

Teil A

Strategische Bedeutung

Lateinamerikas

Lutz Kaufmann/Dirk Panhans

A Novel Framework for International Value Creation

An Investigation of Latin American Affiliates

1	Introduction.....	5
2	Framework.....	6
2.1	Research gap	6
2.2	Dimensions.....	7
2.3	Strategic positions.....	8
2.4	Opportunities and barriers.....	10
2.5	Development stages	13
3	Methodology	13
3.1	Focus	14
3.2	Data source	14
3.3	Variable conceptualization	15
4	Results	16
4.1	Region	16
4.2	Countries	18
4.3	Industries.....	20
5	Summary.....	25
6	References	26

1 Introduction

There is a long history of European and U.S. affiliates in Latin America. This article attempts to ascertain the different roles these affiliates play. A new framework is developed that categorizes different choices a company can make in its value creation system and therefore what roles foreign operations can have within a company wide network. A methodology is devised that allows measuring these different roles. Results are discussed with specific focus on wholesale trade, transportation equipment, and electronics in Mexico and Brazil.

Foreign affiliates can take the form of sales offices, represent stand-alone businesses, or be part of a global value chain. On the one hand, sales offices only have operations at the very end of the value chain, including at times after sales services, distribution, marketing and refurbishing. On the other hand, stand-alone businesses comprise all functions from research & development to procurement and production to sales. Finally, affiliates that represent parts of a global value chain may comprise single functions at any point of the value chain and must therefore have resource interdependencies with foreign corporate group members. Procurement offices are an example of this type. Moreover, there are several ways foreign companies may be active in Latin America without actually owning affiliates there. Export partnering, licensing & franchising, as well as subcontracting are such forms.

The role of Latin American operations can significantly differ from country to country or from industry to industry. Consequently, there is not only one management approach towards operations on that continent. Rather, local competitive strategies, corporate governance structures, and monitoring methods all depend on the role these affiliates play within their corporate group. Therefore this article aims at revealing what roles foreign affiliates typically play in Latin America, and what differences exist in specific countries or industries.

This article is structured as follows. In chapter two a new overarching framework is developed that categorizes alternative roles foreign operations may play in the overall value creation system of a company. In chapter three a methodology is outlined that enables the measurement of these roles for different countries and industries. In chapter four the results of this analysis are presented, i.e. what roles are most dominant in Latin America relative to other continents, and what differences there are between specific countries and industries within this region. Whereas the new framework outlined in chapter 2 is directed towards academics and practitioners alike, the methodology of chapter 3 is probably of stronger interest to academics, and the results discussed in chapter 4 are probably more relevant for practitioners.

2 Framework

The development of a novel framework becomes necessary, because existing typologies do not allow for longitudinal analysis, small sample environments, or research efficiency. The novel framework is constructed along dimensions that are easily measurable and that represent the main decision variables concerning the configuration of value creation systems. The combination of these dimensions then leads to a model containing eight distinct strategies, six of which may be roles of foreign operations within a corporate group. Then the opportunities and barriers related to these strategies are discussed and typical developments over time are shown.

2.1 Research gap

A survey of existing literature shows that a new framework needs to be created. There is extensive literature on the roles of foreign operations (for an overview see Harzing 2000). Yet most of it are alterations or empirical testing of one of the three typologies provided by Perlmutter (1969), Stopford and Wells (1972), and Barlett and Ghoshal (1989). Especially the latter framework has been used extensively for empirical testing by the means of large-scale mail surveys (e.g. Roth/Morrison 1990, Leong/Tan 1993, Ghoshal/Nohria 1993, Harzing 2000).

Yet concerning empirical validation and adaptability all these typologies possess three limitations. First, they do not allow for research efficiency in terms of costs and time if their validation is restricted to mail surveys. Second, they do not allow for empirical validation in small sample environments, such as an analysis of a smaller industry or country. Third, they do not allow for proper longitudinal analysis (i.e. analysis over time), simply because managers cannot be asked how they perceived the pressure for localization that rested on their company during each of the preceding 20 years or so. These three limitations are due to the fact that large samples are necessary to test typologies that are based on latent variables. Latent variables cannot be measured directly but require multiple items for measurement. The more items are measured, the larger the sample needs to become (DeVellis 2003).

Yet the aim of this paper is to analyze the role of foreign affiliates in the whole of Latin America as well as in specific countries and industries. The former would be very research intensive with existing typologies, given the large sample of company responses that would be required. The latter would be impossible because there may not be a sufficient number of potential respondents within smaller countries or industries. These barriers can only be overcome by building a new framework on dimensions that can be conceptualized by routinely gathered statistical company data. Sethi et al. (2003) advocate the use of macroeconomic indicators, which represent an aggregation

of business-level figures that are routinely collected. This approach would allow for longitudinal analysis, small sample environments, and research efficiency.

2.2 Dimensions

Besides building on routinely gathered statistical company data, the dimensions of the new framework need to represent the main decision variables concerning the configuration of value creation systems. According to Root (1988), there are three questions concerning such value creation systems: Where to locate value creation, what resource-interdependencies to establish between different locations, and how to structure the ownership of these locations.

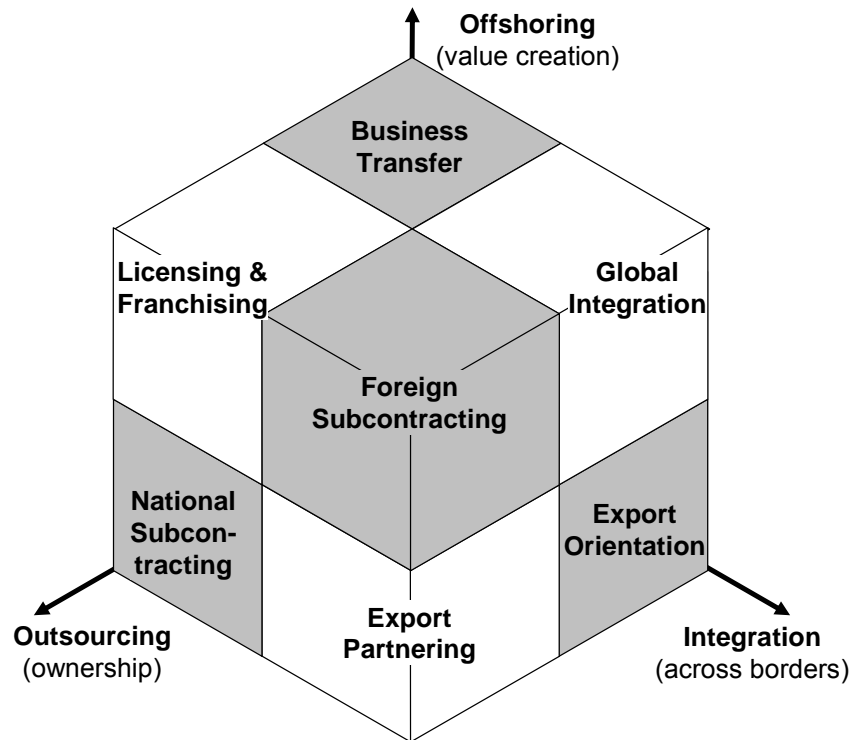
The *offshoring* dimension describes whether a certain step of the value chain is located in the company's home country or abroad. Foreign value creation can be performed in various forms, such as licenses & franchises, joint ventures, and wholly owned subsidiaries, which can in turn be created by mergers, acquisitions, or greenfield development (Meissner/Gerber 1980).

The *integration* dimension describes whether there are resource-interdependencies between different locations. On a binary scale, there are the alternatives of no integration, i.e. the location operates as a stand-alone business or full integration, i.e. there are intensive upstream and/or downstream interdependencies with other corporate group members (Welge 1989).

The *outsourcing* dimension describes the ownership structure of these entities. In reality the ownership may range from wholly owned subsidiaries to equity joint ventures to minority investments to portfolio investments to complete outsourcing. On a binary scale, there are the options of majority owned affiliates with an equity share of at least 50 percent and outsourced operations with less or no equity share. Outsourced operations may apply to support functions (Meier et al. 1997) but also to production itself (Picot 1991) or to any other function such as research & development, procurement, or sales (Hanser 1993).

Combining these three dimensions creates the value creation cube depicted in Figure 1. This systematization reflects two major research questions of international business literature - the research stream concerning the boundaries of the firm (e.g., Buckley/Casson 1976) and the research stream concerning forms of international expansion (e.g., Barlett/Ghoshal 1989).

Figure 1: Value creation cube



2.3 Strategic positions

The value creation cube comprises eight generic positions. The base position of the cube is neither offshoring, integrating, nor outsourcing and so is considered trivial. All other forms describe distinct roles foreign operations can have for a corporate group.

Business Transfer is characterized by foreign operations that are neither integrated into the corporate group network nor outsourced to third parties. The main idea is to replicate the domestic business system abroad in order to exploit firm-specific core-competencies against weaker competitors. As such, this strategy is purely market-seeking. It is often used in case of high trade barriers (Corden 1967) or where high country-specific customization is demanded.

Global Integration is characterized by foreign operations that have intensive resource-interdependencies with the parent company or other corporate group members (Malnight 1996). This strategy builds on the idea of deconstructing the value chain and placing each process step at the ideal location and processing the entire volume there (Hedlund 1986, Barlett/Ghoshal 1989, White/Poynter 1990). The choice of location depends upon location-specific resources, such as low factor costs (e.g. textile manufacturing in India), qualifications and externalities (e.g. pharmaceutical research clusters), or proximity to natural resources, suppliers, and other strategic resources. As such, this strategy is mostly resource- or efficiency-seeking. It allows combining firm-specific with country-specific advantages (see Rugman/Verbeke 2003). Note that for Global Integration, a high share of exports is intra-company.

Export Orientation is characterized by foreign resource interdependencies without actually having proper foreign operations and without outsourcing to other companies. In this case, most value creation is performed domestically yet sales are international. The main focus is on economies of scale, notably the spreading of R&D costs over a larger sales volume. Without the global market, some research intensive products would not even exist, such as research intensive pharmaceuticals.

National Subcontracting is characterized by outsourcing operations domestically without integration across borders. This option is mostly chosen to reduce the depth of value creation in order to concentrate on core competencies (Picot 1991).

Licensing & Franchising corresponds to the strategy of Business Transfer outside the firm. Because operations are simultaneously offshored and outsourced but not integrated with other parts of the firm, it means that a third party operates the entire business system in another country. The goal is to exploit firm-specific core-competencies against weaker foreign competitors without actually having to incur any investments and associated risks and without having to dedicate significant management capacity.

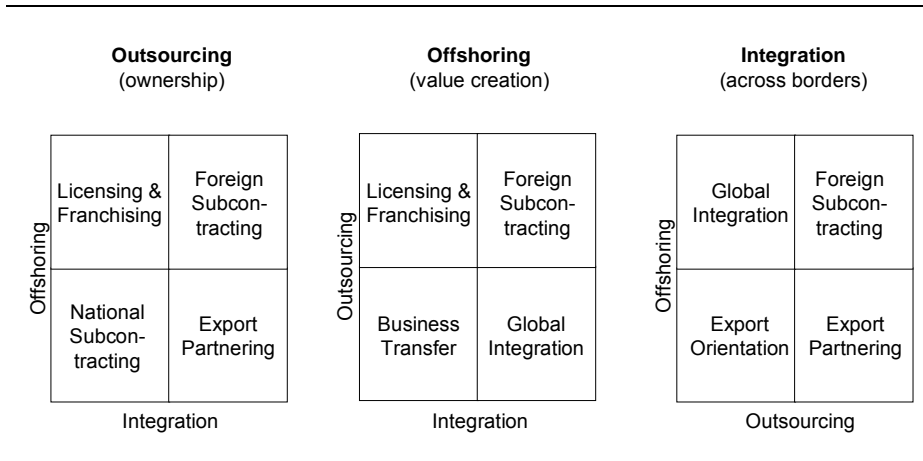
Foreign Subcontracting corresponds to the strategy of Global Integration outside the firm. This requires the outsourcing of activities to a third party, their relocation to another country, and their integration with other activities of the corporate group. Thus this strategy poses the highest challenges, yet it also gives the highest rewards. Specialization advantages of the third party provider are combined with local advantages of the host country and scale advantages of marketing the outcomes beyond the boundaries of the host country.

Export Partnering corresponds to the strategy of Export Orientation outside the firm. This strategy is mostly used in early stages of market development, as it does not require the management capacity needed to establish own export operations. At the same time, the local market knowledge of incumbent sales agents can be exploited.

This categorization also allows to structure different forms of offshoring, integration, and outsourcing. For instance if a company wants to reap the opportunities of out-

sourcing, a vertical cut through the value creation cube shows the four alternatives the company faces (see left matrix of Figure 2).

Figure 2: Dimensions of value creation



2.4 Opportunities and barriers

Specific opportunities and barriers characterize the different strategies as depicted in Table 1. While the set of opportunities is different for each strategy, the barriers run along the three dimensions and can therefore be interpreted as barriers to offshoring, integration, or outsourcing. In the following, first opportunities and then barriers will be discussed.

As the first opportunity, *market expansion* describes the revenue opportunities of foreign engagement. This may be for specific market characteristics such as high market volume or growth, or for more strategic reasons such as product life cycle extension or gaining first mover advantage in market penetration. Especially the diagonally located strategies of Export Orientation, Export Partnering, Business Transfer and Licensing & Franchising exploit this opportunity. Yet practically also the local presence of Global Integration may have some positive market effects.

Table 1: Characteristics of strategic positions

	National Focus	Business Transfer	Global Integration	Export Orientation	National Subcontracting	Licensing & Franchising	Foreign Subcontracting	Export Partnering
Dimensions								
Offshoring		x	x			x	x	
Integration			x	x			x	x
Outsourcing					x	x	x	x
Affected functions								
Sales				x				x
Single other functions			x		x		x	
Entire value chain		x				x		
Opportunities								
Market expansion		x	(x)	x		x		x
Economies of scale			(x)	x	x		x	x
Economies of scope		x	(x)		x	x	x	x
Economies of location			x				x	
Barriers								
Transfer barriers		x	x			x	x	
Trade barriers			x	x			x	x
Control barriers					x	x	x	x

Second, *economies of scale* are decreasing unit costs at higher output due to the spreading of fixed costs (notably in research & development), increasing efficiency (e.g. in production), or faster learning curve effects (see Buckley/Casson 1976, Caves 1971). Yet also the extended bargaining power towards suppliers resulting from higher procurement volume belongs to this category. Scale may be achieved by pooling volume across countries as in Export Orientation or Global Integration. Yet it can also be achieved by pooling volume across companies as in National and Foreign Subcontracting and Export Partnering. The strategies of Business Transfer and Licensing & Franchising, however, do not profit from economies of scale, as only local volume is processed in each country and as licensed or franchised operations are usually not integrated with other operations of the contractor.

Third, *economies of scope* arise when different regions or divisions share common competencies or overhead functions. The concept mainly builds on the idea of utilizing firm-specific core competencies in other countries or promoting managerial learning by having a multi-country presence (Tallman/Fladmore-Lindquist 2002). Accordingly,

only strategies with offshoring and/or outsourcing exploit this opportunity, i.e. all strategies but the base case and Export Orientation.

Fourth, *economies of location* exploit local advantages of the host country in performing certain steps of value creation, such as low factor costs, local skills and knowledge, spillover-effects in industry clusters, or proximity to natural resources or key suppliers. Such characteristics of host countries can only lead to a competitive advantage for firms if they are transferred abroad. Ghemawat (2003) refers to this as the arbitrage function of the firm. Only Global Integration and Foreign Subcontracting exploit this opportunity, as these are the only strategies that combine offshoring to other countries and integration across borders. Please note that absolute (Smith 1776) rather than relative national advantages (Ricardo 1817) are relevant from a business perspective.

This categorization of opportunities is designed to be mutually exclusive and collectively exhaustive. Learning effects, often mentioned in international business literature, are not considered an extra category in this article, as learning is already included in the other types. Economies of scope, for instance, include the firm wide utilization of core competencies. Economies of scale include the spreading of research & development costs across countries and the acceleration of learning through learning curve effects. Economies of location include the internalization of local knowledge and knowledge-spillovers from other companies in clusters.

Concerning barriers, *Transfer barriers* are associated with the offshoring dimension. These may include managerial difficulties of transferring and coordinating processes or knowledge (Kim et al. 2003), disadvantages in the business environment of the host country, or host country discrimination against foreign firms. In general this also holds true for outsourced operations.

Trade barriers are associated with the integrating dimension. These may include discriminations against trade such as tariffs, quotas, or local content requirements, external limitations such as transportation costs, exchange rate effects, or differing customer preferences, as well as general managerial difficulties of coordinating such activities across countries.

Control barriers are associated with the outsourcing dimension. They are characterized by a general loss of power, a growing dependence upon the outsourcing partner, a need for profit sharing, a loss of know-how, and associated risks.

These opportunities and barriers determine the choice of strategic posture. Some of them are largely country-specific, such as market expansion opportunities, economies of location, trade barriers, and some transfer barriers. Others are largely independent from country characteristics such as economies of scale, economies of scope, and control barriers. Yet also these may differ across countries. Thus it is to be expected that the roles of foreign affiliates in Latin America differ from those in other regions and that they also differ between different countries within Latin America.

2.5 Development stages

The choice of strategic posture within the value creation cube does, however, not only reflect the various opportunities and barriers associated with each position, but also the development stage of international expansion of the respective companies (Meissner/Gerber 1980).

Market-seeking companies may start with either Licensing & Franchising or Export Partnering as forms of market expansion that do not require much management capacity. If a market becomes sufficiently developed, the company may choose to open an own sales office to gain control over the export business (Export Orientation). From then on, more and more functions may be added, starting from distribution, marketing and after sales services and then adding refurbishing facilities and later more elements of production. When all business functions are transferred a Business Transfer is achieved. If functions are only added selectively, this may lead to Global Integration.

Resource- and efficiency-seeking companies may start with separating certain parts of their value creation system and outsourcing them to a nearby subcontractor for efficiency reasons (National Subcontracting). If this first step is successful and further potential lies in economies of location, that company may later transfer this part of value creation abroad (Foreign Subcontracting). Value creation steps that are too critical for outsourcing may be directly transferred abroad but kept within the boundaries of the firm, resulting in Global Integration.

This discussion of development stages shows that also the novelty of activities in a region may have an effect on the role of foreign affiliates there. Yet this argument is less applicable for Latin America as there has been a long presence of foreign companies there.

3 Methodology

In the previous chapter, a framework has been introduced that allows for a research efficient analysis of the roles foreign affiliates typically play in Latin America and of related differences in various countries and industries. This chapter will describe the focus of our analysis, the data source that has been used, and the conceptualization of variables that makes our framework measurable by the given data. This is to give an understanding how we reached the results that are discussed in the next chapter.

3.1 Focus

For reasons of research efficiency, the analysis of this paper is limited to a static, macroeconomic perspective on intra-company data.

A static perspective means that we only examine the data for one year rather than performing a longitudinal analysis. Both the framework and the available data would allow for such an analysis over time, yet the primary concern of this article is to ascertain the different roles Latin American affiliates play for foreign companies today. Therefore, the longitudinal analysis is left for future research.

A macroeconomic perspective means that we base our analysis only on aggregated data. We do so because such aggregated data is more comprehensively available and gives a better overview over trends than single company data (Sethi et al. 2003).

An intra-company perspective means that we restrict our analysis to intra-company forms of expansion, thereby neglecting all positions that involve outsourcing. This is the most restrictive focus of the three, because according to Buckley and Casson (2003), contractual alternatives to international expansion are of growing importance. Yet we do so for reasons of research efficiency and because the intra-company forms of international expansion still dominate today.

The focus on expansion strategies within the boundaries of the firm reduces the value creation cube to the matrix depicted in Figure 3. Because Licensing & Franchising, Export Partnering and both forms of subcontracting have been eliminated, the scope of this analysis is limited to the activities of parent companies and their majority owned foreign affiliates (MOFAs). Those affiliates can take the form of joint ventures and wholly owned affiliates created by mergers, acquisitions, or greenfield investments.

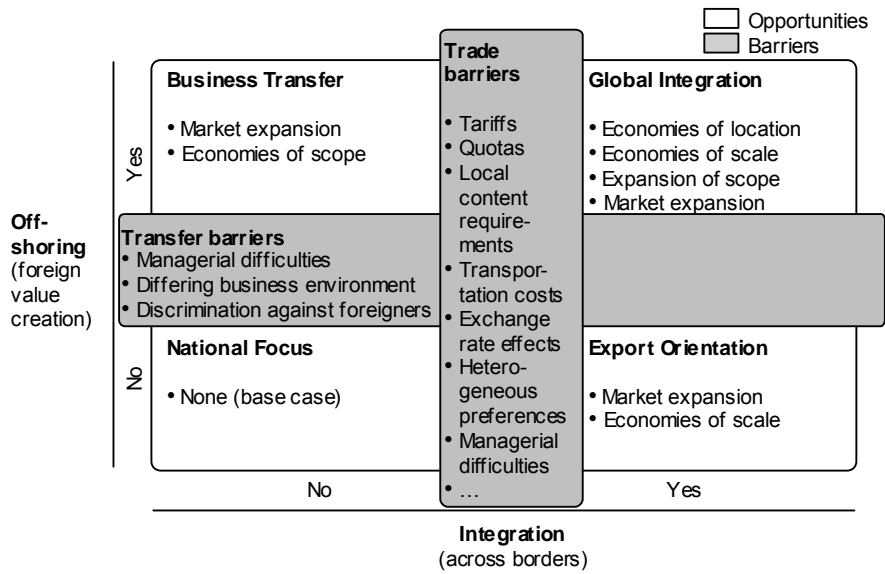
3.2 Data source

A database provided by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce (BEA 2003) offers detailed information on the operations of non-bank U.S. parent companies and their MOFAs. We have selected the most recent data set, which was the preliminary data for 2001.

This data source has the limitation that it only refers to U.S. companies and their MOFAs. U.S. firms differ from other nationalities in their means to international expansion due to the effect of big countries (Ruigrok/Wagner 2003). Moreover, Latin America has a special importance to U.S. companies due to its geographical proximity. But U.S. firms constitute a good starting point for analysis, as 40% of the world's top 2000 companies are U.S. based (in terms of market value at the end of 2002, see Bloomberg 2003). Moreover, comparable data is not available for most European countries.

The data is analyzed on a country by industry basis. Industry detail is available for 14 industries and a residual category. Country detail is available for all Latin American countries including Western Hemisphere countries such as the Dominican Republic. Barbados, Bermuda and the United Kingdom Islands in the Caribbean were excluded from analysis because they mainly function as tax-saving investment vehicles for U.S. companies. Concerning the industry detail, the categories of the North American Industry Classification System (NAICS) used by BEA in 2001 exhibit a granularity of 15 industries. On the level of single countries by industries, some of the data has been suppressed by BEA to avoid disclosure of individual company data. Therefore there are some gaps in Figures 6 and 7.

Figure 3: Forms of international expansion



3.3 Variable conceptualization

This section explains how variables have been conceptualized to make our framework measurable by the given data. Three variables that matter for our analysis are the total of foreign activities, the distribution of strategies, and the foreign performance.

The *total of foreign activities* is measured by gross product (GP). The GP is the company-level value added that aggregates to the gross domestic product (GDP). It can be calculated by either adding up profits earned in production and all costs incurred except for intermediate inputs, or by subtracting intermediate input from gross output. The clear advantage of this measure is that no double counting can occur because the value of intermediate products is subtracted. This is especially relevant in case of resource-interdependencies, because there high levels of intra-company trade raise the error of double-counting. The total of foreign activities consists of the GP of all foreign affiliates plus the export share of the GP of the parent company.

Accordingly, the *distribution between strategies* is conceptualized by the distribution of GP between the parent and MOFAs and between local sales and exports. The GP that can be attributed to Export Orientation is the GP of the parent company multiplied by its export share. In analogy the GP of Global Integration equals the GP of all MOFAs times their export shares, and the GP of Business Transfer is the remaining GP of MOFAs. The share of National Focus is neglected from further analysis, because we want to analyze the distribution of strategies from the perspective of Latin America as a host region.

Similarly, *foreign performance* is measured by the ratio of MOFAs' net income to their GP. The performance contribution of Export Orientation is neglected because confounding effects of the parent company's domestic performance would be high. Thus our measure of foreign performance only represents the performance of affiliates subject to Business Transfer or Global Integration.

4 Results

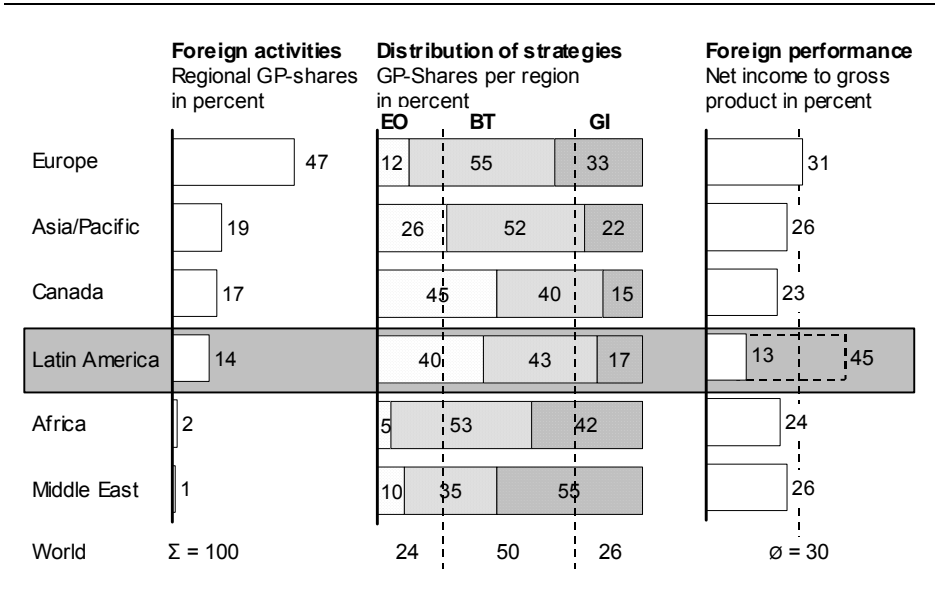
The BEA database has been analyzed according to the framework presented earlier to answer the questions of what affiliate roles are most dominant in Latin America relative to other continents and what differences there are between specific countries and industries within this region.

4.1 Region

Figure 4 illustrates the position of Latin America in the world with respect to the total volume of foreign activities, the distribution of roles foreign affiliates have there, and the performance of those. The bars on the left hand side show that Latin America ranks only before Africa and the Middle East in terms of U.S. foreign activity. The

distribution of strategies shows that on average across all industries and countries, Latin America is subject to a high proportion of Export Orientation (40 vs. 24 percent) and a very low proportion of Global Integration (17 vs. 26 percent). In terms of performance, Latin American activities rank last.

Figure 4: Latin America in the world, 2001



The high proportion of Export Orientation and the low proportion of Global Integration mean that foreign companies regard Latin America mostly as a sales market rather than a production platform. This is biased by the fact that only activities of U.S. companies have been analyzed. Because Latin America is very close to the U.S., physical trade barriers between Latin America and the U.S. are lower, so that U.S. companies can easily serve the Latin American market from their domestic production platforms. This argument is further supported by the fact that Canada as another neighboring country of the U.S. shows a very similar structure in terms of strategy distribution. In contrast, the distance to Europe seems to create trade barriers so high that separate production platforms are created there, as is indicated by the high shares of Business Transfer and Global Integration of U.S. companies in Europe.

In terms of performance, the first striking observation is that foreign activities possess a much higher average ratio of net income to gross product. Foreign operations subject to Business Transfer or Global Integration show average rates of 30 percent, as can be seen in Figure 4. This compares to a ratio of only six percent for U.S. businesses pursu-

ing a National Focus or an Export Orientation, as a different analysis of the data provided by BEA shows. This may be due to tax-minimizing intra-company transfer pricing practices that transfer profits to foreign operations subject to lower tax rates. From the perspective of economic value added this may also be due to the fact that higher risks usually involved in foreign operations require a higher average rate of return in order to be favorable over domestic investments. But part of the discrepancy may also be due to the fact that companies have not yet fully exploited the potential that lies in the economies of location of foreign operations.

Excluding the investment vehicles Barbados, Bermuda, and the United Kingdom Islands in the Caribbean from analysis, foreign operations in Latin America have the lowest average performance relative to other regions in 2001. This may be due to the geographical proximity of Latin America to those investment vehicles. Including them in the analysis catapults Latin America to first rank in terms of performance as indicated by the dotted bar in Figure 4. Yet another explanation may be the unfavorable macroeconomic environment in Latin America. For example, Argentina was struck by a financial crisis in the end of 2001, and countries like Venezuela, Bolivia, and Peru have fallen into political crises since then. In contrast, Chile for instance has been a country with a rather stable economic performance over time.

Foreign companies seem to be reluctant to shift their activities to Latin America; this market is mostly served by Export Orientation. This is because companies adjust their share of Business Transfer and Global Integration towards a region according to the performance of foreign operations there. This is supported by a comparison of the four largest regions in terms of foreign activity. Europe, exhibiting the highest performance, also receives the highest shares of Business Transfer and Export Orientation, whereas Latin America, exhibiting the lowest performance, also receives one of the lowest shares.

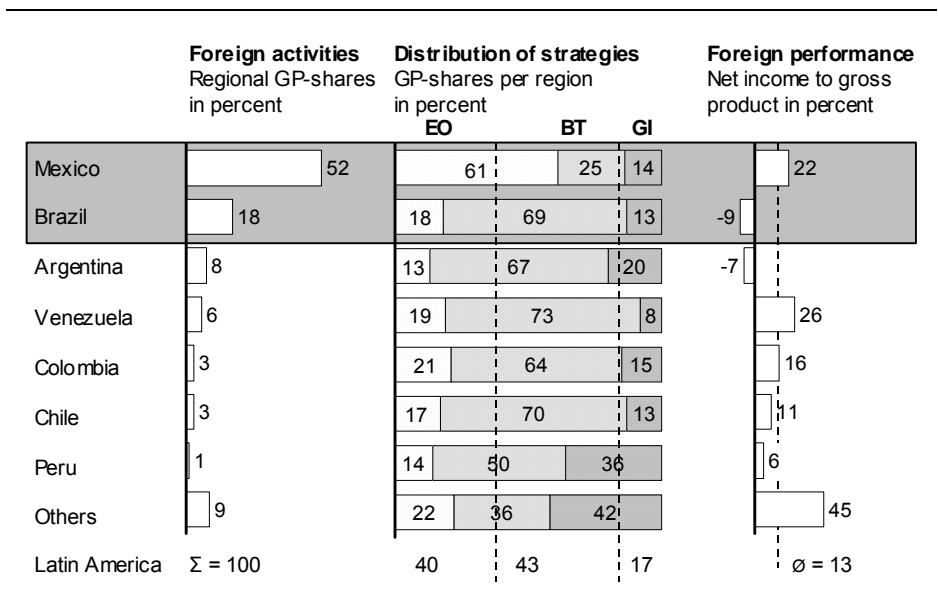
In conclusion, Latin America is a region that receives a relatively low share of total foreign activities, which is to an unfavorable macroeconomic environment that does not allow for high business performance. Accordingly, Latin America serves mostly as a sales market rather than a production platform for U.S. companies.

4.2 Countries

Figure 5 displays the country composition of Latin America in terms of total volume of foreign activities, predominant roles of foreign affiliates, and performance. The bars on the left hand side indicate that more than two-thirds of total foreign activity is concentrated on only two countries, Mexico and Brazil. Moreover, these two countries significantly differ from each other in terms of the roles affiliates of foreign companies play

there and in terms of performance. Therefore, the following analysis will focus on Mexico and Brazil.

Figure 5: Countries within Latin America, 2001



The high share of foreign activity directed towards Mexico is most probably due to the data bias that only foreign activities of U.S. companies have been analyzed. Mexico has a direct land border with the U.S. and is part of the common North American Free Trade Area (NAFTA). This proximity may explain not only the high total of foreign activity but also the high share of Export Orientation. Also, foreign operations in Mexico are characterized by borderline production. The much higher ratio of Global Integration to Business Transfer relative to Brazil means that foreign production in Mexico is mostly directed towards the U.S. market, whereas Brazil is subject to local activities. This argument is further supported by the fact that nearly 80 percent of exports of U.S. affiliates in Mexico go to the U.S., whereas this figure only amounts to 20 percent for Brazil and to 30 percent on world average. Concerning performance, the foreign operations in Mexico lie well above the Latin American average, which may as well be attributed to Mexico's NAFTA membership. Thus overall, Mexico much more resembles the other NAFTA member Canada than other Latin American countries in terms of total volume of foreign activities, roles of foreign affiliates, and performance.

Brazil, not sharing a border with the U.S. and not being a NAFTA member is subject to much less Export Orientation than Mexico. Yet Brazil also exhibits a lower share of Global Integration, as foreign production there is mostly directed towards the local market. The fact that Brazil is subject to only few Export Orientation and Global Integration means that foreign activities in Brazil are still mostly operated as isolated local production platforms. This is mostly due to high trade barriers such as exceptionally high import tariffs, local content requirements of up to 60 percent, and the high exchange rate volatility since the floating of the Brazilian Real from 1999 onwards. Since 2001, however, the extension of bilateral agreements and the further devaluation of the Real has led to increasing shares of Global Integration.

The *remaining* Latin American countries attract only little foreign activity, are similar to Brazil with respect to the distribution of strategies, and have an average performance of foreign activities more resembling that of Mexico. Concerning the distribution of strategies, Peru and "Others" attract exceptionally high levels of Global Integration, which is mainly due to natural resources in mining. Relative to the world average, Argentina, Venezuela, Colombia, and Chile attract higher shares of Business Transfer at the expense of Export Orientation and Global Integration. Thus foreign companies do not much use cross border synergies between them. This is, however, changing with the ongoing integration within the South American Common Market Mercosur. In the future, closer cooperation with the European Union and the potential creation of the Free Trade Area of the Americas (FTAA) may further promote Export Orientation and Global Integration towards these Latin American countries. Concerning performance, Argentina scores low due to its financial crisis in 2001. Venezuela and Colombia score high, mostly driven by mining and chemicals.

In conclusion, foreign activities in Latin America are largely concentrated on Mexico and Brazil. Mexico plays a special role as both sales market and borderline production site due to its proximity to the U.S. and its NAFTA membership. Brazil and other Latin American countries are subject to an exceptionally high proportion of Business Transfer, which can be attributed to high trade barriers.

4.3 Industries

In this section, the total volume, the strategy composition, and the performance of foreign activities is analyzed on the industry level for the whole of Latin America as well as for Mexico and Brazil. First a short overview over these aspects is presented. Then three industries with special importance to Latin America are discussed in greater detail.

Figure 6: Volume of foreign activities per industry, 2001
(Regional gross product shares in percent)

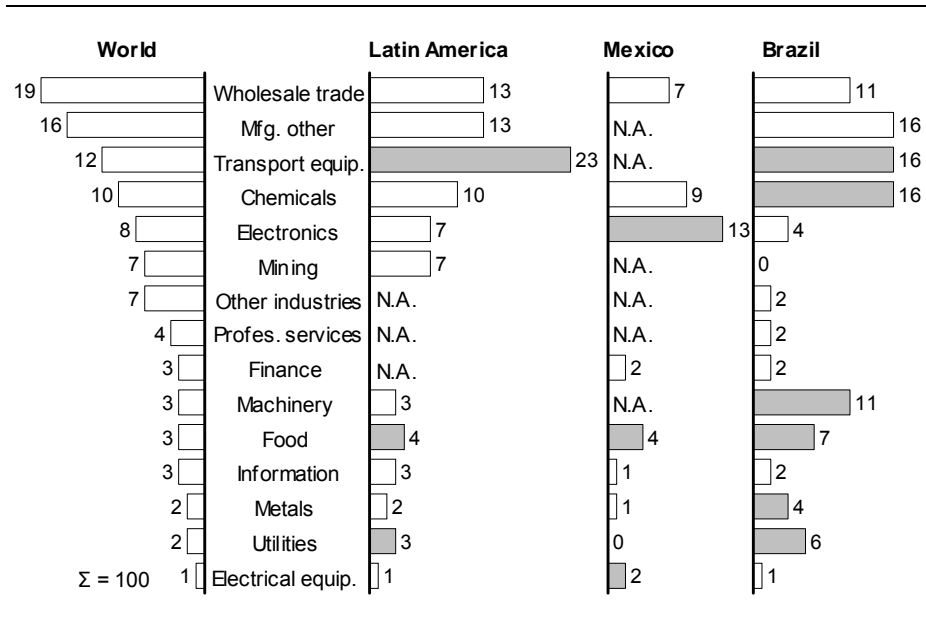


Figure 6 illustrates the industry composition of foreign activities in terms of regional gross product shares. The bars on the left hand side rank the industries according to their worldwide composition. This rank order is also maintained on the following figures. The bars on the right hand side compare the industry structure of foreign activities in the whole of Latin America as well as in Mexico and Brazil. When a bar on the right hand side is longer than that for world average, it means that this industry is more important in that region or country with respect to foreign activity. Cases where this importance deviates by more than 30 percent are shaded gray. Whenever there is a *N.A.* instead of a number, it means that some variable needed for calculation is not disclosed. Because BEA does this in order to keep the confidentiality of single company data, this is an indication that foreign activity of one kind or the other is concentrated on one company only.

Wholesale trade and other manufacturing as the most common foreign activities from a worldwide perspective are underrepresented in Latin America in favor of transportation equipment, food, and utilities. Mexico shows a noteworthy strength in electronics, which will be more closely examined later in this chapter. Brazil peaks in many industries, such as in transportation equipment, chemicals, machinery, food, metals, and utilities. This high number of differences indicates that Brazil very much differs from world average in the structure of foreign activities.

Figure 7: Distribution of strategies per industry, 2001
(Gross product shares per industry in percent)

World			Dominant Strategy			
EO	BT	GI		Latin America	Mexico	Brazil
37	42	21	Wholesale trade	GI	EO	BT
11	66	23	Mfg. other	EO		
51	22	27	Transport equip.	EO		BT
21	47	32	Chemicals	BT	EO	
42	19	39	Electronics	EO		BT
2	56	42	Mining	EO		
9	82	9	Other industries			
4	78	18	Profes. services			BT
0	70	30	Finance			BT
29	41	30	Machinery	EO		EO
17	60	23	Food	GI	BT	GI
3	79	18	Information			
20	42	38	Metals	EO	EO	
0	97	3	Utilities		BT	BT
26	36	38	Electrical equip.	EO		BT
24	50	26				

EO = Export Orientation, BT = Business Transfer, GI = Global Integration

Figure 7 illustrates the distribution of strategies and the respective roles foreign affiliates play in each industry. Again, the left hand side represents the world average for foreign activities. The right hand side shows what strategies differ most for the respective industries in the whole of Latin America, Mexico, and Brazil. Wholesale trade in Latin America, for instance, possesses a higher share of Global Integration than on world average. The shadings indicate the magnitude of this difference. A light gray indicates a difference of over 15 percent, a dark gray of over 30 percent. There are many omissions. They stem from the unavailability of data and signify that in at least one strategy, foreign activity is concentrated on one company only.

On world average, half of foreign activities are devoted to Business Transfer and a quarter each to Export Orientation and Global Integration. This means that foreign affiliates import as much from their parent companies as they export back home or to third countries. Yet this distribution varies for different industries. An above-average share of Export Orientation characterizes scale industries such as transportation equipment, electronics, machinery, chemicals, and metals. Barriers also affect the distribution of strategies. While scale is probably at least as important for chemicals as it is for transportation equipment, chemicals show a much lower rate of Export Orientation. This difference is due to the higher trade barriers for chemicals in terms of bulkier

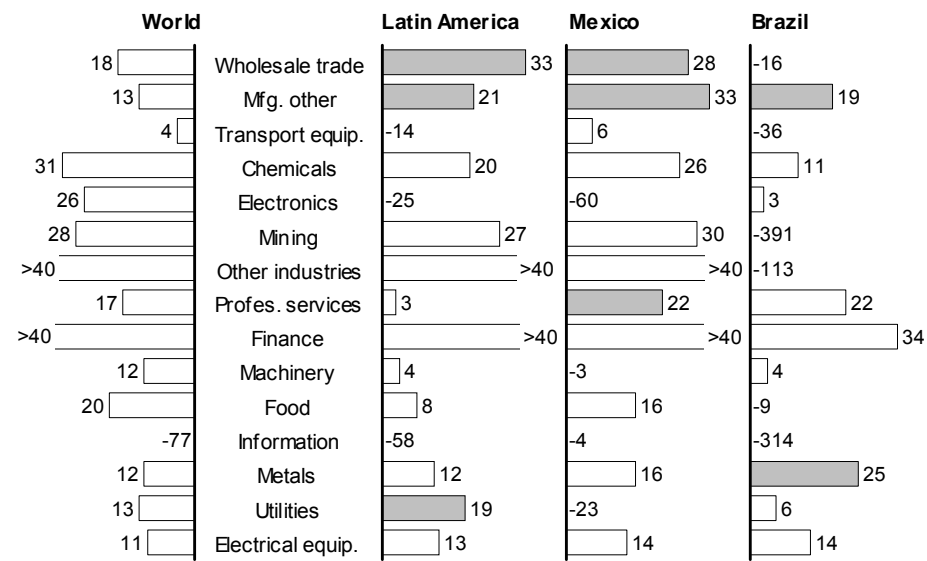
or more hazardous freight. The high share of Export Orientation in wholesale trade signifies that U.S. trading companies focus on exporting U.S. goods, most probably due to scale effects in other U.S. industries. High shares of Business Transfer are mostly caused by high trade barriers, such as transportation difficulties in utilities, location specificity in information (e.g. newspapers) and professional services (e.g. law firms), or putridness in the food industry. High shares of Global Integration arise in industries that profit from both economies of scale and economies of location. In mining, metals, and chemicals, these economies of location may be caused by closer proximity to natural resources, whereas in electronics and electrical equipment they are probably driven more by local factor cost advantages.

In *Latin America* overall, especially transportation equipment and electronics attribute to the overall high share of Export Orientation described earlier. The high share of Export Orientation towards *Mexico* is well reflected in wholesale trade and metals. *Brazil* differs very much in terms of strategy composition. The high levels of Business Transfer in many industries signify that many foreign companies have separate production platforms in Brazil that due to high trade barriers only serve the local market. High exchange rate volatility is the cause in transportation equipment, electronics, and electrical equipment. Linguistic and cultural differences represent important trade barriers in professional services and finance.

Figure 8 illustrates the performance of foreign operations in terms of net income to gross product. The hitherto industry order that reflects the total volume of foreign activities is maintained. Whereas performance is not comparable across industries due to industry-specific margins and depths of value creation, it may well be compared across regions or countries. Industries where Latin America as a whole, Mexico, or Brazil have performance ratios of 10 percent or more above world average are shaded gray. Wholesale trade and other manufacturing, both underrepresented in foreign operations in Latin America, have above average performance there. This indicates low competition intensity and therefore further potential for foreign operations in Latin American wholesale trade and other manufacturing. Moreover, foreign activities show above average performance in Latin American utilities, Mexican professional services and the Brazilian metal industry.

Wholesale trade ranks first worldwide in terms of total volume of foreign activities. It mainly represents forms of international activity outside the boundaries of the firm. High levels of Export Orientation, for instance, signify that U.S. companies of other industries indirectly export their goods via U.S. trading companies. In Latin America, Mexico, and Brazil, wholesale trading is underrepresented in foreign activities, yet especially Latin America as a whole and Mexico in particular show productivities well above industry average. This may indicate further untapped potential of foreign activities there. Mexico is subject to especially high levels of Export Orientation, because other U.S. industries mostly export to Mexico via trading companies, whereas trade related to Global Integration is mostly achieved within the boundaries of the firm.

Figure 8: Foreign performance per industry, 2001
(Ratio of gross product to net income in percent)



Concerning *transportation equipment*, Latin America shows exceptionally high levels of foreign activity, which is mostly driven by Mexico and Brazil. In Mexico this high level is mostly driven by border-zone production for the U.S. (i.e. Global Integration), in Brazil it is mostly driven by Business Transfer, and for the remaining Latin American countries it mostly consists of Export Orientation by foreign companies. Concerning passenger car production, for instance, Mexico and Brazil are very similar in terms of total production volume, yet significantly differ in terms of exports and productivity: Mexico exports three-thirds of its production and performs better than world average, whereas Brazil exports only one-third of its production and falls way behind world average in terms of financial performance in 2001. Mexico's high level of Global Integration and performance in transportation equipment can be traced back to the long history of foreign companies in Mexico and its growing integration in NAFTA. The U.S. original equipment manufacturers (OEMs) Ford and GM entered Mexico already in the 1920s and 30s, and NAFTA export tariffs for light vehicles of 70 percent in 1993 have been eradicated altogether. Brazil's high levels of Business Transfer in 2001 stem from high trade barriers such as exchange rate volatility, local content requirements, and tariffs on the import of intermediates. As a result, traditional automotive export markets such as Argentina and Europe broke away at this time. Since then, however, bilateral trade agreements have helped restore automotive exports from Brazil, so that

the share of Global Integration is on the rise again. The very bad financial performance of foreign transportation equipment manufacturers in Brazil in 2001 can be traced back to a very low utilization ratio of only 57 percent, which was caused by a strong capacity buildup from 1994 to 2000 that was based on overoptimistic growth expectations and government incentives (McKinsey Global Institute 2003).

Electronics and *electrical equipment* are overall characterized by very high levels of Global Integration. Especially Mexico profits from this situation, as it functions as a border-zone producer for the U.S. market. Intermediates mostly sourced from Asia and the U.S. are assembled in Mexico due to lower factor costs and then sold to the U.S. whereas the volume of foreign activities in Mexico is high for both electronics and electrical equipment, the performance of foreign electronics companies is well below world average there. This may in part be due to tax-minimizing transfer-pricing practices; yet it can also be attributed to a productivity gap in Mexican electronics. According to the McKinsey Global Institute (2003), Mexico's productivity lacks more than 75 percent behind Korea and also still far behind other electronics producers such as Malaysia and Brazil.

5 Summary

A new overarching framework has been developed that categorizes alternative roles foreign operations play in the overall value creation system of a company. Then the roles Latin American affiliates play within foreign group companies have been analyzed using 2001 data of U.S. parent companies and their MOFAs. This data has then been analyzed concerning what roles are most dominant in Latin America, what differences exist between countries within Latin America, and how these roles differ between various industries.

Overall, Latin America functions as a sales market rather than a production platform for foreign companies. This can be largely attributed to the low performance of foreign operations in Latin America. Yet the two largest Latin American countries in terms of attracted foreign activity differ largely both in their function and their business performance. Mexico, on the one hand, largely profits from its proximity to the U.S. and its NAFTA membership. It is the biggest Latin American country in terms of attracted foreign activity, it functions both as a sales market and a production platform for U.S. companies, and foreign affiliates in Mexico show one of the highest overall productivities on the continent. Mexico especially profits from its border-zone production in transportation equipment and electronics, and still has seemingly untapped potential in wholesale trading. Brazil, on the other hand, is rather isolated by trade barriers in 2001, and therefore attracts mostly foreign companies that transfer their entire busi-

ness to satisfy local demand. Since then, however, there has been a tendency towards higher levels of Global Integration. Concerning financial performance, foreign businesses are losing money in Brazil. This is exemplified by the transportation equipment industry, which suffers from tremendous overcapacities but still does not manage to sufficiently expand its markets abroad. In the future, a turnaround of foreign affiliates in Brazil may be achieved if they are more closely integrated with the operations and markets of neighboring Mercosur countries.

While addressing the roles of foreign affiliates in Latin America, this analysis raises further questions concerning the general linkage between environmental determinants, strategy, and performance. Therefore, future research in this field should be focused on the impact of macroeconomic conditions and industry characteristics on the strategic choices of foreign companies and the resulting roles of foreign affiliates. Moreover, success factors should be explored that make foreign affiliates successful in their respective roles.

6 References

- Barlett, C. A., Ghoshal, S. (1989), *Managing Across Borders. The Transnational Solution*, Boston.
- BEA (ed.) (2004), *International Accounts Data*, Washington, DC.
- Bloomberg (ed.) (2003), *Market Data*, URL: www.bloomberg.com (as of Dec 5th 2003).
- Buckley, P. J., Casson, M. C. (1976), *The Future of the Multinational Enterprise*, London.
- Buckley, P. J., Casson, M. C. (2003), *The Future of the Multinational Enterprise in retrospect and in prospect*, in: *Journal of International Business Studies*, Vol. 34, No. 3, pp. 219-222.
- Caves, R. E. (1971), *Industrial Corporations: The Industrial Economics of Foreign Investment*, in: *Economica*, Vol. 38, pp. 1-27.
- Corden, W. M. (1967), *Protection and Foreign Investment*, in: *The Economic Record*, Vol. 43, pp. 209-232.
- DeVellis, R. F. (2003), *Scale development: Theory and Applications*, second edition, London.
- Ghemawat, P. (2003), *Semiglobalization and international business strategy*, in: *Journal of International Business Studies*, Vol. 34, No. 3, pp. 138-152.

- Ghoshal, S., Nohria, N. (1993), Horses for Courses: Organizational Forms for Multinational Corporations, in: Sloan Management Review, Vol. 34, pp. 23-35.
- Hanser, P. (1993), Marketing-Outsourcing: Schlankheitskur mit Risiko, in: Absatzwirtschaft, Vol. 36, No. 8, pp. 34-39.
- Harzing, A.-W. (2000), An Empirical Analysis and Extension of the Bartlett and Ghoshal Typology of Multinational Companies, in: Journal of International Business Studies, Vol. 31, No. 3, pp. 101-120.
- Hedlund, G. (1986), The hypermodern MNC: A heterarchy?, in: Human Resource Management, Vol. 25, No. 1, pp. 9-35.
- Kim, K., Park, J.-H., Prescott, J. E. (2003), The global integration of business functions: a study of multinational businesses in integrated global industries, in: Journal of International Business Studies, Vol. 34, No. 7, pp. 327-344.
- Leong, S. M., Tan, C. T. (1993), Managing Across Borders: An Empirical Test of the Bartlett and Ghoshal [1989] Organizational Typology, in: Journal of International Business Studies, Vol. 24, No. 9, pp. 449-464.
- Malnigh, T. W. (1996), The Transition from Decentralized to Network-Based MNC Structures: An Evolutionary Perspective, in: Journal of International Business Studies, Vol. 27, No. 1, pp. 43-65.
- McKinsey Global Institute (ed.) (2003), New Horizons: Multinational Company Investment in Developing Economies, San Francisco.
- Meier, A., Stuker, C., Trabucco, A. (1997), Auslagerung der Personaldienstfunktion: Machbarkeit und Grenzen, in: Zeitschrift Führung und Organisation, Vol. 66, No. 3, pp. 138-145.
- Meissner, H. G., Gerber, S. (1980), Die Auslandsinvestition als Entscheidungsproblem, in: Betriebswirtschaftliche Forschung und Praxis, Vol. 32, No. 3, pp. 217-228.
- Perlmutter, H. V. (1969), The Tortuous Evolution of the Multinational Company, in: Columbia Journal of World Business, No. 1, pp. 9-40.
- Picot, A. (1991), Ein neuer Aufsatz zur Gestaltung der Leistungstiefe, in: Zeitschrift für Betriebswirtschaft, Vol. 43, No. 4, pp. 336-357.
- Ricardo, D. (1817), Principles of political economy and taxation, London.
- Root, F. R. (1988), Some Taxonomies of International Cooperative Arrangements, in: Contractor, F. J., Lorange, P. (eds.) (1988), Cooperative Strategies in International Business, Toronto, pp. 69-80.
- Roth, K., Morrison, A. J. (1990), An empirical analysis of the integration-responsiveness framework in global industries, in: Journal of International Business Studies, Vol. 21, No. 3, pp. 541-561.

- Rugman, A. M., Verbeke, A. (2003), Extending the theory of the multinational enterprise: Internalization and strategic management perspectives, in: *Journal of International Business Studies*, Vol. 34, No. 3, pp. 125-137.
- Ruigrok, W., Wagner, H. (2003), Internationalization and Performance: An Organizational Learning Perspective, in: *Management International Review*, Vol. 43, No. 1, pp. 63-83.
- Sethi, D. et al. (2003), Trends in foreign direct investment flows: a theoretical and empirical analysis, in: *Journal of International Business Studies*, Vol. 34, No. 7, pp. 315-326.
- Smith, A. (1776), *An inquiry into the nature and causes of the wealth of nations*, Dublin.
- Stopford, J. M., Wells, L. T. (1972), *Managing the Multinational Enterprise. Organization of the firm and Ownership of the Subsidiaries*, New York.
- Tallman, S., Fladmoe-Lindquist, K. (2002), Internationalization, Globalization, and Capability-Based Strategy, in: *California Management Review*, Vol. 45, No. 1, pp. 115-135.
- Welge, M. K. (1989), Organisationsstrukturen, differenzierte und integrierte, in: Macharzina, K., Welge, M. K. (eds.) (1989), *Handwörterbuch Export und Internationale Unternehmung*, Stuttgart.
- White, R., Poynter, T. A. (1990), Organizing for worldwide advantage, in: Barlett, C., Doz, Y., Hedlund, G. (eds.) (1990), *Managing the global firm*, New York.