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RESEARCH ARTICLE



## Market Size, Legal Institutions, and International Diversification Strategies: Implications for the Performance of Multinational Firms

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### Abstract and Key Results

- Recognizing that country-specific resources are generally difficult to imitate or diffuse across national boundaries, we propose that home country conditions are key determinants of firms' strategic choices. By embracing insights from both institutional economics and resource-based view, we identify two country-level environmental constituents – domestic market size and legal institutions – to examine how these resources influence multinational firms' international diversification strategies. We further propose that home country legal institutions moderate the link between geographic diversification and firm performance.
- These hypotheses are tested with historical data on 435 multinational firms based in 13 developed economies. Results suggest that a multinational firm's degree of international diversification has a U-shaped relationship with the size of the firm's domestic market; firms from civil law countries are more likely to pursue international diversification than their counterparts from common law countries; and the effect of international diversification on firm performance was more pronounced among MNCs from civil law countries.

**Keywords:** Diversification Strategies · Firm Performance · Home Country · Market · Institutions

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## Introduction

The country environment where firms are embedded can substantially influence their strategies and performance (Kogut 1988, Porter 1990). This insight has prompted a growing line of strategic management research (Bensaou/Coyne/Venkatraman 1999, Gedajlovic Shapiro 1998, Khanna/Rivkin 2001, Thomas/Waring 1999), and has been one of the general conclusions drawn from a large number of theoretical and empirical studies (Kogut/Walker/Anand 2002, Makino/Isobe/Chan 2004, Mayer/Whittington 2003, Wan/Hoskisson 2003). Because a firm typically develops within a domestic context prior to expanding abroad, the national home base plays a key role in shaping its approaches to strategy and organization worldwide (Hamilton/Biggart 1988, Kogut/Walker/Anand 2002). Correspondingly, the competitive advantages that firms enjoy internationally may, in fact, reflect the embedded comparative advantages of the countries those firms emanate from (Porter 1991, Shan/Hamilton 1991).

Despite the importance of such country effects, previous studies have mainly focused on industry, corporate, and business unit effects to explain firm strategies and performance (e.g., McGahan/Porter 1997, Rumelt 1991). For instance, the industrial organization economics perspective posits that industry structure is the primary determinant of a firm's strategic decisions and long-term profitability, leading to a prediction that firm performance varies more between, rather than within, industries. By contrast, the resource-based view of the firm suggests that a firm's resources and capabilities are the major sources of its sustainable competitive advantages, leading to a prediction that firm performance varies more between firms than between industries. Although such perspectives have substantially enhanced our understanding of the antecedents of firm strategies and performance, they have concentrated almost exclusively on examining the performance of firms with diversified business units in a single-country context, thus treating country effects as external to firm strategic decision making and performance.

As one excellent exception, Wan and Hoskisson (2003) studied how country environment affects corporate diversification strategies and resulting firm performance. Drawing primarily on arguments from institutional economics (e.g., North 1990), they recognized the varying munificence of different home country environments, especially factors that facilitate transformational activities and institutions that foster transactional activities. Their study of firms from six Western European countries showed that home country environment is indeed an important determinant of corporate diversification strategies and performance.

Wan and Hoskisson's (2003) results suggest two research questions which are the foci of this study: How do country-level market and institutional factors affect a multinational corporation (MNC)'s diversification strategies? And how does the diversification-performance link vary across national settings? Specifically, this study centers on the influence of domestic market size and legal institutions on the geographic diversification strategies of multinationals from different home countries. These two antecedents were selected in an attempt to capture the economic and societal aspects of any opportunity set provided by the home country environment (Arora/Gambardella 1997, La Porta et al. 1997, 1998, Porter 1990). Meanwhile, it is generally agreed that international expansion is an important growth strategy for multinationals (Buhner 1987, Delios/Beamish 1999, Hitt/Hoskisson/Kim 1997, Tallman/Li 1996). Research has shown that it plays a vital

role in determining firm performance and international competitiveness (e.g., Geringer/Beamish/da Costa 1989, Hitt/Hoskisson/Kim 1997, Wan/Hoskisson 2003). Therefore, this study also explores the performance outcomes of international diversification strategy to elucidate the moderating effects of domestic country environment.

This study is organized as follows. The theoretical arguments underlying country differences in firm strategies will be reviewed. Hypotheses concerning country-level influences on MNC international diversification strategies will then be developed. The following sections introduce the data employed and statistical analysis. The final two sections discuss the key findings and their implications.

### **Country Effects on Corporate Diversification and Performance**

The antecedents which lead firms to choose specific diversification strategies and the performance outcomes of those strategies are two core issues in the study of corporate diversification. Findings from previous research suggest that firms may diversify into new markets to reap synergistic benefits (e.g., Rumelt 1974), to reduce overall risk exposure (e.g., Smith/Cooper 1988), to minimize transaction costs (e.g., Buckley/Casson 1976), or to exploit economies of scale relative to firms in foreign countries (e.g., Hymer 1960). Diversification often generates economies of scope in the use of resources (Barney 1991, Prahalad/Hamel 1990), and may improve a firm's return on resource investments while stabilizing cash flow (Kim/Hwang/Burgers 1993). However, diversification also raises governance costs and can thus reduce profits (Jones/Hill 1988). Most previous studies along this line have either focused on firms from a single home country (Makino/Isobe/Chan 2004) or have assumed homogeneity of strategy and structure across firms if multiple home countries were included (Fladmoe-Lindquist/Tallman 1994). These studies have generally paid insufficient attention to the effects of domestic country environments on international strategic choices.

However, some studies have delved into this issue, investigating the influences of domestic country markets and institutions on corporate diversification (e.g., Kogut et al. 2002, Wan 2005) and diversification-performance linkages across countries (e.g., Makino et al. 2004, Wan/Hoskisson 2003). For instance, Kogut, Walker, and Anand (2002) analyzed the diversification patterns of large corporations from five developed economies. The convergence of organizational forms in diverse national settings has been a fundamental theme in comparative cross-country studies, but their results indicated a remarkable divergence in these patterns. They interpreted such institutional variations in terms of the unique interplay of agency and institutions in the context of structurally dictated opportunities for entrepreneurship. They concluded that entrepreneurial diversification decisions are "... neither the outcome of technically given factors nor pressures toward conformity, but a product of reflective actors constrained and enabled by their access to authority, resources, and structural opportunities" (2002, p. 163). From this perspective, if diversification across industries is subject to nation-specific governance and resource constraints, then countries should vary widely in their inter-industry diversification patterns. Given the fixity of certain institutions, even if countries are subject to the pressure of globalization, convergence in diversification patterns is not necessarily to be expected.

In another study, Wan and Hoskisson (2003) compared national environments to examine the relationship between corporate diversification strategies and firm performance. Their results suggest that these relationships hinge on differences in home country environments. Wan and Hoskisson defined the "munificence" of a home country environment in terms of *factors*, such as physical infrastructure, that are used for transformational activities, and *institutions*, such as judiciary efficiency, that facilitate transactions. Factors may be endowed factors such as natural resources, advanced factors such as physical infrastructure, or human factors (particularly labor abundance), but they are mostly tangible in nature. In contrast, institutions might be political (bureaucratic infrastructure), legal (formal rules) or societal (general norms), but they are generally less tangible than factors. A national environment's opportunity set is determined by its production factors and institutions, and firms seek profitable opportunities in the context of the opportunity set (North 1990). Because opportunity sets differ across countries, firms' optimal actions diverge accordingly. In their study, Wan and Hoskisson showed that international diversification aimed at improving competitiveness at home is positively related to firm performance in less munificent home country environments.

These insights complement the resource-based view (RBV) of the firm, which emphasizes firm resources and capabilities in generating competitive advantage (Barney 1991, Rumelt/Schendel/Teece 1991, Tallman/Fladmoe-Lindquist 2002, Wernerfelt 1984). Studies based on the RBV have often argued that heterogeneity among firms results from a unique mixture of physical, human and intangible resources (Mahoney/Pandian 1992). But the origins of these unique resource bundles are rarely explored. Recent studies have suggested that the value of firm resources and capabilities may be determined in part by context (Miller/Shamsie 1996, Priem/Butler 2001). Such studies have extended the RBV to encompass the impact of national origins on the operations of firms in international competition (Bartlett/Ghoshal 1991, Collis 1991). They have postulated that country-specific resources are generally difficult to imitate or substitute across cultural boundaries (Bartlett/Ghoshal 1998, Kogut 1991, Porter 1990). The surrounding domestic cultural and social environments imprint certain perspectives and routines on organizations (Stinchcombe 1965), and the routines further influence managerial capabilities and strategic choices (Nelson/Winter 1982). When competing internationally, firms exploit the skills and routines that have driven their success in the home market (Kogut 1988). Fladmoe-Lindquist and Tallman (1994) have shown that most firms retain their home country identities long after they become MNCs. Hence, home country patterns affect the distribution of firm-specific resources among MNCs competing internationally, playing a vital role in determining their strategies and competitive advantages in international markets (Kogut 1988).

This research examined the effects of domestic market size and legal institutions on firms' international diversification strategies. It was designed in an attempt to explain why MNCs from some countries tend to be more diversified in terms of international scope than those from other countries, mainly from these two aspects. It also sought to explain why certain diversification strategies are more likely to be associated with superior performance in certain home country environments rather than the others, mainly from the legal institution aspect.

## Effects of Domestic Market Size on International Diversification

Mainstream economists emphasize a country's production factors to account for its economic accomplishments (Hirschman 1981). For instance, they accentuate the role of land scarcity in restraining a country's economic growth, or the impact of capital accumulation in promoting long-term economic development. Domestic market size is a vital determinant distinguishing the resources and competencies available to MNCs with different national origins (Rosenberg 1963, Scott/Lodge 1985, Stigler 1951, Wells 1972). Countries with a large domestic market may also have abundant endowed and social resources to increase the minimum efficient scale of industry operation (Krugman 1979), to boost the rate of investment and growth (Porter 1990), and to enhance industry specialization (Rosenberg 1963, Stigler 1951). As an example, a large home market has been suggested as a major advantage for U.S. firms in the aircraft, automobile, computer, and pharmaceutical industries (Chandler 1990), and early home demand for advanced goods has been cited as an advantage for U.S. firms pioneering new products (Vernon 1966).

Arora and Gambardella (1997) have provided a well-developed demand-side explanation for differences in firm competencies by examining the distinctive role of domestic market size. Their central argument is that larger markets, by accommodating a larger number of firms, are likely to have market leaders that are more successful than those in smaller markets. This positive effect, however, was further argued to diminish as a result of increased market competition. Comparing specialized engineering firms from the U.S., Europe and Japan, they found that the beneficial impact of a larger home market was more pronounced for competencies used for producing a relatively narrow range of goods, but less salient in production activities based on competencies applicable across a wide range of products. In contrast with the conventional view that large domestic markets enable firms to benefit from economies of scale, their findings imply that large markets are beneficial even if factors such as economies of scale or learning effects are absent.

Our first task in this research is to explain how domestic market size shapes corporate diversification strategies. Firms based in small countries may be forced to expand internationally (Caves 1996, Dunning 1993). Kogut (1985) argues that international expansion produces economies of scale, scope, and learning. A broad geographic scope of operations should yield a competitive advantage by permitting firms to exploit the benefits of performing more activities internally (Rugman 1981). Porter (1990) has suggested that firms from countries where home demand is growing only moderately tend to expand only incrementally, but are more resistant to embracing new technologies that make existing facilities and people redundant, compared to firms from countries with fast demand growth. Franko (1976) has argued that the small national markets of some European countries induce heavy foreign investment because the narrow domestic market base provides successful firms with only limited opportunities to diversify their risks.

A large domestic market surely brings competitive advantages in industries where there are economies of scale or learning, encouraging firms to invest aggressively in larger facilities, in technology development, and in productivity improvements (Porter 1990). Moreover, local firms often enjoy endowed advantages in serving their home market compared to foreign firms, a result of proximity as well as language, regulation, and cultural affinities. Firms may find home demand more certain and easier to forecast, while

foreign demand may be seen as more uncertain, even if they think they have the ability to fill it (Porter 1990). Therefore, access to a large domestic market size may be associated with weak motivation to invest in foreign markets.

However, when the domestic market is very large, more and more new firms emerge, and competition escalates (Arora/Gambardella 1997). This situation creates pressure to cut prices, improve product performance, and provide new incentives for customers to replace old products with newer versions. Firms face pressure to upgrade and expand, which may result in vigorous efforts to penetrate foreign markets (Porter 1990). Hence, in order to sustain growth, or even to fill capacity, local firms tend to expand internationally and draw resources from their large domestic markets to develop competitive advantage in international markets.

These factors suggest a U-shaped relationship between domestic market size and international diversification. Thus, we hypothesize that:

*Hypothesis 1.* There is a U-shaped relationship between the size of a firm's domestic market and its degree of international diversification.

### **Effects of Legal System on International Diversification**

Researchers in the field of institutional economics contend that in addition to production factors, institutions have an important influence on business activities and economic progress. According to North (1990), institutions are "the rules of the game in a society" which prescribe a country's incentive structure and economic specialization. Without such rules, complex inter-firm transactions would become too costly to complete and business dealings would be restricted to known parties. As one important constituent, legal institutions spell out the formal rules based on which business transactions may take place. Adequate legal institutions enable firms to engage in complex transactions with anonymous parties, thus facilitating production specialization (Greif 1993). And organizations constantly construct rational responses that are themselves modeled after the public legal order (Edelman/Uggen/Erlanger 1999).

It has been amply demonstrated that systematic differences among countries in laws and their enforcement, which are closely related to the historical origin of their laws, account to a large extent for differences in financial development (La Porta et al. 1997, 1998, 1999, 2000). Legal traditions differ in terms of the priority they attach to private property rights and the rights of investors, and the protection of private property rights and investors constitutes an important basis of development. Hence, historically determined differences in legal tradition help explain national differences in financial development and corporate strategies (La Porta et al. 1998).

Two broad legal traditions were compared in this study: civil law and common law. The civil tradition originates in Roman law, uses statutes and comprehensive codes as a primary means of ordering legality, and relies heavily on legal scholars to formulate its rules (Merryman 1969). By contrast, the common-law tradition stems from the law of England. Precedent judicial decisions, as opposed to contributions by scholars, shape common law. It has been suggested that these different legal systems have strong associa-



tions with differences in corporate ownership structure (La Porta et al. 1998, 1999), firm size (Kumar/Rajan/Zingales 1999), efficiency in investment allocation (Rajan/Zingales 1998), and economic growth (Beck/Levine/Loayza 2000). English common law evolved to protect private property owners against the crown, and so facilitates private contracting and financial development (North/Weingast 1989). In contrast, the French and German civil codes were written to solidify government dominance of the judiciary, thus focusing less on private property rights and more on the rights of the government, with negative repercussions on financial contracting (Mahoney 2001). Based on a sample of firms from 49 countries, La Porta et al. (1998) have shown that common-law countries give both shareholders and creditors stronger protection than French-style civil-law countries, with the German and Scandinavian systems somewhere between the two.

How, then, do different legal systems lead to differences in corporate diversification strategies? Corporate shareholders in common law countries generally enjoy more legal protection than those in civil law countries. This leads to them being able to vote by mail, to trade their shares during shareholder meetings, and to be preserved from certain expropriations by directors (La Porta et al. 1998). In countries where the legal system provides only limited protection to investors, the capital markets are likely to be less developed making it costly to obtain external capital. Capital constrained firms in such countries might establish internal capital markets to allocate capital within the firm. La Porta et al. (1997) discuss why that the English legal system provides the most protection to capital providers. If this protection results in a better access to external capital, the benefits of internal capital markets and corporate diversification will arguably be smaller in countries that operate under a legal system with English origins (Fauver/Houston/Naranjo 2003). Consistent with this argument, Fauver, Houston and Naranjo (2003) found that the value of diversification is related to the degree of country's capital market development and legal system. In particular, they found that the value of diversification systematically varies with the legal system: diversification discounts are largest among countries where the legal system is of English origin, and smaller diversification discounts are found in countries where the legal system is of a German, Scandinavian, or French origin.

So better protection of corporate investors and more developed capital markets may imply that firms based in common law countries benefit less from the internal capital market, thus discouraging diversification. By contrast, as a result of poor investor protection and limited external capital market, firms based in civil law countries may have more motivation to diversify to benefit from the internal capital market. Thus, we hypothesize that:

*Hypothesis 2.* MNCs from civil law countries are more likely to pursue international diversification than their counterparts from common law countries.

### **Domestic Resources and the Diversification-Performance Link**

Diversification research has often attempted to associate different performance levels with particular diversification strategies (for reviews, see Datta/Rajagopalan/Rasheed 1991, Grant 1987, Grant/Jammine/Thomas 1988). The costs and benefits of different expansion strategies have been considered as playing an important role (e.g., Delios/Beamish 1999,

Geringer et al. 1989, Geringer/Tallman/Olsen 2000, Hitt/Hoskisson/Kim 1997, Rumelt 1974, Tallman/Li 1996). International diversification enables a firm to realize economies of scale and scope (Caves 1996), to reduce fluctuations in revenue by spreading its investment risks over different countries (Kim et al. 1993), and to increase its market power over its suppliers, distributors, and customers (Kogut 1985). Though MNCs expanding internationally are also confronted with costs due to the liabilities of newness and foreignness in host country markets (Hymer 1960, Stinchcombe 1965), these disadvantages tend to diminish in a learning-by-doing process (Barkema/Vermeulen 1998, Vermeulen/Barkema 2002).

According to the RBV of multinationals, geographic diversification through foreign direct investment can help a firm better exploit its profitable capabilities while protecting them from compromise (Buckley 1988). Scholars favoring a learning perspective emphasize that international expansion through establishing foreign subsidiaries can enhance a firm's knowledge base, capabilities and competitiveness (Barkema/Vermeulen 1998, Zahra/Ireland/Hitt 2000). So the more multinational a firm is, the greater its opportunities to leverage strategic resources and grow through experiential learning, which, in principle, leads to improved performance (Delios/Henisz 2000, Kim et al. 1993, Tallman/Li 1996).

Previous research on the relationship between international diversification and firm performance has been inconclusive and contradictory (Geringer et al. 2000, Grant 1987, Grant et al. 1988, Contractor 2007, Hennart 2007). There is empirical evidence to support a positive linear effect (e.g., Grant et al. 1988, Tallman/Li 1996), an inverted U-shaped effect (e.g., Geringer et al. 1989, Hitt et al. 1997), a U-shaped effect (Lu/Beamish 2001), and even an S-curve effect (Lu/Beamish 2004). An inverted U-shaped effect tends to be shown in studies based on samples of large, well-internationalized firms, while a U-shaped effect has been found in studies of samples of small to medium-sized firms (Lu/Beamish 2004).

Each home country has its own unique resource endowments, including production factors and legal institutions. These differences represent diverse sets of opportunities and constraints for firms, and firms' actions and success are in part dictated by country-level differences in these factors and institutions. Wan and Hoskisson (2003) have systematically examined this relationship. They argued that success in any environment largely hinges on a firm's capability to use the factors and institutions available. Therefore, a low level of international diversification may be more beneficial to a firm in a relatively munificent environment. By contrast, firms in less munificent environments might find it beneficial to diversify into a wider range of geographic markets, as they are compelled to create substitutes for the factors and institutions insufficient in the domestic environment.

Focusing on the legal dimension of the home country institutional environment, we examine how different legal systems may influence the performance outcomes of firms' international diversification strategies. Facing a relatively unfavorable domestic legal environment, a firm may find geographic diversification a relatively attractive way to create substitutes for the lack of legal support. This should lead such firms to make more marked performance improvements as a result of geographic diversification compared to firms based in common law countries. Firms based in common law countries may thus find relatively less benefits in geographical diversity, as the rights of their investors are well taken care of at home. Such financial advantages are amplified in the financial markets of common law countries (La Porta et al. 1997, 1998, 1999). In sum, we antici-



pate the relationship between international diversification and firm performance will vary among MNCs from home countries with distinct legal traditions in the following way:

*Hypothesis 3.* The effect of international diversification on firm performance will be stronger for MNCs from civil law countries than those from common law countries.

## Research Methods

### Sample and Data Sources

The hypotheses were tested using data covering 435 large multinational manufacturing firms based in thirteen developed economies with diverse economic and political environments. The study examined the effects of home country production factors and legal institutions on MNCs' international diversification strategies and their performance, controlling for the effects of industry- and firm-level variables. We applied Stopford's (1989) criterion that a firm is multinational if it has sales or production in at least three foreign countries. (See also Carpenter/Sanders/Gregersen 2001) The data was taken from the third edition of the *Directory of Multinationals* (Stopford 1989), which profiled the world's 450 largest industrial corporations. Each had sales of over one billion U.S. dollars in 1987. From these 450 firms, 15 were eliminated because of unavailable data or because there were fewer than five firms listed from the same home country. Most of the sample firms were based in Japan, Western Europe, or North America, including 59 Japanese firms, 161 European firms, and 192 U.S. firms. The 23 remaining firms were from other developed economies.

Firm-level data were collected from the financial tables of the directory. Diversification data were available only for 1987 in many cases. In balancing sample size against use of multiyear data, we considered that previous studies had used multiple years only to calculate average values and thus chose to go with the largest sample, accepting more noise in the data. Therefore, all dependent and independent variables were for 1987.

### Variables and Measures

*Dependent variables.* Measures of international diversification should reflect the relative size and strategic importance of foreign and domestic operations (Grant et al. 1988, Hitt et al. 1997). Following prior research, *international diversification* was measured as firm sales from foreign operations divided by total firm sales (Geringer et al. 2000, Sullivan 1994, Tallman/Li 1996). While studies have used other measures of international diversification such as foreign asset ratio (Carpenter et al. 2001), country count (Tallman/Li 1996, Wan/Hoskisson 2003), or foreign employee ratio (Kim et al. 1993), the foreign sales measure has been shown to be a reasonable indicator of international diversification (e.g., Geringer et al. 2000, Tallman/Li 1996). Data on foreign and domestic sales were obtained from the aforementioned directory.

Performance is most often measured in diversification studies by profit as a fraction of sales or by a profit to assets ratio. In this study, both return on assets (ROA) and return on sales (ROS) were used as dependent variables. Using accounting measures facilitated comparison with previous diversification studies (e.g., Hitt et al. 1997, Lu/Beamish 2004, Tallman/Li 1996, Wan/Hoskisson 2003). Market based performance measures indicate the stock market's perception of future performance, but their use is premised on the assumption of stock market efficiency, which is likely to differ between different home country environments (Wan/Hoskisson 2003), and thus they were not considered appropriate for this study.

*Independent variables.* Domestic market size was defined at the industry level. For a diversified firm, only home market size in the firm's primary industry was considered. The market size was measured as the industry's production adjusted for imports and exports (Arora/Gambardella 1997, Porter 1990). Home country market size for industry group  $j$  = (total production $_j$  + imports $_j$  - exports $_j$ ). Both the linear and square terms of the market size were included in the analysis. The data for 1987 were drawn from the *Handbook of Industrial Statistics* published by the United Nations (1990).

In order to capture the effect of legal institutions, countries were classified according to their legal traditions, using data for 1987 (La Porta et al. 1998). The sample included 275 firms from common law countries (Australia, 9 firms; Canada, 14; the U.K., 60; and the U.S.A., 192). The 160 firms from civil law countries covered French civil law (Belgium, 5 firms; France, 18; Italy, 5; Netherlands, 8), German civil law (Germany, 29 firms; Japan, 59; Switzerland, 11), and Scandinavian civil law (Finland, 8 firms; Sweden, 25). Civil law dummy variables were created to represent the French, German, and Scandinavian civil law traditions, with the common law countries taken as the reference group for ease of interpretation.

*Control variables.* Industry structure and firm characteristics have been shown to have important effects on corporate diversification and performance. Because the theoretical arguments presented here focus on country-level influences, industry- and firm-level variables were included in the models as control variables. Industry growth was measured as the average annual growth in value of industry shipments over the 1983-1987 period using the data from United Nations (1990). Industry growth was used to capture demand conditions facing a firm, as well as product cycle effects, because firms operating in high growth industries are likely to enjoy better performance (Gedajlovic/Shapiro 1998). In addition, industry fixed effects were also included in the statistical analysis.

Firm size was used to control for scale economies. It was captured by the natural logarithm of a firm's total revenue. Firm leverage was measured as the percentage of long-term debt to total capital (debt plus equity). We also include a firm's degree of product diversification as a firm-level control. *Product diversification* was measured with a Herfindahl-type quantitative index, as used by Grant and his colleagues (1988). It is based on the share of a firm's sales in each four-digit SIC industry (Berry 1975) and empirically defined as  $1 - \sum S_j^2$ , where  $S_j$  was the proportion of a firm's sales reported in product group  $j$ . This measure, therefore, takes into account the number of segments in which a firm operates and the relative importance of each segment (Geringer et al. 2000, Tallman/Li 1996).

**Table 1.** Means, Standard Deviations, and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. International diversification	0.40	0.21	1.0										
2. Product diversification	0.58	0.18	.07	1.0									
3. ROA	4.8	4.5	.06	.01	1.0								
4. ROS	4.4	4.3	.01	-.02	.86*	1.0							
5. Market size	86.9	85.6	-.42*	-.20*	.09*	.01	1.0						
6. Firm size	1.4	0.9	.07	-.11*	-.03	.02	.16*	1.0					
7. Firm leverage	0.3	0.2	-.04	.08	-.35*	-.31*	-.12*	-.08	1.0				
8. Industry growth	5.5	5.0	-.03	.11*	.15*	.1*	.13*	-.07	-.09	1.0			
9. French civil law	0.08	0.3	.24*	.05	-.1*	-.07	-.24*	.11*	.06	-.06	1.0		
10. German civil law	0.2	0.4	.09	.16*	-.34*	-.30*	-.06	.06	.05	.17*	-.16*	1.0	
11. Scandinavian civil law	0.06	0.2	.30*	.12*	-.1*	-.06	-.24*	-.08	.26*	.01	-.07	-.13*	1.0

N = 435; \* Significant at the  $p < 0.05$  level.

## Results

Descriptive statistics and correlations among the variables are presented in Table 1. Hierarchical regression analysis was used to estimate the strength of the relationship between the country-level factors and the extent of international diversification, and also the strength of the correlation of corporate diversification with performance. The results are presented in Tables 2 and 3. The dependent variables are international diversification and firm performance respectively.

Table 2 reports relationships between a firm's home country characteristics and its degree of international diversification. Models 1-3 included the full sample; and models 4-6 employed the sample excluding the US firms. Model 1 and 4 included control variables. Models 2 and 5 added the linear term of domestic market size and legal institutions. Models 3 and 6 added the square term of domestic market size. The significant  $R^2$  differences of models 2-3 and models 5-6 over the respective baseline models with control variables only (models 1 and 4) suggest that the theoretical variables have significant predictive power on top of the effects that have been explored in previous studies.

The results show a U-shaped relationship between domestic market size and international diversification, confirming Hypothesis 1 (Model 3). The inflection point was within the observed range of this independent variable. International diversification first decreases with domestic market size, but after market size reaches a certain point, firms turn to be more likely to be internationally diversified.

The results for home country legal institutions are in line with our expectation as well. The dummy variables for French, German, and Scandinavian civil law countries all showed a positive and significant effect on international diversification (Model 3). Therefore,

**Table 2.** Country Effects and MNC Strategies

Independent variables	International Diversification			International Diversification (excluding US firms)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<b>Domestic market size</b>						
Market size		-.13*** (.01)	-.29*** (.04)		-.26* ** (.05)	-.65*** (.13)
Market size <sup>2</sup>			.06*** (.01)			.24** (.08)
<b>Home country legal institutions</b>						
French civil law		14.1*** (3.48)	11.9*** (3.41)		8.21* (3.98)	6.90** <sup>a</sup> (3.93)
German civil law		2.71 (2.41)	4.78* (2.38)		1.75 (3.73)	4.86 (3.80)
Scandinavian civil law		24.0*** (4.20)	19.9*** (4.17)		16.2*** (4.79)	12.69*** (4.84)
<b>Firm-level control variables</b>						
Firm size	1.33 (1.20)	2.29* (1.02)	2.71** (1.0)	.18 (1.74)	2.16 (1.60)	2.59 (1.57)
Firm leverage	-5.76 (5.82)	-17.5*** (5.0)	-17.8*** (4.87)	-16.4* (7.82)	-23.2** (7.19)	-24.7*** (7.08)
Product diversification	.08 (.06)	-.08† (.05)	-.10* (.05)	-.12 (.09)	-.15† (.08)	-.17* (.08)
<b>Industry control variables</b>						
Industry growth	.43 (.38)	.65† (.38)	.59 (.37)	.14 (.47)	1.22* (.50)	.64 (.53)
Food products	2.16 (3.56)	10.6** (3.42)	10.0** (3.33)	2.32 (4.92)	3.14 (4.67)	10.7* (5.22)
Paper	-2.99 (4.37)	-2.46 (4.01)	.23 (3.94)	3.47 (6.66)	3.77 (6.18)	5.40 (6.09)
Industrial chemicals	5.27† (2.89)	8.17** (2.68)	10.9*** (2.67)	12.4** (4.05)	12.63*** (3.78)	18.2*** (4.13)
Iron and steel	-.67 (3.94)	2.88 (3.65)	3.33 (3.55)	9.88† (5.14)	13.0** (4.82)	13.7** (4.73)
Non-electrical machinery	1.84 (3.18)	12.9*** (3.19)	15.4*** (3.15)	8.41† (4.67)	14.9*** (4.48)	19.5*** (4.65)
Electrical machinery	-.97 (3.88)	6.37† (3.66)	9.16* (3.61)	5.23 (5.45)	13.8** (5.27)	14.6** (5.18)
Transport equipment	-3.61 (3.80)	12.8** (3.98)	7.63† (4.03)	4.01 (5.31)	17.5** (5.49)	21.9*** (5.58)
Model F value	1.29	15.1***	16.4***	1.37	7.08***	7.47***
Model R <sup>2</sup>	.033	.352	.387	.061	.321	.348

Table 2. continued

Independent variables	International Diversification			International Diversification (excluding US firms)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Adjusted R <sup>2</sup>	.007	.329	.363	.016	.275	.301
N	435	435	435	243	243	243

Standard errors are in parentheses.

\*One-tailed test.

†  $p < 0.10$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

MNCs from civil law countries were more likely to be internationally diversified than those from common law countries, confirming Hypothesis 2.

The firm-level control variables also showed the expected relationships (Model 3). Firm size was positively and significantly related to international diversification, while firm leverage had a significant negative impact on international diversification. In addition, firms in industries such as food products, industrial chemicals, machinery, and transportation equipment were more likely to be internationally diversified than those in other industries. The models were highly significant, with model 3 explaining over 38 percent of the variation in the degree of international diversification among the sampled firms based in 13 developed economies.

As noted before, U.S. firms enjoy a notably large home market which equips them with competitive advantages in various business arenas (Chandler 1990). In order to examine the robustness of the above findings, we tested our hypotheses with the sample excluding US firms. The results are shown in Models 4-6. As we can see, they are largely consistent with the findings using the full sample. Therefore, both H1 and H2 are supported with the full sample, as well as the sample excluding US firms.

Table 3 shows the results of regressing MNC performance against international diversification. The two measures of MNC performance, ROA and ROS, gave largely consistent results. Models 7 and 8 tested MNC performance with the overall sample. International diversification showed a positive linear relationship with ROS, but did not show any significant relationship with ROA. In an additional analysis not reported here, no curvilinear relationships of international diversification were found.

Firms from common law and civil law countries were then separated for a similar analysis. The results for MNCs from common law countries are reported as Models 9 and 10 in Table 3. However, international diversification did not show any significant relationship with performance for firms from common law countries. In Models 11 and 12, MNCs from civil law countries were tested. Here, international diversification showed a positive linear relationship with corporate performance. Overall, these results confirmed our Hypothesis 3, that the effect of international diversification on firm performance is stronger for MNCs from civil law countries.

Other control variables also showed interesting results. Firm leverage, for instance, is shown to have a consistent negative effect on MNC performance across countries. In the overall sample, product diversification showed an inverted U shaped relationship with both measures of MNC performance, positive in the first order and negative in the second.

**Table 3.** Product and International Diversification and Corporate Performance

Independent variables	Overall		Common Law Countries		Civil Law Countries	
	ROS	ROA	ROS	ROA	ROS	ROA
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
<b>International diversification</b>	.52* (.24)	.29 (.24)	.48 (.34)	.14 (.34)	.51* (.23)	.44* (.21)
<b>Home country legal institutions</b>						
French civil law	-2.09** (.71)	-2.74*** (.70)				
German civil law	-3.50*** (.48)	-4.11*** (.47)			-1.47** (.47)	-1.25** (.44)
Scandinavian civil law	-.74 (.88)	-1.62† (.87)			.37 (.63)	.12 (.60)
<b>Firm-level control variables</b>						
Firm size	.16 (.22)	.19 (.22)	.01 (.03)	.01 (.03)	.01 (.02)	.01 (.02)
Firm leverage	-6.42*** (1.07)	-7.54*** (1.06)	-8.53*** (1.65)	-10.4*** (1.64)	-3.36*** (.97)	-3.23*** (.92)
Product diversification	.16** (.05)	.15** (.05)	.20** (.07)	.17* (.07)	.03 (.07)	.02 (.06)
Product diversification <sup>2</sup>	-.14** (.05)	-.13** (.05)	-.18* (.07)	-.14** (.07)	-.02 (.06)	-.01 (.06)
<b>Industry control variables</b>						
Industry growth	.13† (.07)	.07 (.07)	.15 (.15)	.06 (.15)	.14* (.06)	.09 (.06)
Food products	-.37 (.69)	1.80** (.69)	-1.07 (.93)	1.46 (.92)	1.83* (.88)	2.82** (.84)
Paper	-.13 (.85)	.93 (.84)	-.37 (1.17)	.85 (1.16)	-.63 (.98)	-.11 (.93)
Industrial chemicals	1.42* (.57)	1.72** (.56)	1.81† (.93)	2.49** (.92)	.92 (.51)	.71 (.49)
Iron and steel	-1.25 (.77)	-1.06 (.76)	-.95 (1.22)	-1.16 (1.21)	-1.35† (.69)	-1.05 (.65)
Non-electrical machinery	-2.15*** (.62)	-1.41* (.61)	-3.4*** (.95)	-2.35* (.94)	-.71 (.57)	-.64 (.54)
Electrical machinery	-1.37† (.76)	-.63 (.74)	-1.94† (1.06)	-1.19 (1.05)	-1.25 (.82)	-.82 (.78)
Transport equipment	-.51 (.74)	.62 (.73)	-.77 (1.30)	.34 (1.29)	-.09 (.62)	.69 (.59)
Number of observations	435	435	275	275	160	160



Table 3. continued

Independent variables	Overall		Common Law Countries		Civil Law Countries	
	ROS	ROA	ROS	ROA	ROS	ROA
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Model F value	10.33***	13.76***	5.39***	6.46***	5.54***	5.24***
Model R <sup>2</sup>	.283	.345	.212	.243	.366	.353
Adjusted R <sup>2</sup>	.256	.320	.172	.201	.30	.286

Standard errors are in parentheses.

<sup>a</sup> One-tailed test.

†  $p < 0.10$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

These are in general consistent with the expectations. This suggests that product diversification and performance are positively associated up to a point, after which increases in product diversification are associated with declining performance. However, the inverted U-shaped relationship between product diversification and MNC performance was found only for common law countries; in civil country sample, no significant relationship was found between product diversification and firm performance. In an additional analysis not reported here, no linear relationship of product diversification was found for civil law countries. Future research is clearly needed to explore these interesting results further.

## Discussion and Conclusions

This study examined country patterns in firms' strategies by delving into specific dimensions of the domestic resource environments within which business firms are embedded. The intention was to go beyond discussing the importance of national origin to firm strategy (Earley/Singh 1995). The results show that home country factors and institutions are strong predictors of international diversification strategies and performance outcomes.

As predicted, international diversification first decreases with the size of a firm's home market, but then increases if the home market size is above a certain threshold. This result suggests that MNCs are highly motivated to expand into foreign markets to seek economies of scale and growth opportunities when confronted with limited domestic market demand, but are less motivated to do so when home market demand is moderate. However, when their domestic market is very large, MNCs are prompted to expand internationally in response to competitive pressures from domestic peers.

The results further show that firms from civil law countries are more likely to pursue international diversification than their counterparts from common law countries. This finding suggests that different levels of investor protection and ownership concentration resulting from different legal traditions may influence firms' diversification decisions and their implementation. Finally, the results show that the effect of international diversification on firm performance was more pronounced among MNCs from civil law countries. This finding implies that historically determined legal traditions not only predict finan-

cial development today (Beck/Levine/Loayza 2000, La Porta et al. 1998, 1999, 2000), but also significantly predict firm-level strategy decisions and their performance implications. These results concerning home country legal environments suggest that there is important background information behind corporate diversification that has not been examined in previous studies.

With few exceptions, most prior studies have assumed away country environmental influences on diversification strategy decisions. This study, by integrating the RBV and institutional economics, has brought together simultaneous consideration of the economy and the law to explain firm capabilities and diversification strategies in different countries. We consider this approach a significant improvement over those of most previous studies in individual country contexts. Our study further builds on recent streams of work which have begun to pay attention to the crucial influences among domestic country markets and institutions with respect to corporate diversification (e.g., Kogut et al. 2002, Wan 2005), and even diversification-performance relationships across countries (e.g., Makino et al. 2004, Wan/Hoskisson 2003). This study has demonstrated not only that country effects exist, but that firm strategies and subsequent performance vary with these dimensional differences in a systematic way. The findings are consistent with previous research contending that although broad performance relationships can be found, these can be expressed very differently in particular contexts (Mayer/Whittington 2003, Thomsen/Pedersen 2000).

This research has accentuated the importance of resources in shaping a firm's core competencies in accordance with the RBV, but it has extended this line of research by focusing on resources available in a firm's national environment (Miller/Shamsie 1996, Priem/Butler 2001, Wan 2005). Recognizing that country-specific resources are generally difficult to imitate or diffuse across national boundaries, we propose that home country conditions are key determinants of a firm's strategic choices and bear importance performance implications for multinationals. The methods developed here provide an excellent opportunity to further develop and refine the implications of the resource-based model in strategy formulation.

This study has attempted to bring together insights from law and finance. Laws differ markedly around the world. Previous research has generally found that countries whose legal rules originate in the common law tradition tend to protect investors considerably more than the countries whose laws originate in the civil law tradition, and especially the French civil law tradition. Being a shareholder, or a creditor, in different legal jurisdictions involves very different bundles of rights, and this study has attempted to show why MNCs from civil law countries are more likely to pursue product and geographical diversification than their counterparts from common law countries. The different diversification-performance relationships apparently applicable to different countries highlight the importance of the legal dimension of an MNC's home environment.

The results of this study confirm that even in the midst of globalization and orientation towards supposedly 'universal best practice', national origin is still a powerful factor. The capabilities of a firm are nested in the wider institutional environment of a country. Firms exploit internationally what they develop domestically, but their capabilities partly reflect skills and institutional strengths originating from their home countries (Kogut 1991). This suggests the importance of considering other institutional

factors which may also have significant effects on the development of the firm and strategy evolution.

Because of the strikingly different portfolios of resources and capabilities that are developed by firms nurtured in different national environments, MNCs competing in international markets need to take their rivals' domestic resource configurations into account when making strategic moves. The resources and capabilities of individual firms are likely to reflect the characteristics of their home national economy, legal system, culture, and society. When facing rivals from the same home country, their resources will originate in the same factor market and institutional environment, therefore any difference in competitiveness should depend primarily on internal investments in firm-specific resources and capabilities. However, when facing rivals based in other countries, the situation becomes more complex. Differences in resources will depend not only on internal resource stocks, but also on resource availability in the different home countries. Hence, this research should prove valuable for international managers, as it may help them to understand and better predict the strategic behavior of their international competitors, as well as the restraints on their own strategic responses.

### Limitations and Future Research

The firms sampled in this study were representative of the world's largest industrial companies in the late 1980s, and constituted a sample similar to others previously used in such research (e.g., Gedajlovic/Shapiro 1998, Kogut et al. 2002, Mayer/Whittington 2003, Thomsen/Pedersen 2000), but they nonetheless represented the institutional context of the period, and this to some extent limits the generalizability of the results. Balancing the advantages and disadvantages of collecting more recent data, it was decided to use 1980s data for an initial test of the country factors and to facilitate comparison with the results of previous studies. For example, Kogut et al. (2002) examined diversification patterns in France, Germany, Japan, the United Kingdom and the United States with 1970s data. Further research is needed to test this framework with more recent data and with a longitudinal design. In addition, while this study focused on large multinational firms across a large number of developed economies, the same country-level factors and institutions may well predict the strategies of firms which are not multinationals. This represents another interesting area for future research.

This study has demonstrated that the development of firms in different countries is predicted by the economic and legal environment. While it is important to consider industry structure as a driver of firm strategy, research on international competition should not underestimate the influence of environmental factors that lie beyond the boundaries of specific industries. Future research should take into account not only the economic and competitive attributes of industries, but also the social, legal, cultural, and political attributes which can be assumed to influence corporate strategy, organization, and management in the global arena (Bartlett/Ghoshal 1991, Wan/Hoskisson 2003). Given the limited validity of extrapolating from one context to another when making predictions about firm strategies and their performance implications, adopting a country-level dynamic perspective in future research would be fruitful.

Although we have shown the importance of domestic market size and legal system classification, future studies might identify additional national characteristics of importance and examine their influences on firms' strategic actions. Other strategic choices can also be studied. For instance, future research might profitably look at why firms based in certain countries invest more in research and development or innovate more than those from other countries. Moreover, since existing knowledge about corporate diversification strategies has primarily been based on developed countries such as the US, the UK and Japan (Wan 2005, Wan/Hoskisson 2003), studies based on a wider range of national contexts, such as those in emerging economies (Hoskisson et al. 2000, Khanna/Rivkin 2001), are needed as well to advance understanding in this area.

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