were identified2, of which 459 considered Spain a bidder (i.e. nation of the

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1 Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

2 A caveat similar to other assessment of companies' data with a sector breakdown, is that service sector might be under-recorded because companies are classified according to their main line of activity. For
acquiring firm)\(^3\) and Latin America as the target. Information regarding the financial value of deals was available for only a sub-set of the data (228 transactions or 50% of total). For this reason the assessment initially moved forward using only the number of deals to test for unrelated diversification while the value of deals was used when different patterns emerged (more below).

Data was also available for the share of total equity owned after individual transactions (399 transactions or 87% of total). Using ownership data, 26 transactions were excluded from the total. This to consider transactions where the Spanish firm had purchased more than 10% of equity (i.e. ‘capital social’\(^4\)). Excluding transactions of 9.99% or less allowed distinguishing between investments leading to or creating ‘options to expand’ from simple financial investments. There were 96 transactions with no data regarding per cent owned after acquisition and these were also excluded. As a result, the assessment moved forward using data for 337 transactions when assessing the number of deals (while testing for related/unrelated diversification) and 228 transactions when assessing the value of the deals (while testing for trends and directions of cross-border acquisitions).

3.3. Empirical Model

The data set on individual transactions was sorted to include specific characteristics of each country and year to form a panel as specified in model 1 above. This database was the basis to proceed with the empirical assessment of the value of FDI decisions (\(S^n\)). These decisions were measured by the proportion of the value of an individual transaction in Latin America represented in the total annual value of cross-border transactions where Spain had been the country of the acquiring firm.

The interaction of financial characteristics of individual transactions (\(s^p\)) and the effects of demand (\(M_{ij}\)), wage (\(W_{ii}\)) and cultural affinity (\(C_{ii}\)) constructs was tested to

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\(^3\) Country classification of the deal refers to the nation state of the unit whose ownership has been transferred and the unit who has acquired rather than the whole group (i.e. the parent company).

\(^4\) Country classification of the deal refers to the nation state of the unit whose ownership has been transferred rather than to the whole group (i.e. the parent company).
investigate systematic differences between trends and directions of FDI decisions using aggregate and individual transaction data. A total of 110 constructs were used in assessing determinants of the value of individual FDI decisions, $S^n$ (Hofstede, 1992; 1996; R. La Porta et al., 1998; CEPAL, 2000; OIT, 2002; SDC, 2002; 2002; Euromoney, 2003). These constructs are not presented for brevity but are available from the corresponding author. Succinctly, 39 different constructs (35%) provided details as to the financial characteristics ($s^n$) of each and every one of the 228 transactions were the financial value was available for acquisitions involving Spanish MNCs in Latin America. There were 16 constructs (15%) dealing with terms of trade and ‘degree of openness’ were identified as potential measures of market size ($M_i$). Six constructs (5%) considered relative income measures and an index for the intensity of union militancy throughout the work force and were identified as potential measures wage effects ($W_{ij}$). Eight constructs (7%) considered trends and directions of M&A activity ($\tau_{i-1}$) and thus accounted for issues such as 'herd effects', growth in the stock of FDI and a reduction in the number of potentially suitable acquisition targets.

Instrumental variables were added to identify transactions involving the most active companies as described in Table 1 and Figure 3 ($\delta_1$). Another variable modelled the main recipients of Spanish FDI in terms of number of transactions as described in Figure 2 ($\delta_2$). There were eleven instrumental variables (10%) as specified below.

Cultural compatibility has increasingly been sought to provide an explanation as to why domestic and cross-border acquisitions succeed or fail (e.g. Kogut and Singh, 1988; Gomez-Mejia and Palich, 1997). While favourable financial statements or product synergy may be the initial attraction to an acquisition candidate, it has increasingly been argued that whether an acquisition actually works may have more to do with how well the two organisations' 'cultures' match up. Data to assess 'cultural affinity' ($C_{ij}$) included dimensions external and external to individual entities. External to the organisation, it was important to model the market for corporate control. In particular, 26 (24%) constructs were identified to represent the rights granted to the shareholders by the legal environment as well as the effectiveness of the judiciary to uphold these rights (R. La

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4 Art. 4.1., Real Decreto 672/1992, 2nd July, considers Spanish foreign investments and establishes that “it is presumed that effective influence exists in a foreign firm management when the investor’s
Porta et al., 1998). Dimensions which seem to have been critical to explain growth of MNCs in some Latin American countries (R. La Porta and López de Silanes, 1999).

At the same time, the internal environment was represented by difference between the rank of Spain and the rank of each individual county as scored in Hofstede's (1991) four indexes of national culture (4%). Stylised features of corporate culture such as those emerging from grounded work by Hofstede are not without critics (Hampden-Turner and Trompenaars, 1997; Hennart and Larimo, 1998; McSweeney, 2002; Baskerville, 2003). However, these indexes have been used extensively in empirical research as measures of national culture and explanations of the interaction between national culture and management (Hofstede, 2002; Williamson, 2002). As a result, the empirical assessment of the 'cultural affinity' construct ($C_{ij}$) assumed differences between countries were greater than differences between different organisations or differences between organisations in the same industry or sector.

### 3.4. Sector Level Analysis

Following Ietto-Gilles et al. (2000, p. 62), an indicator of ‘abnormal’ M&A activity (either more or less than expected), was developed to compare related and unrelated diversification. Each element of this matrix measured the number of transactions between a two digit SIC code in Spain and a two digit SIC code in Latin America. In this matrix related diversification was measured by the elements on the main diagonal (that is, TO the same SIC code as FROM the same SIC code). Unrelated diversification was measured by the off-diagonal elements. Cohen's kappa was used as measure of dispersion from the main diagonal (Wilcox, 1996) and an estimate of $k = 0.52$ suggested there was more than chance agreement for related diversification of cross-border activity.

To identify sectors where unrelated diversification was statistically significant, the matrix with M&A flows was compared with another matrix that considered ‘theoretical’ frequencies that would appear in the absence of any particular strong link between two sectors. The matrix with expected flows represented the number of transactions between a two digit SIC code in Latin America and a two digit code in Spain that would occur in the absence of any factors that would favour particular participation, direct or indirect, is equal or superior to 10% of the social capital”.

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relationships (i.e. particularly high or particularly low) between any one pair of two digit codes. The matrix for actual flows and the matrix for ‘theoretical’ flows were compared using an indicators based on the chi-squared, namely

\[ U_{ij} = \frac{\sum (A_{ij} - E_{ij})^2}{E_{ij}} \]  

where

- \( i \) Total number of transactions for two digit SIC code of targets in Latin America.
- \( j \) Total number of transactions for two digit SIC code in Spain.

The indicator for unrelated diversification, \( U_{ij} \), resulted from the square value of the difference between the actual flow, \( A_{ij} \), and the expected flow, \( E_{ij} \). The expected number of transactions, \( E_{ij} \), between a two digit SIC code in Spain and a two digit SIC code in Latin America was calculated by multiplying the row and column totals relative to the cell and dividing by the product by the overall total. Insights into specific patterns of unrelated diversification emerged when comparing \( U_{ij} \) to a \( \chi^2 \) of 68.77 (with 45 d.f. and 5% significance) and thus rejecting (or not) the null hypothesis of equal distribution of means.

Following the US SIC classification for the 1987 census, there were 31 two-digit SIC codes (39%) in both Spain and Latin America without any activity at all (see further the Appendix for detailed results). At the same time, there were 14 industries (18%) in where a two digit SIC code in Latin America (i.e. the target) or a two digit SIC code in Spain ware active but the indicator, \( U_{ij} \), was not statistically significant. There were 11 industries (14%) where a two digit SIC code in Spain and a two digit SIC code in Latin America were active but only one was statistically significant. Table 3 summarises these results.

[Table 3 here]

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5 Note that using the average number of transactions to calculate the expected number of transactions (\( E_{ij} \)) was equally problematic given the cyclical nature of both M&A and FDI decisions (phenomena which is well documented).

6 For 30 d.f. or more the chi-squared statistic is considered to distribute as a normal with mean 1 and variance 0. An approximation to 45 d.f resulted from adding the values for the chi-squared with 15 d.f. (25) to that with 30 d.f. (43.77) for a 5% level of significance.
As shown in Table 3, MNCs from six Spanish industries pursued unrelated diversification. This trend is perhaps more evident in investment in five Latin American industries where companies were acquired by an unrelated Spanish industry. These are target and acquiring industries with extreme values and one should avoid taking these results to portray the only industries observing unrelated diversification. However, visual examination of individual transactions suggested these transactions were not far apart within the value chain. For instance, Banco Santander Central Hispano (SIC 60) acquiring a security broker (SIC 62). Results in Table 3 could thus be biased because of the classification method used when sorting by SIC criteria.

Table 4 shows 24 industrial sectors (30%) where two digit SIC code in Latin America and in Spain were both active and both were statistically significant. These sectors encompassed most of the industries making related diversification and show that cross-border activity of Spanish MNCs in Latin America concentrated in but a handful of industries.

[Table 4 here]

Succinctly, in order to investigate the pattern of foreign investment through cross-border M&A, a matrix was created examining the flow of M&A (number of deals) between pairs of industries (as measured by two digit SIC codes). The aim was to assess whether trends in M&A transactions could help in ascertain links between M&A activity and the competitive advantage of Spanish firms in Latin America. As suggested by descriptive evidence in the previous, an approximation using Cohen's kappa and $\chi^2$ suggested that foreign investment of Spanish MNC’s in Latin America during the 1990s was heterogeneous and concentrated in a few industries. These tests, however, were unable to tell whether related diversification associated with the successful transfer of competencies, market opportunities and accessing resources to supply foreign markets.

In the following section an assessment is made as to the growth of Spanish MNCs in Latin America in terms of market opportunities and environmental risk.

3.5. Country Level Analysis

A second statistical test looked at the empirical significance of model 1 above through a regression model, namely

$$S^n = \alpha_j + \sum^n \beta^n_j (s^n, M_{ij}, W_{ij}, C_j, \tau_{ij}) + \sum^m \beta^m_j \delta_j + \phi \ AR(9) + e^n$$  \hspace{1cm} (3)
where

\( S^n \) Value of FDI decision (as measured by firm-level transaction data).

\( s^n \) Financial characteristics of individual transactions.

\( M_{ij} \) Demand (i.e. market size) effect.

\( W_{ij} \) Wage differential effect.

\( C_j \) Cultural affinity effect.

\( \tau_{i-1j} \) Trend (lagged).

\( \delta_j \) Instrumental variables

a) Value of 1 when purchaser was a financial service firm (BBVA, BSCH or Mapfre).

b) Value of 1 when purchaser was a utility (Telefonica, Repsol, Endesa, Mapfre or Union Fenosa).

c) Value of 1 when country was Argentina, Brazil, Chile or Mexico.

AR(9) Autoregressive adjustment (Cochrane-Orcutt method).

\( \varepsilon^n \) Residual.

\( n \) Transaction number.

\( m \) Number of instrumental variables.

\( i \) Year.

\( j \) Country.

The 110 constructs identified as potential determinants of the value of individual FDI decisions \( (S^n) \) were reduced to 22 constructs. See Table 5. Firstly, pre-regression test used cross sections by year (1999 and 2001) as well as countries (Argentina and Colombia) and found 28 constructs were unable to contribute to the assessment. For instance, most of the details as to the financial characteristics of the transaction \( (s^n) \) were lost as these constructs overwhelmingly had a value of zero. Other constructs and notably wage effect characteristics \( (W_{ij}) \) as well as differences in the culture of the market for corporate control \( (C_j) \), were found to contribute little in the way of explaining the value of individual cross-border transactions. Secondly, during test for linear correlation, loss of constructs came about in order to avoid the potential spurious relation between some of them (i.e. multicollinearity) as the model had to be corrected for autocorrelation and heteroscedasticity.

[Table 5 here]

As a result of the careful screening, 11 constructs (50%) provided details as to the financial characteristics of the transactions \( (s^n) \). There were six constructs (27%)
dealing with terms of trade and degree of openness. These had been identified as potential measures of market size \( M_{ij} \). Two constructs (9%) represented measures of national culture \( C_{ij} \). Two constructs (9%) considered trends and directions of M&A activity \( \tau_{i-1} \). One instrumental variable (5%) was added to identify transactions involving the most active companies (i.e. utilities) as described in Table 2 above \( (\delta_1) \). No-one constructs identified as potential measures wage effects \( W_{ij} \) was found to have had statistically significant or making a contribution to the best explanatory model.

Results suggested Spanish MNCs were happy to accommodate the institutional environment in Latin America provided there was certainty shareholder rights would be protected and country risk was perceived to be relatively low. Cultural affinity constructs were important but only two were statistically significant to explain differences in valuation. The latter pointed to a common cultural heritage between Spain and Latin America. Specifically, a small difference between Spain’s and the host country’s power distance index suggests Spanish MNC seemed to prefer countries (and companies) where there was a perception of a paternalistic style of management. Taken together with the relative importance of the masculinity index (i.e. same degree of gender differentiation) forceful argument could be made that, in such a context, the importance of interpersonal trust is high.

At the same time the propensity for unions to influence negotiations and the potential value of an acquisition was important but again, not statistically significant.

The instrumental variable for privatisation was no statistically significant at the 1% level. Instead the number of potential candidates for acquisition was seen as more important. Together these effects pointed to the importance of changes in economic policies of Latin American governments as source for the emergence of the Spanish MNC. Privatisation was instrumental in developing local stock markets and allowed exploiting market-value differences in less developed countries (Porter, 1987, pp. 49 and 52; Hu, 1995, pp. 84-5). Privatizations, therefore, were a welcomed invitation for making expansion into foreign markets through acquisition attractive.

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7 Not shown for brevity but available from the corresponding author.
Absence of constructs related to wage effect suggested that neither greater efficiency nor the construction of an international platform (in the sense of increased global value integration) were a prime reason to explain internationalisation of Spanish entities. Rather than resource seeking or efficiency seeking, results from the econometric model suggested the strategies of Spanish firms responded to market seeking, that is, demand oriented FDI. Results suggesting a preference by Spanish firm in gaining access to foreign markets rather than an attempt to create global export platforms were consistent with those of Amman and Ferraz (2002) and Nachum, Jones et al. (2001). Market seeking strategies could well have resulted from the desire to satisfy unmet demand in foreign markets (e.g. utilities) or because of an excess supply in home markets (e.g. depositary institutions). The drive to increase demand for existing products and services was evident in that market seeking measures ($M_{ij}$) had the greatest number of statistically significant constructs (that is, after considering financial constructs or those related to the potential to pay a premium for the target company).

Statistical significance of trend constructs suggested not all partners in Latin America were equally desirable. The greater the number of transaction for a single country in the same industry significantly reduced the number of potential acquisition targets. In combination with financial constructs (these been the greatest in number for the final model) suggested Spanish MNC were unwilling to pay a premium or enter a market through acquisition at “which ever the cost”. Spanish MNC were ready to pay “fair price” for their interest in (some or all) the assets. Otherwise would enter through a different mode (such as greenfield investments, export or licensing).

4. CONCLUSIONS

Links between Spanish and Latin America have a long history as Spanish FDI in the region dates to the 16th and 17th centuries. More recently, during the 1990s there was an important re-emergence of Spanish investments in the region. However, Spain’s investments in Latin America during the 1990’s cannot be examined without looking into what preceded such investments. That is to say, the ‘lost decade’ of the 1980’s lowered the overall attractiveness of the region. Multinational companies based in so called ‘Triad’ countries had the highest stock of FDI in the region but, at the time, were unwilling or unable to increase their investments. In particular, financial service
organisations retreated from international markets while dealing with debt renegotiation. Thereby, key players that otherwise would have competed against the Spanish banks were totally absent. Spanish bankers lead the investment process not only through their financial operations, but through their (controlled) subsidiaries in key countries.

Trends and directions of aggregate FDI flows of Spanish investments into Latin America suggested that the competitive advantage of Spanish entities abroad was different from that at home. There was a marked concentration in some countries and selected industries but at the same time, there were a number of issues not explained by aggregate FDI data. For instance, some sectors where Spanish MNCs were absent in Latin America (such as consumer goods and pharmaceuticals) were part of the global dominance of MNCs based ‘Triad’ countries and this dominance helped explaining geographic and sector concentration of Spanish acquisitions in Latin America. Moreover, along side the apparent concentration of Spanish acquisitions in Latin America (within few countries and few markets), evidence was found suggesting there similar (significant) investments which went beyond utilities and banking. Following these trends and examining their statistical significance was the motivation to assess the determinants of Spanish FDI investment decisions in Latin America. Throughout this process, research result pointed to issues explaining the sources of competitive advantage for the Spanish MNC.

Inferences on FDI decisions from highly aggregated data risks biased results because aggregate data offers little insights as to who owned the assets, who undertook the investments or what was the motivation to pursue such investments. As a result, research in this article documented empirical evidence based on cross-border transactions. Cross-border M&A transactions allowed ascertaining the motivation of individual entities rather than assuming the same behaviour by participants in different sectors. Statistical analysis of M&A activity suggested most transactions involving Spanish entities in Latin America were indeed not random occurrences nor a ‘blanket’ response to European integration. Concentration in a handful of countries resulted from market seeking initiatives rather a broad response to industrial policies or threats from other European entities entering Spanish home markets.

During the 1990s, the Spanish MNC aimed to gain access to 'key' Latin American markets namely Mexico, Chile, Brazil and Argentina. Related to sector
distribution, Electric, gas and sanitary services (SIC 49) and Communications (SIC 48) took the second and third places in terms of M&A activity while the most active sector was Depository Institutions (SIC 60). The importance of the financial sector was based on the strong development in Latin America of the main Spanish banks: SCH and BBVA. However, statistical significance of cross-border activity in over half the economic sectors of Spain (as measured by SIC codes) made it hard to ignore the internationalisation of the Spanish economy during the 1990s and the role played by Latin America in that process. As such, demand oriented FDI dominated over a desire to gain access to natural resources (i.e. resource seeking) and a more efficient division of labour or specialisation of an existing portfolio of foreign and domestic assets (i.e. efficiency seeking).

At the same time, it was interesting to see the absence (or statistical significance) of cross-border activity otherwise associated with main contributors to Spanish economic growth. In particular, agricultural production (SIC 2), agricultural services (SIC 7), leather products (SIC 31), apparel and accessory stores (SIC 56). This portrayed the mixed situation of the Spanish economy as both exporter and recipient of FDI; the combination of private enterprise (dominated in sectors such as amusement and recreational services, SIC 79 by small and medium sized firms) and the provision of services private and public entities (postal service, SIC 43); but also that Spain’s competitive advantage is not within activities of high value added or high technology such as electronic equipment (SIC 35 and 36) and education services (SIC 82). Suggesting that the comparative (i.e. owner specific) advantages of the Spanish firm are not absolute, that is, so as to out bid any other actual or potential competitor in international markets (as required by Porter, 1987) but sufficient to be superior to organisational forms found in Latin America (see further Hu, 1995; Dunning, 2000).

An econometric model explored measures of market size effect, wage effects, 'cultural affinity', overall trend (i.e. ‘herd’ effect) and financial dimensions unique to the transaction. Most financial dimension were statistically significant, many trend and cultural variables were discarded but at least two of each remained, as did constructs related to market (i.e. demand) effects, while and wage effects were discarded. The most (statistically) significant variables in the most parsimonious estimation of the econometric model included the mode of acquisition, the rank of the target country
exports to Spain in Spain’s imports, country risk, Hofstede's (1991) power distance index and the growth rate in the overall number for cross-border transactions for that country. All this suggested that buying into the right market was as important as acquiring the right target at a ‘fair price’. Econometric results were consistent with poorly developed financial markets and a strong preference of Spanish MNCs to acquire control (i.e. average ownership after transaction equal to 67%). The analysis of the growth of Spanish firms in Latin America also highlights the advantages of privatisation to strengthen product and market positions rather than attempting to create global export platforms.

The emergence of the Spanish MNC, as reported in this article, takes place during a period of heighten cross-border activity and in particular changed competition in global markets for financial service organisations. However, there are limitations to generalise on the effects of globalisation based on the last wave of cross-border activity behaviour (see further Evenett, 2003). Nevertheless, the nature and intent behind Spanish acquisitions in Latin America is topic that still requires attention. In particular, documenting systematic differences between sectors involving a few transactions and those involving a large number of transactions.
Table 1: Geographic Distribution of Spanish FDI (1993-2001)  
(In millions of euros at nominal prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O.E.C.D.</td>
<td>1,260</td>
<td>1,589</td>
<td>2,819</td>
<td>3,285</td>
<td>4,712</td>
<td>7,142</td>
<td>24,088</td>
<td>44,657</td>
<td>47,356</td>
</tr>
<tr>
<td></td>
<td>67%</td>
<td>36%</td>
<td>57%</td>
<td>51%</td>
<td>52%</td>
<td>38%</td>
<td>39%</td>
<td>59%</td>
<td>63%</td>
</tr>
<tr>
<td>Latin America</td>
<td>358</td>
<td>2,476</td>
<td>805</td>
<td>2,557</td>
<td>4,068</td>
<td>10,604</td>
<td>35,504</td>
<td>29,145</td>
<td>26,675</td>
</tr>
<tr>
<td></td>
<td>19%</td>
<td>56%</td>
<td>16%</td>
<td>40%</td>
<td>45%</td>
<td>56%</td>
<td>57%</td>
<td>38%</td>
<td>36%</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>274</td>
<td>351</td>
<td>1,325</td>
<td>576</td>
<td>341</td>
<td>1,049</td>
<td>2,256</td>
<td>2,379</td>
<td>546</td>
</tr>
<tr>
<td></td>
<td>14%</td>
<td>8%</td>
<td>27%</td>
<td>9%</td>
<td>4%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,893</td>
<td>4,416</td>
<td>4,949</td>
<td>6,418</td>
<td>9,121</td>
<td>18,796</td>
<td>61,848</td>
<td>76,181</td>
<td>74,577</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Spanish Ministry of Economy, Department of Commerce and Investment, UNCTAD (2002) and own estimates.
Figure 1: Spanish Acquisitions in Latin America, 1987-2001  
(Total cross-border M&A transactions involving Spanish firms by country)

*Others:* countries with two or less transactions, namely Guatemala, Guyana, Honduras, Nicaragua, Paraguay and Uruguay.

*Source:* SDC (2002); own estimates.
Figure 2: Spanish Acquisitions in Latin America, 1987-2001
(Sector distribution of cross-border M&A transactions by two digit SIC code;
Sectors with more than seven transactions)

Source: SDC (2002); own estimates.
## Table 2: Top Spanish Acquiring MNCs in Latin America, 1987-2001

(Companies involved in seven or more cross-border transactions)

<table>
<thead>
<tr>
<th>Two-Digit SIC</th>
<th>M&amp;A Transactions</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Num. Trans.</td>
<td>Accumulated Value (US millions)</td>
</tr>
<tr>
<td>Telefonica</td>
<td>48</td>
<td>$24,692</td>
</tr>
<tr>
<td>Banco Bilbao Vizcaya A</td>
<td>60</td>
<td>$7,766</td>
</tr>
<tr>
<td>Banco Santander Centr</td>
<td>60</td>
<td>$12,270</td>
</tr>
<tr>
<td>Repsol</td>
<td>13</td>
<td>$17,043</td>
</tr>
<tr>
<td>Corp MAPFRE SA</td>
<td>63</td>
<td>$123</td>
</tr>
<tr>
<td>Endesa SA</td>
<td>49</td>
<td>$3,575</td>
</tr>
<tr>
<td>Union Electrica Fenosa</td>
<td>49</td>
<td>$390</td>
</tr>
</tbody>
</table>

*Source: SDC (2002); own estimates.*
Table 3: M&A Activity of Spanish Firms in Latin America by Industry, 1987-2001
(Sectors where target and acquirer were active but only one was statistically significant)

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>1987 U.S. SIC Description</th>
<th>Target (Lat Am)</th>
<th>Acquirer (Spain)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value of Indicator, $A_{pq}$</td>
<td>Nº of transactions</td>
<td>Value of Indicator, $A_{pq}$</td>
</tr>
<tr>
<td>13</td>
<td>Oil and gas extraction</td>
<td>159**</td>
<td>12</td>
</tr>
<tr>
<td>29</td>
<td>Petroleum and coal products</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>35</td>
<td>Industrial machinery and equipment</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>36</td>
<td>Electrical and electronic equipment</td>
<td>60</td>
<td>6</td>
</tr>
<tr>
<td>44</td>
<td>Water transportation</td>
<td>66</td>
<td>1</td>
</tr>
<tr>
<td>50</td>
<td>Wholesale trade--durable goods</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>62</td>
<td>Security, commodity brokers, and services</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>76</td>
<td>Miscellaneous repair services</td>
<td>83**</td>
<td>1</td>
</tr>
<tr>
<td>80</td>
<td>Health services</td>
<td>128**</td>
<td>4</td>
</tr>
<tr>
<td>87</td>
<td>Engineering and management services</td>
<td>98**</td>
<td>5</td>
</tr>
<tr>
<td>95</td>
<td>Environmental quality and housing</td>
<td>335**</td>
<td>2</td>
</tr>
</tbody>
</table>
| Sum | | 38 | 32 | ** = Significant with a 95% confidence interval.
Table 4: M&A Activity of Spanish Firms in Latin America by Industry, 1987-2001
(Sectors where target and acquirer were active and both were statistically significant)

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>1987 U.S. SIC Description</th>
<th>Target (Lat Am)</th>
<th>Acquirer (Spain)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Value of Indicator, ( A_{pq} )</td>
<td>Nº of transactions</td>
</tr>
<tr>
<td>1</td>
<td>Agricultural production- crops</td>
<td>336</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>General building contractors</td>
<td>96</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Heavy construction contractors</td>
<td>91</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>Special trade contractors</td>
<td>168</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Food and kindred products</td>
<td>185</td>
<td>8</td>
</tr>
<tr>
<td>21</td>
<td>Tobacco manufactures</td>
<td>336</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>Textile mill products</td>
<td>335</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>Furniture and fixtures</td>
<td>334</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>Printing and publishing</td>
<td>83</td>
<td>7</td>
</tr>
<tr>
<td>28</td>
<td>Chemicals and allied products</td>
<td>145</td>
<td>8</td>
</tr>
<tr>
<td>32</td>
<td>Stone, clay, glass, and concrete products</td>
<td>279</td>
<td>15</td>
</tr>
<tr>
<td>33</td>
<td>Primary metal industries</td>
<td>250</td>
<td>4</td>
</tr>
<tr>
<td>37</td>
<td>Transportation equipment</td>
<td>167</td>
<td>2</td>
</tr>
<tr>
<td>38</td>
<td>Instruments and related products</td>
<td>291</td>
<td>4</td>
</tr>
<tr>
<td>39</td>
<td>Miscellaneous manufacturing industries</td>
<td>336</td>
<td>1</td>
</tr>
<tr>
<td>45</td>
<td>Transportation by air</td>
<td>197</td>
<td>7</td>
</tr>
<tr>
<td>47</td>
<td>Transportation services</td>
<td>195</td>
<td>6</td>
</tr>
<tr>
<td>48</td>
<td>Communications</td>
<td>115</td>
<td>38</td>
</tr>
<tr>
<td>49</td>
<td>Electric, gas, and sanitary services</td>
<td>154</td>
<td>45</td>
</tr>
<tr>
<td>60</td>
<td>Depository institutions</td>
<td>132</td>
<td>48</td>
</tr>
<tr>
<td>63</td>
<td>Insurance carriers</td>
<td>136</td>
<td>25</td>
</tr>
<tr>
<td>65</td>
<td>Real estate</td>
<td>162</td>
<td>5</td>
</tr>
<tr>
<td>70</td>
<td>Hotels, rooming houses, camps, and other lodging places</td>
<td>258</td>
<td>7</td>
</tr>
<tr>
<td>73</td>
<td>Business services</td>
<td>141</td>
<td>27</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td></td>
<td><strong>270</strong></td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Empirical determinants of cross-border M&A decisions, 1988-2001
(Dependent Variable: Value of individual transaction / Total value of M&A in Spain for year i)

<table>
<thead>
<tr>
<th></th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.1819</td>
<td>0.6590</td>
</tr>
</tbody>
</table>

**FINANCIAL CHARACTERISTICS OF INDIVIDUAL TRANSACTIONS**

- Unsolicited bid (y/n): 0.4728 ± 0.0378 (Beta = 0.3305, 12.4977)
- Purchase financed through bank loan (y/n): -0.6261 ± 0.0517 (Beta = -0.6176, -12.1177)
- Purchase financed through bond borrowing (y/n): 1.1591 ± 0.1295 (Beta = 0.8102, 8.9523)
- Post merger gearing ratio: 0.2610 ± 0.0379 (Beta = 0.2574, 6.8851)
- Percent of transactions for the year where target and its head office are in the same country: 0.1491 ± 0.0309 (Beta = 0.3159, 4.8288)
- Total number of transactions for year i in country j: 0.0130 ± 0.0045 (Beta = 1.1435, 2.8538)
- Investor group helped to finance the transaction (y/n): 0.0385 ± 0.0148 (Beta = 0.1337, 2.6006*)
- Average number of days to finalize a transaction in country j during year i: 0.0001 ± 0.0000 (Beta = 0.0814, 2.4002*)
- Seller's main office in same country as target: -0.0172 ± 0.0084 (Beta = -0.2444, -2.0521*)
- Percent owned after transaction: -0.0271 ± 0.0136 (Beta = -0.0853, -2.0018*)
- Type of acquisition*: 0.0046 ± 0.0025 (Beta = 0.0813, 1.8462**)  

**DEMAND (MARKET SIZE) EFFECT**

- Rank of Spain's imports in country's exports: 3.4216 ± 0.4071 (Beta = 0.9387, 8.4044)
- Accumulated value of Spanish acquisitions in year i / total cross-border M&A value in year I: 0.0163 ± 0.0056 (Beta = 0.2954, 2.9137)
- Accumulated value / total cross-border M&A purchases by Spain or country j in year I: 0.2432 ± 0.0943 (Beta = 0.5040, 2.5796*)
- Accumulated value M&A Spain / total FDI inflow country: -0.0887 ± 0.0345 (Beta = -0.4040, -2.5729*)
- Rank of country's exports to Spain in Spain's imports: 6.8449 ± 0.0409 (Beta = -1.7261**, 8.147)
- Country risk index: 0.2111 ± 0.1252 (Beta = 0.2008, 1.6851**)  

**CULTURAL AFFINITY EFFECT**

- Masculinity index: 0.1200 ± 0.0426 (Beta = 0.2101, 2.8180)
- Power distance index: 0.0770 ± 0.0439 (Beta = 0.1890, 1.7539**)  

**TREND**

- Date of transaction between 1994 and 1998 (y/n): 0.0940 ± 0.0245 (Beta = 0.2540, 3.8311)
- Growth rate in the overall number of transactions: 0.0086 ± 0.0045 (Beta = 0.1239, 1.9196**)  

**INSTRUMENTAL VARIABLE**

- Target is a utility (y/n): 0.0166 ± 0.0082 (Beta = 0.0724, 2.0256*)  

* = Significant at 5%; ** = Significant at 10%.
Appendix:

Unsuccessful Diversification of Spanish MNC by Industrial Sector, 1988-2001

Table A.- Sectors without cross-border activity

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>1987 U.S. SIC Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Agricultural production- livestock</td>
</tr>
<tr>
<td>7</td>
<td>Agricultural services</td>
</tr>
<tr>
<td>8</td>
<td>Forestry</td>
</tr>
<tr>
<td>9</td>
<td>Fishing, hunting, and trapping</td>
</tr>
<tr>
<td>12</td>
<td>Coal mining</td>
</tr>
<tr>
<td>14</td>
<td>Non-metallic minerals, except fuels</td>
</tr>
<tr>
<td>23</td>
<td>Apparel and other textile products</td>
</tr>
<tr>
<td>30</td>
<td>Rubber and miscellaneous plastics products</td>
</tr>
<tr>
<td>31</td>
<td>Leather and leather products</td>
</tr>
<tr>
<td>43</td>
<td>Postal Service</td>
</tr>
<tr>
<td>46</td>
<td>Pipelines, except natural gas</td>
</tr>
<tr>
<td>52</td>
<td>Building materials, hardware, garden supply, and mobile</td>
</tr>
<tr>
<td>53</td>
<td>General merchandise stores</td>
</tr>
<tr>
<td>54</td>
<td>Food stores</td>
</tr>
<tr>
<td>56</td>
<td>Apparel and accessory stores</td>
</tr>
<tr>
<td>64</td>
<td>Insurance agents, brokers, and service</td>
</tr>
<tr>
<td>72</td>
<td>Personal services</td>
</tr>
<tr>
<td>75</td>
<td>Automotive repair, services, and parking</td>
</tr>
<tr>
<td>79</td>
<td>Amusement and recreational services</td>
</tr>
<tr>
<td>81</td>
<td>Legal services</td>
</tr>
<tr>
<td>82</td>
<td>Educational services</td>
</tr>
<tr>
<td>83</td>
<td>Social services</td>
</tr>
<tr>
<td>84</td>
<td>Museums, art galleries, botanical and zoological garden</td>
</tr>
<tr>
<td>86</td>
<td>Membership organizations</td>
</tr>
<tr>
<td>88</td>
<td>Private households</td>
</tr>
<tr>
<td>89</td>
<td>Miscellaneous services</td>
</tr>
<tr>
<td>91</td>
<td>Executive, legislative, and general government</td>
</tr>
<tr>
<td>92</td>
<td>Justice, public order, and safety</td>
</tr>
<tr>
<td>93</td>
<td>Finance, taxation, and monetary policy</td>
</tr>
<tr>
<td>94</td>
<td>Administration of human resources</td>
</tr>
<tr>
<td>96</td>
<td>Administration of economic programs</td>
</tr>
</tbody>
</table>

8 Acquisition (certain assets, minority interest, majority interest); buyback; or merger.
Table B.-
Sectors where target or acquirer is active but neither is statistically significant

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>1987 U.S. SIC Description</th>
<th>Target (Lat Am)</th>
<th></th>
<th>Acquirer (Spain)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value of Indicator, $A_{pq}$</td>
<td>N° of transactions</td>
<td></td>
<td>Value of Indicator, $A_{pq}$</td>
<td>N° of transactions</td>
</tr>
<tr>
<td>10</td>
<td>Metal mining</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Lumber and wood products</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Paper and allied products</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Fabricated metal products</td>
<td>0</td>
<td>41</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Local and interurban passenger transit</td>
<td>0</td>
<td>55</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Motor freight transportation and warehousing</td>
<td>44</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Wholesale trade--nondurable goods</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Automotive dealers and gasoline service stations</td>
<td>60</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>Furniture, home furnishings and equipment stores</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Eating and drinking places</td>
<td>0</td>
<td>47</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>Miscellaneous retail</td>
<td>16</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Nondepository credit institutions</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>Holding and other investment offices</td>
<td>11</td>
<td>13</td>
<td>40</td>
<td>51</td>
</tr>
<tr>
<td>78</td>
<td>Motion pictures</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td></td>
<td>29</td>
<td></td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>
References


(Eds.), European Integration and Global Strategies, (pp. 3-24). London: Routledge.


