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Chinese Affiliates Mature: International Expansion Strategies of German Manufacturers in the PRC

Lutz Kaufmann, Dirk Panhans, Boney Poovan and Benedikt Sobotka

Abstract

This article explores what strategies foreign companies should use to enter the Chinese market or to leverage the full potential of existing affiliates in order to successfully play the specific "aces" China has to offer while possibly avoiding trade and investment barriers. A novel research-based framework links these aces and barriers to strategic posture. While market size and growth are still the most relevant drivers of German activities in China today, local factor conditions such as lower labor costs are gaining in importance. As expert interviews with more than 50 chief executives of German affiliates in China have shown, already today those companies are more successful that exploit Chinese economies of location to provide products or services for third markets. These exports will increase substantially in the future, as the interviewees' aggregated medium-term plan reveals. (Manuscript received 19.12.2005, accepted for publication 03.03.2006)

Keywords: International business, strategy, China, global integration, internationalization

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Studie

Chinesische Töchter werden erwachsen: Internationale Expansionsstrategien deutscher Produktionsunternehmen in der VR China

Lutz Kaufmann, Dirk Panhans, Boney Poovan und Benedikt Sobotka

Abstract

Dieser Beitrag geht der Frage nach, welche Strategien Unternehmen bei der Neuerschließung des chinesischen Marktes oder dem Ausbau bestehender Tochtergesellschaften nutzen können, um die spezifischen „Asse" Chinas erfolgreich zu spielen und gleichzeitig Handels- und Investitionsbarrieren möglichst zu umgehen. Ein theoretischer Bezugsrahmen modelliert die Strategiewahl in Abhängigkeit dieser Asse und Barrieren. Während Marktgröße und -wachstum heute noch die wichtigsten Treiber deutscher Auslandsaktivitäten in China sind, gewinnen lokale Faktorvorteile wie beispielsweise niedrige Lohnkosten zunehmend an Bedeutung. Wie Experteninterviews mit mehr als 50 Leitern deutscher Tochtergesellschaften in China gezeigt haben, sind bereits heute jene Unternehmen erfolgreicher, die chinesische Standortvorteile nutzen, um Leistungen für Drittmärkte zu erbringen. Diese Exporttätigkeit wird noch erheblich zunehmen, wie die aggregierte Mittelfristplanung der interviewten Unternehmensvertreter zeigt. (Manuskript eingereicht am 19.12.2005, zur Veröffentlichung angenommen am 03.03.2006)

Keywords: Internationales Management, Strategie, China, globale Integration, Internationalisierung

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1 Introduction

Within the scope of a comprehensive research project on international expansion strategies at WHU – Otto Beisheim School of Management, we conceived a novel framework of international expansion strategies and interviewed more than 500 senior executives of German affiliates[1] in the four large developing countries Brazil, Russia, India and China, in the Triade regions Japan, the U.S. and Europe (especially Eastern Europe), as well as in ASEAN countries. This article will solely focus on our findings from China. In the People's Republic, we interviewed 50 chief executives of German affiliates in order to find answers to the questions which international expansion strategies foreign companies should use to enter the Chinese market or to leverage the full potential of existing affiliates, and how to successfully surmount trade and investment barriers while exploiting the specific benefits offered by China. During those 50 interviews, we gathered 44 completed standardized questionnaires that serve as the basis for this article.[2]

To be successful in China, managers have to find answers to the two key questions regarding their company's strategic orientation in China and regarding the operational adaptation to the day-to-day challenges of the Chinese business environment. This article will focus on the first question of strategic orientation.[3]

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[1] In this article, the term "German" companies refers to companies from German speaking countries and may thus include Austrian and Swiss firms.

[2] In this article, we will focus on the description of the research model and the quantitative empirical analysis. For a presentation of the methodological design and a discussion of our qualitative findings, please refer to our new management guidebook *China Champions*, available in both English (ISBN 3-938877-00-6) and German (ISBN 3-409-14331-9). Other books of this comprehensive research project include *American Allstars*, *Brazilian Brilliance* and *Investmentguide Indien*. A list of our current publications can be found on our homepage at http://www.whu.edu/intman/ies. We conducted our interviews in five manufacturing industries, which together represent 58 percent of German foreign direct investment (FDI) stock in China (Deutsche Bundesbank 2005: 19): the automotive industry, mechanical and electrical engineering, the chemical and the pharmaceutical industry. In China, our interview partners were located in the greater Shanghai area (including the neighboring cities of Wuxi, Suzhou and Nanjing in the Jiangsu Province and Hangzhou in Zhejiang Province), in the greater Beijing area and the city of Tianjin, in the southern cities of Hong Kong, Shenzhen and Guangzhou (Guangdong Province) and in the northern provinces of Jilin and Liaoning. Among these were not only large corporations such as BASF, Siemens and Volkswagen, but also successful small and medium-sized companies.

[3] The aspects of strategic orientation and operational adaptation are both addressed in the book *China Champions*.

To define a strategy for China is to map out whether China should serve primarily as an export market for German products, a prolonged work bench for the Asian or world market, or an independent business system in and of itself. Which functional units should be located in China and how should they be integrated into the company's global network? For which business functions should the Chinese affiliate receive provisions from German headquarters and which products or services should the Chinese affiliate provide for other parts of their worldwide corporate network? What drives those strategic decisions and which strategy will be the most successful now and in the future?

Established frameworks are not able to adequately answer these questions. There is extensive literature on international expansion strategies; for an overview see Harzing (2000). Yet most of it are modifications or empirical tests of one of the three typologies provided by Perlmutter (1969), Stopford/Wells (1972), and Barlett/Ghoshal (1989). While each of these typologies have their specific merits, neither of them differentiates between strategies that are directly measurable, scalable and action-oriented. Most typologies merely categorize strategies, which do not allow to identify gradual differences to competitors (benchmarking) or over time (longitudinal analysis). Also, the lack of measurability prevents the comparison of strategic posture with macroeconomic indicators, which could help to assess geographic differences or emerging shifts in strategic posture. Moreover, most existing typologies are not scalable and thus do not allow for the measurement or formulation of differentiated strategies on the functional, regional or product level. Finally, most typologies are not action-oriented. Like Perlmutter's (1969) typology, some are merely descriptive and do not at all allow for prescriptive strategy recommendations based on situational variables. Others like Bartlett/Ghoshal's (1989) framework do not answer the basic configurational questions of where to locate value creation, what resource-interdependencies to establish between different locations, and how to structure the ownership of these locations (Root 1988). Due to the lack of a measurable, scalable and action-oriented typology, we have conceived a novel framework and applied it to analyze the international expansion strategies of German companies in China.

This article will provide answers to the following four exploratory questions:

Q1: What international expansion strategies do German companies pursue in China? Do they differ between industries or business functions? Are they different from strategies pursued elsewhere in the world?

Q2: What are the motives for international expansion towards China, and what are its barriers? Are the chosen strategies suitable to surmount the barriers while exploiting the specific benefits offered by China?
Q3: Does the choice of strategy have an effect on performance? Which strategies are most successful?
Q4: What changes in strategic posture are planned for the future? Which strategies will gain and which ones will lose in importance?

This article is structured as follows. Chapter 2 develops the new framework, defines the strategies used in this article, categorizes the motives (which we call aces) and barriers of doing business in China, and describes the expected impact of aces & barriers on strategic posture. Chapter Results then presents the exploratory findings on our four research questions. Chapter Conclusion concludes with the derivation of recommendations for managers.

2 Framework

Our aspiration is to establish a framework that differentiates between strategy terms that are directly measurable, scalable and action-oriented. We will first elaborate on these three criteria before defining our strategy terms, the aces & barriers, and the expected relation between both.

(1) Measurability: Whereas most existing models only categorize strategies in a discrete manner, we want to establish a framework that shows to what extent various generic strategies are used within a mixed strategy. Thus we do not ask which strategy is used but to what extent each strategy is pursued. This allows the measurement of gradual differences between companies, which makes this model suitable for benchmarking. Similarly, this allows the measurement of gradual changes in strategy, which allows for longitudinal analysis. This property is especially relevant for finding a quantitative answer to Q4 about the planned changes in strategic posture. Further, the strategies need to be directly measurable, i.e. they must not constitute latent variables. Our model can only serve as a practical tool for analysts and decision makers if its strategies can be easily measured. This goes along with the comparability of strategic posture to macroeconomic indicators. If the strategies are defined in a way that allow for such a comparison, macroeconomic data can be used to analyze geographic differences or emerging shifts in strategic posture.

(2) Scalability: The strategy terms used in our model should not be restricted to the corporate level. Rather, it should be possible to generalize them and break them down to the functional, regional or product level. Only this allows for the measurement and formulation of differentiated strategies. Also, the strategy terms should be exhaustive and unambiguous. This criterion can be realized by defining the strategies along independent dimensions.

(3) Action-orientation: We do not merely want to provide a tool for analyzing strategic postures but also a hands-on tool for decision makers. In other words, we want to be prescriptive rather than solely descriptive. Thus we need to model which factors drive the choice of expansion strategy, hence how aces & barriers determine strategic choice. We derive these relationships from literature and provide an exploratory analysis in the answer to research question Q2. Yet only a confirmatory analysis based on a large-scale empirical survey can show whether these predicted relationships actually hold true.[4] Another aspect of action-orientation is that the strategy terms need to be defined along the main decision variables of international value creation configurations. 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.

2.1 Strategies

We will first explain what dimensions define our strategy terms before we describe the resulting generic strategies and the concept of mixed strategies.

Dimensions

We define our strategy terms along the dimensions proposed by Root (1988): Localization (where to locate value creation), integration (what resource-interdependencies to establish between those locations) and outsourcing (how to structure the ownership of those locations).

[4] This confirmatory analysis is not included in this paper, as the responses of our interview partners in China alone would not suffice for a proper structural equation modeling. Rather, we will present our confirmatory findings from the analysis of all interviews of our comprehensive research project in a later article.

(1) Localization[5] describes whether value creation activities are located 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 extent of localization is typically reflected in statistics on direct foreign investments.

(2) Integration describes whether there are resource-interdependencies with and between foreign affiliates. With no integration at all, each foreign affiliate operates as a stand-alone business. There are no cross-border interdependencies, so each foreign affiliate needs to provide all business functions by and for itself. With full integration, there are intensive dependencies between corporate group members (Welge 1989). A foreign affiliate may receive substantial provisions from corporate headquarters or from other foreign affiliates, so it is no longer necessary to provide all business functions by and for itself. Also, a foreign affiliate may provide products or services for headquarters or other foreign affiliates which makes it specialize on some business function, product range or regional scope. Integration across borders does not only describe the company-internal trade of unfinished or finished goods that is reflected in import and export statistics, but it also includes the company-internal exchange of research data and product developments, the shared utilization of management know-how and internal services as well as the shared use of business connections, rights and brands. Strictly taken, the mere establishment of cross-border controlling or the return of profits to the parent-company already constitutes a marginal form of cross-border integration.

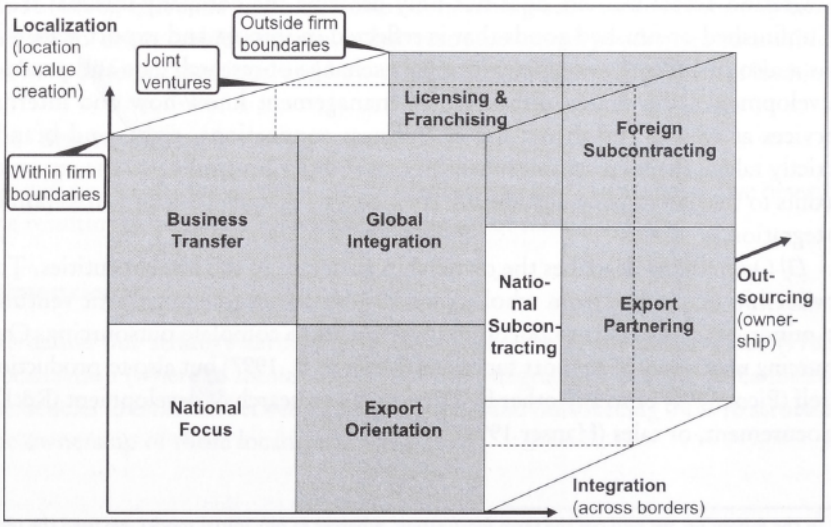
(3) Outsourcing describes the ownership structure of the foreign entities. The ownership may range from wholly owned subsidiaries to equity joint ventures to minority investments to portfolio investments to complete outsourcing. Outsourcing may apply to support functions (Meier et al. 1997) but also to production itself (Picot 1991) or to any other function such as research & development (R&D), procurement, or sales (Hanser 1993).

[5] In the following, we will use the term *localization*, whereas in our initial model, we used the term *offshoring* (see Kaufmann/Panhans 2004, Panhans/Kaufmann 2004). Both terms are interchangeable and describe the build-up of value creation in foreign countries. From the point of view of the parent-company, this is a transfer to another country (offshoring), whereas the foreign affiliate views this as a build-up of local value creation (localization).

Generic strategies

Combining these three dimensions creates the value creation cube depicted in Figure 1. Inside firm boundaries (i.e., in the front of the cube), we differentiate between the international expansion strategies of Export Orientation, Business Transfer and Global Integration. Outside firm boundaries, we differentiate between Export Partnering, Licensing & Franchising and Foreign Subcontracting. The remaining two strategic postures, not shaded in Figure 1, refer to purely domestic strategies, namely national focus and national subcontracting. As they do not have any international aspects to them, we will not analyze them any further. In addition to these purely external expansion strategies, companies may also establish partial forms of ownership, or so-called joint ventures. Similar to our intra-firm strategies, joint ventures may aim at exports, the transfer of entire business systems or the selective value creation for third markets.

Figure 1: International expansion cube



Source: Own conceptualization.

(1) Export Orientation means that the foreign country is utilized primarily as a sales market for German exports. This strategy is located in the lower right-hand front of the cube. There is only marginal value creation in the host country (low localization), as all products sold in that market are exported by the German parent company (high integration). If sales are not conducted through an intermediating trading company, the company itself has full ownership over these sales activities (low outsourcing). The foreign affiliate is hence a sales office, strongly dependent on the parent company and consisting only of marketing, sales and in some cases also after-sales services. Export Orientation is clearly a market-oriented strategy.

(2) Business Transfer means that the host country is treated as an isolated market where the company's basic business concept is replicated. This strategy is located in the upper left-hand front of the cube. All value creation takes place locally (high localization), within firm boundaries (low outsourcing), and cross-border transactions are restricted to control & governance issues (low integration). The foreign affiliate is hence an independent, fully-fledged, stand-alone business system, consisting of all business functions including not only marketing & sales, production and procurement but also R&D and its own internal support functions. Business Transfer is also a primarily market-oriented strategy.

(3) Global Integration is characterized by a close integration of the foreign affiliate into the company's worldwide value creation network. This strategy is located in the upper right-hand front of the cube. The foreign affiliate is majority-owned (low outsourcing) and specializes on some specific business functions, product groups or has a regional mandate (high localization). It exports products or services for processing or sales elsewhere in the world and in return receives products or services it cannot generate itself from other group members (high integration). Hence the affiliate has a contributing function and is strongly interdependent with the company's worldwide network (Malnight 1996). In contrast to the expansion strategies explained before, Global Integration is characterized by globally distributed, interdependent resources and activities. With this strategy, a company locates each functional unit where it can reap economies of location best, connects these units located all over the world, and thus bundles volumes across national borders (Hedlund 1986, Barlett/Ghoshal 1989, White/Poynter 1990). The choice of location depends on location-specific resources, such as low factor costs (e.g., textile manufacturing in low cost countries), qualifications and externalities (e.g., pharmaceutical research clusters), or proximity to natural resources, suppliers, and

other strategic resources. This strategy is mostly resource- or efficiency-seeking and allows the combination of firm-specific with country-specific advantages (see Rugman/Verbeke 2003). A prominent example of this strategy is the relocation of production facilities to low cost countries. Although the term global may suggest that operations span multiple continents (Rugman/Verbeke 2004), we use this term also for any cross-border integration, and also for those within a continent or region.

(4) Export Partnering is the counterpart to Export Orientation outside firm boundaries (high outsourcing). This strategy is located in the lower right-hand back of the cube. As part of an export partnership, local trading firms take on the responsibilities for sales & marketing of goods exported to the country (high integration, low localization). This strategy is primarily used in those export markets where market volume is of lesser importance, where a lot of local marketing know-how is needed, or where it is difficult to gain access to local sales channels.

(5) Licensing & Franchising corresponds to Business Transfer outside firm boundaries (high outsourcing). This strategy is located in the upper left-hand back of the cube. Through external partners, it applies the domestic business system in foreign markets, i.e., the entire value chain is replicated in the foreign country (high localization). Because the local business system is largely self-sufficient, exchanges with the German parent company are low (low integration). The only difference to the Business Transfer strategy is that control is enforced by contracts and not by ownership.

(6) Foreign Subcontracting corresponds to Global Integration outside firm boundaries. This strategy is located in the upper right-hand back of the cube. Specific company functions are transferred to a foreign partner (high outsourcing and localization). Similar to Global Integration, foreign economies of location are being utilized to produce goods and services for third countries (high integration). One common form of subcontracting is passive job processing. Here, locally-produced, unfinished goods are shipped to a foreign subcontractor for additional finishing steps and are then, in turn, sold back or re-imported (Kaufmann 2001: 44-45).

This systematization reflects two major research streams of international business literature: offshoring and integration refer to the research stream concerning forms of international expansion (e.g., Barlett/Ghoshal 1989), whereas outsourcing reflects the research stream concerning the boundaries of a firm (e.g.,

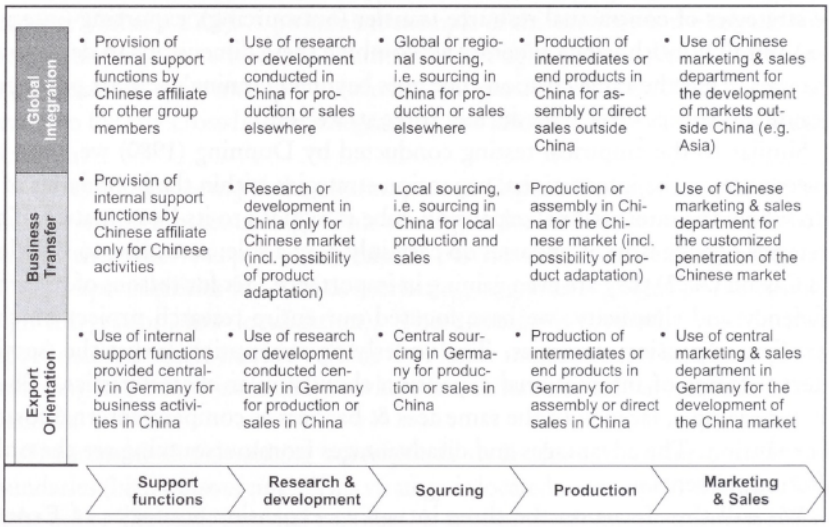
Buckley/Casson 1976). Please note that these dimensions also correspond to the strategies Dunning (1977) uses in his eclectic paradigm. He differentiates between the strategies of contractual resource transfer (outsourcing), exporting (integration) and FDI (offshoring), whereas we combine these dimensions to derive our strategies. Thus the value creation cube goes beyond Dunning's eclectic paradigm because it combines freely the former three strategies.

Similar to the empirical testing conducted by Dunning (1980) we want to concentrate on the international expansion strategies within the boundaries of a firm where the international expansion cube is reduced to its front matrix. The strategies outside firm boundaries do certainly play a role; according to Buckley and Casson (2003) they are even gaining in importance. Yet for reasons of research efficiency and simplicity, we have focused our entire research project on the intra-firm expansion strategies. The underlying assumption is that the (semi-) external forms of international expansion show similar characteristics. They are, for example, faced with the same aces & barriers as company-internal forms of expansion. The advantages and disadvantages from outsourcing are the only differing elements.

We will thus focus on the three intra-firm expansion strategies of Export Orientation, Business Transfer and Global Integration. With Export Orientation, China primarily functions as an export market for German products. With Business Transfer, the Chinese affiliate is an independent business system in and of itself. And with Global Integration, China may function as a prolonged work-bench for the Asian or world market.

In order to understand what functional units companies have localized in a host country and to what extent these functions are integrated in the global company structure, we distinguish between the traditional functional areas of the value chain as follows: internal support functions, R&D, sourcing, production, and marketing & sales. The concept of the three strategies we defined can be easily applied to the functional level. Export Orientation stands for the provision from the German parent company; Business Transfer denotes the stand-alone value creation in the host country for its local market; and Global Integration implies the provision of products or services from the foreign affiliate for other entities within the worldwide corporate network. Figure 2 details these definitions for each business function.

Figure 2: International expansion strategies by business function



Source: Own conceptualization.

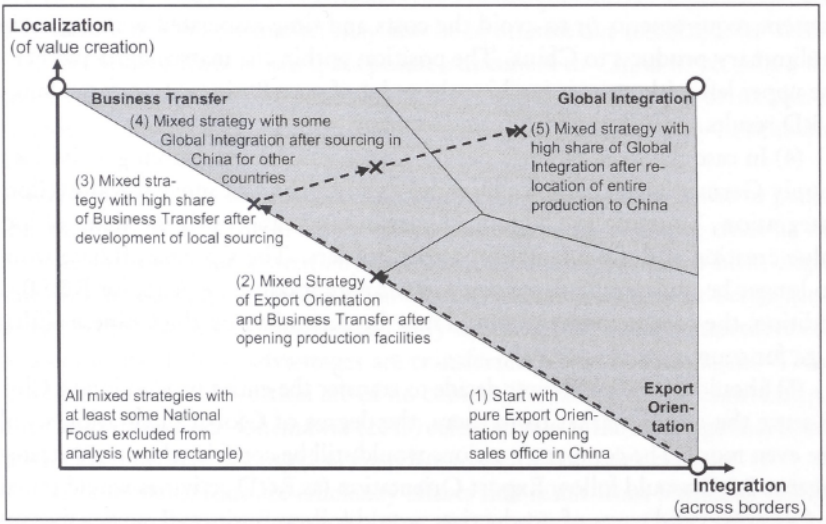
Mixed strategies

These three generic strategies presented above are conceptual extreme points. Most companies choose mixed strategies, i.e., different strategies for different host countries, business functions or product groups. Even within each business function, several strategies can apply; for instance, intermediate products are exported from Germany (Export Orientation) but the final assembly takes place in the sales country (Business Transfer). Hence the critical question is what is the share of individual base strategies that contributes to the overall mixed strategy of a company.

Also, these shares may well change over time, as the conceptual example in Figure 3 illustrates. In this illustration, each strategy mix is represented by an individual dot in the matrix: the higher the percentage of a specific strategy, the closer the dot to the corresponding corner of the matrix. The three shaded quadrangles delineate dominant strategies, e.g., all points in the upper left-hand

quadrangle represent mixed strategies whose share of Business Transfer is highest. The lower left-hand side remains empty, as we focus on expansion strategies towards China and thus abstract away from the strategy of National Focus, which would be located on the lower left-hand side.

Figure 3: Mixed strategies of international expansion



Source: Own conceptualization.

(1) When a German company opens a sales office in China, it follows the pure strategy of Export Orientation.[6] This position is mapped in the lower right corner of the matrix because the affiliate is fully integrated (all products and services are provided by the parent company) and does not yet perform any or only minimal value creating activities in China.

(2) The company may build up production facilities in China – initially only for the final assembly of unfinished goods from Germany and later for

[6] Strictly speaking, this would be a mixed strategy of Export Orientation and National Focus, because the company is further active in Germany. In this paper, however, we would like to focus on international activities only and hence will ignore purely domestic activities throughout the article.

the entire production process. If the local production is purely aimed at the Chinese consumer market (localization) and if R&D and sourcing continue to be provided by the German parent company (integration), this represents a mixed strategy of Business Transfer and Export Orientation. This example will be placed somewhere in the center of the matrix.

(3) The Chinese affiliate may then establish a local sourcing network, e.g., to take advantage of lower indirect labor costs in sourced products, to fulfill local content requirements or to avoid the costs and time associated with exporting preliminary products to China. The position within the matrix shifts further to the upper left without ever reaching the point of pure Business Transfer as long as R&D results are still provided from Germany.

(4) In case the manufacturer decides to use its Chinese sourcing activities to supply German production facilities, it would be the first move towards Global Integration. Sourcing in China for Germany increases both the share of local value creation and the integration across borders. The Chinese affiliate would no longer be unilaterally dependent on the parent company (e.g., for R&D). In addition, the parent company would now be dependent on the Chinese affiliate (e.g., for sourcing).

(5) Should the manufacturer decide to transfer the entire production to China to serve the world market from there, the degree of Global Integration would rise even more. The company's actions would still be considered a mixed strategy because R&D would follow Export Orientation (as R&D activities would remain in Germany) and parts of production would follow Business Transfer (because some production would serve the local Chinese sales market).

This example is to illustrate that most companies follow mixed strategies and that these shares may gradually change over time. Our statements about the application of individual strategies will always refer to their share within a mixed strategy.

2.2 Aces & barriers

Every company should consider its motives for entering the Chinese market carefully. Is it to address one of the fastest growing markets in the world and to increase sales volume? Or is it primarily to benefit from low labor costs? So what are the motives to conduct business in China? We categorize these motives into four different "aces" that companies can play during their international expansion.

The first two aces, (1) market opportunities and (2) economies of location win the trick on the output or input side through the utilization of local advantages on the sales or factor markets. The other two aces, economies of (3) scale and (4) scope trump through positive efficiency effects of international expansion.

(1) Market opportunities represent local advantages on the sales market. The target market can hold interest because of its size or growth but also, for example, because of anti-cyclical market characteristics or the presence of sophisticated lead customers. The Chinese market may also be of interest due to companies' desires to simply follow their existing corporate customers to China or to gain a first mover advantage in market penetration. Even though market opportunities are the most intuitive ace of international expansion, they are definitely not the only one.

(2) Economies of location reflect country-specific advantages of the factor market. This includes, for example, lower labor, real estate and sourcing costs as well as lower tax rates but potentially also local technological know-how, higher education levels, agglomeration advantages in industry clusters or better access to capital. Economies of location can only translate into a real competitive edge for a company if those advantages are transferred across borders again. This is because economies of location are of no competitive advantage in relationship to other local companies. Ghemawat (2003) refers to this as the arbitrage function of a firm. The two aces discussed so far relate to factor and sales markets.

(3) Economies of scale are efficiency effects that result from bundling volumes across borders. It is not automatic that the development of new markets will result in economies of scale. If the foreign affiliates are self-sufficient, bundling effects won't be substantiated. One kind of economies of scale is the distribution of fixed costs across a larger production volume. For example, the development of a new drug by a German company would often not be profitable if it would be sold solely on the German market. But fixed R&D costs may be retrieved by selling the drug also in other markets. Economies of scale may also arise in form of more efficient technologies for an increased production volume, in form of increased process know-how over time (so-called learning curve effect) or in form of added negotiation power with suppliers or other market participants (see Buckley/Casson 1976, Caves 1971). Hence this ace makes it advantageous for companies to locate specific process steps to only one location where other markets can be served from this site. Pharmaceutical companies with centralized research facilities often play this ace. Other examples can be found in the electronics

industry, especially semiconductors, where scale economies are essential to achieve cost advantages in centralized production.

(4) Economies of scope are efficiency effects that result from a geographical spread of activities. Examples for geographical economies of scope are risk minimization through a regionally diversified business portfolio, the build-up of real options for future expansion, learning effects from cultural interaction and exchange and the opportunity to spread cross-country projects across different time zones (Tallman/Fladmore-Lindquist 2002). We do not consider, however, horizontal economies of scope (by product diversification) or vertical economies of scope (by front- or backward integration) as they do not relate to international expansion.

Behavioral aspects, coincidence and luck are also often cited as reasons for choosing international expansion strategies and target countries. For instance, top managers' personal preferences, or perhaps influences from relatives or friends in the region, may drive the decision for a particular location. In addition, ignorance of other options or power struggles within organizations may lead to suboptimal expansion decisions. Furthermore, the bandwagon effect may misdirect an international expansion. That is, companies may have expanded to a country simply because "everyone was doing it!". We will set such behavioral aspects aside and focus rather on rational drivers for international expansion. Our framework is meant to be prescriptive rather than merely descriptive. In other words, in order to construct a hands-on tool for decision makers, we refrain from the distracting influence of behavioral aspects and instead concentrate on rational decision requirements. We define rational decisions as those that result in the best decision for the company in its entirety. Naturally, the choice of location based on personal preferences may be completely rational from the perspective of the individual. This choice, however, may very well not be in the best interest of the company.

The four aces are designed to categorize opportunities of international expansion in a mutually exclusive and collectively exhaustive manner. Other benefit categories found in the literature can also be assigned to the four aces. For example, learning effects embody the aspect of market opportunities (learning from the local market), economies of location (utilization of location-specific qualifications or spillover effects in clusters), scale effects (distribution of R&D costs), as well as scope effects (learning across cultures).

If a world without borders and barriers would exist, a company might play these four aces of international expansion to their full extent. The decision for a particular location (where value would be created) would be entirely independent of the sales market (where products are eventually sold). Naturally, reality paints a very different picture. But why? The answer here is that strategic choices are restricted by trade and investment barriers. For reasons of clarity, we use the terms (1) trade barriers and (2) investment barriers in a broad sense. They also include barriers of non-material integration (such as restrictions on the exchange of research findings) and investment barriers other than capital restrictions (such as barriers to the delegation of employees to establish foreign entities).

(1) Trade barriers may hinder cross-border integration. These can be transportation and communication costs, tariffs, quotas, national regulations, and heterogeneous customer preferences. For example, despite substantial economies of scale, most commodity chemicals are only produced on a national or at most on a regional scale, due to high transportation costs. For China, language barriers and hidden trade barriers are prominent examples for trade barriers.

(2) Investment barriers complicate or even prevent foreign value creation. Barriers include discrimination against foreign firms, general disadvantages within the host environment as well as control and governance issues of transferring processes or knowledge (Kim et al. 2003). For German affiliates in China, insufficient enforcement of contracts and intellectual property rights play a particular role.

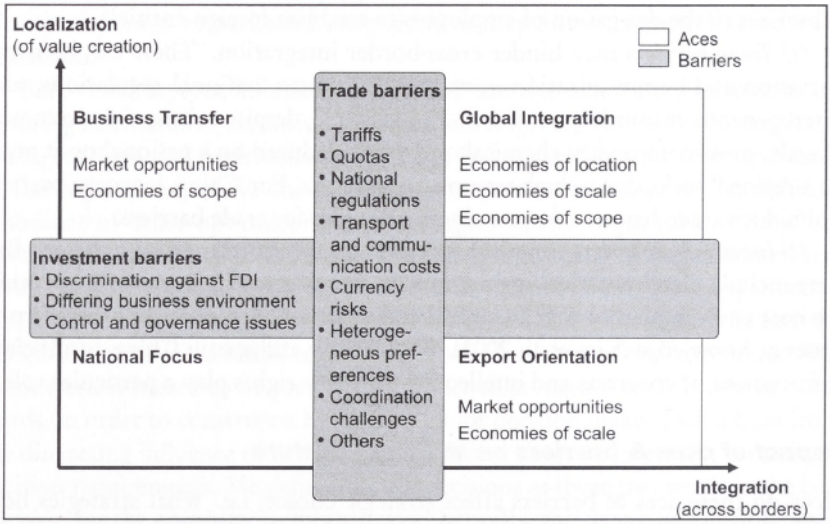
Impact of aces & barriers on strategic posture

How do these aces & barriers affect strategic choice, i.e. what strategies help to play certain aces and which barriers have to be overcome to pursue a certain strategy? We will first review the theory before we will compare it with our findings form China in chapter Aces & barriers. Figure 4 illustrates the expected relationship between aces & barriers on the one hand and strategic posture on the other hand.

Export Orientation combines market opportunities with economies of scale and is exposed to trade barriers. Economies of scale are not directly seen at the foreign affiliate but rather realized at the German headquarters by bundling the value creation for both countries at one location. For example, fixed costs such as in R&D can be distributed across the entire production volume, resulting in lower unit costs. Trade barriers are a major concern for export oriented companies,

e.g., they are exposed to tariffs, hidden trade barriers, transportation costs and currency risks. Thus the strategy of Export Orientation is only chosen if trade barriers are comparatively low. Investment barriers do not affect purely export oriented companies. High investment barriers may only result in the evasion of Business Transfer and hence in the indirect effect that companies flee into the alternative of Export Orientation.

Figure 4: Effect of aces & barriers on strategic posture



Source: Own conceptualization.

Business Transfer profits from market opportunities and economies of scope, while being subject to investment barriers. Similar to Export Orientation, the development of new markets is the primary goal. Yet, in contrast, Business Transfer does not lead to new economies of scale because separate capacities supply the market. On the contrary, if the foreign capacities are initially smaller than those in the parent company, the affiliate has to overcome diseconomies of scale. In return, economies of scope will result from the geographical spread of activities arise. Investment barriers reduce the attractiveness of Business Transfer as trade barriers reduce the attractiveness of Export Orientation. Hence comparatively

high investment barriers keep companies from following a Business Transfer strategy, while comparatively high trade barriers make companies evade the Export Orientation strategy, resulting in a higher share of Business Transfer.

Global Integration benefits from economies of scale, scope and location while being exposed to both trade and investment barriers. Economies of scale can be realized at the foreign affiliate because volumes are bundled between the host country and additional sales markets. As the specialization of affiliates necessitates a presence in many countries, economies of geographical scope arise. In turn, this provides opportunities such as real options for future expansion or learning opportunities across cultures. Global Integration is the only strategy that benefits from economies of location because local factor advantages need to be tapped (localization) and then exported to third countries (integration) in order to constitute a competitive advantage relative to other companies. In the pure form of Global Integration, local market opportunities play no role whatsoever because products are sold to third markets. There are at most secondary market effects, as more efficiently produced products become more competitive in existing and new markets. Global Integration is subject to trade and investment barriers, as it requires companies to build a substantial presence in the host country (localization) and to export products and services to third countries (integration). In effect, Global Integration is only applied in countries with substantial economies of location and low barriers to trade and investment.

3 Results

This chapter attempts to answer our four research questions. First, the international expansion strategies pursued in China are presented, differentiated by industry affiliation and business functions, and compared to strategies employed elsewhere in the world. Then, the top ten aces & barriers of doing business in China are described and analyzed for their impact on strategic posture. This chapter concludes with an analysis of performance effects of strategic posture and future developments.

3.1 Strategies

The current strategic positioning of 44 companies in our survey is displayed in Figure 5. In this illustration, each company is represented by an individual dot

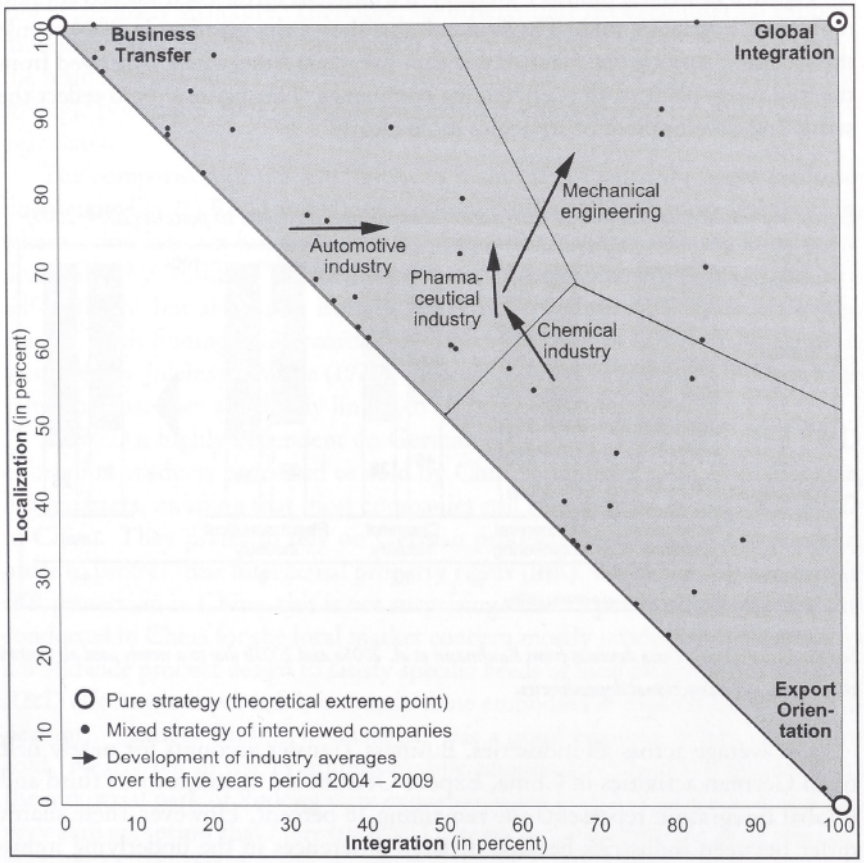
in the matrix. The five arrows in Figure 5 indicate the development of industry averages over the years 2004–2009.

As shown in Figure 5, to a certain degree companies employ all strategies. In terms of dominant strategies, most companies follow a strategy dominated by Business Transfer (22 of 44) or Export Orientation (15 of 44). Only very few follow a strategy dominated by Global Integration (7 of 44). The dot in the very top right corner represents two cases, meaning that two affiliates follow a pure strategy of Global Integration, where they export all their products and services created in China to third countries. All other affiliates but ten positioned on the main diagonal employ Global Integration to some degree, i.e., provide products or services for third markets. The single affiliate in the lower right-hand corner is a pure sales affiliate, i.e., it receives all products and services from Germany. The four affiliates in the upper left-hand corner are rather independent, stand-alone businesses that mostly resulted from mergers or acquisitions. The ten other affiliates positioned on the main diagonal still rely on their parent companies for R&D and procurement but have established their own downstream functions in China such as marketing & sales as well as parts of production. For these companies, value creation is either received from the parent company (Export Orientation) or performed locally for the local market (Business Transfer) but not provided for third countries (Global Integration). Therefore, they only follow a mixed strategy of Export Orientation and Business Transfer. A company following a mixed strategy of Business Transfer and Global Integration can be found on the upper bound somewhere to the right. This company does not receive any provisions from its parent company but provides the majority of its products and services to neighboring countries. The majority of affiliates, however, follow mixed strategies, i.e. they receive some upstream services like R&D from their German parent company (Export Orientation), have some own value creating activities like production targeted at the Chinese market (Business Transfer), and provide some of their products or services to other markets, mainly to neighboring Asian countries (Global Integration).

Industry specifics

Figure 5 also shows positioning and movement of each analyzed industry. On average, all except for the chemical industry follow a strategy dominated by Business Transfer. The automotive sector is most advanced with respect to Business

Figure 5: International expansion strategies of 44 interviewed companies (2004–2009)

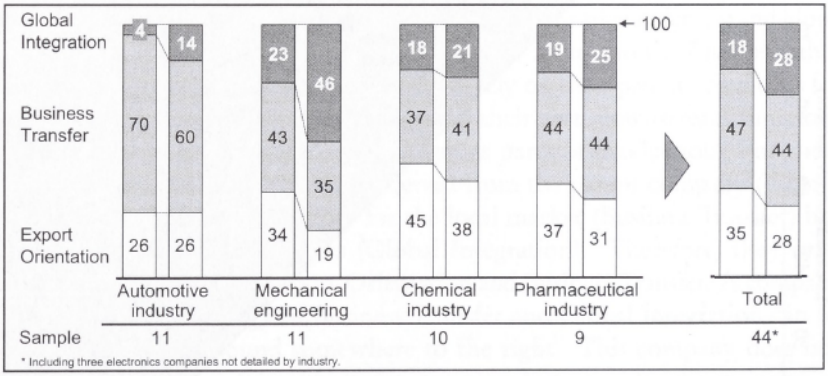


Source: Own survey. Data deviates from Kaufmann et al. 2005a and 2005b due to a newly used algorithm that reflects inter-functional dependencies.

Transfer and moves towards Global Integration. The machinery, the chemical and the pharmaceutical industries still rely on a nearly equal mix of all three strategies. Mechanical engineering is most advanced with respect to Global Integration and is further heading into this direction.

Figure 6 illustrates industry averages in a different form. Each stacked column represents a strategy mix. The first column shows the position in 2004, while the second illustrates the planned position five years later, which is derived from the mid range plans of all participating companies. This figure should reflect the status and development of strategies more clearly.

Figure 6: Industry comparison of international expansion strategies in percent (2004–2009)



Source: Own survey. Data deviates from Kaufmann et al. 2005a and 2005b due to a newly used algorithm that reflects inter-functional dependencies.

On average across all industries, Business Transfer accounts for nearly half of all German activities in China, Export Orientation stands for one third and Global Integration represents the remaining 18 percent. However, these shares differ between industries because of large differences in the underlying industry-specific aces & barriers. The automotive industry is leading in regard to Business Transfer (70 percent), mechanical engineering in regard to Global Integration (23 percent) and chemical companies in regard to Export Orientation (45 percent). On average in all industries, companies still receive more provisions from their parent companies than they provide for other countries.

Functional specifics

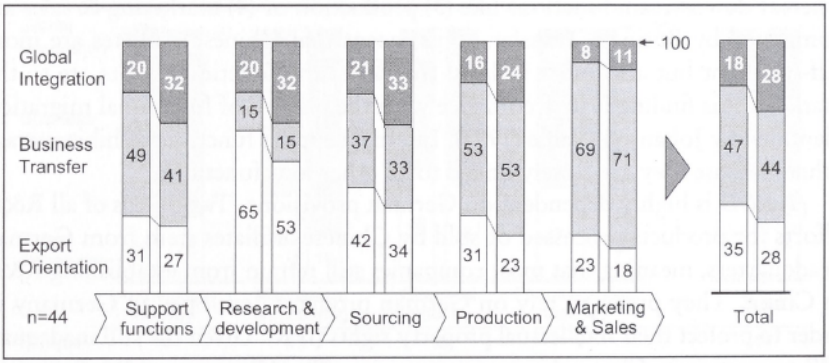
Next, we will study the roles and corresponding competencies of Chinese affiliates on each functional level. We will analyze which functional units companies have already localized in China and to what extent those are integrated in the global company structure. Therefore, we differentiate between internal support functions, R&D, sourcing, production and marketing & sales. Figure 7 shows the results of our analysis by functional units. The first column represents the strategic posture in 2004 whereas the second column depicts the functions five years later.

The comparison of the five functions makes it obvious that upstream functional units like (1) R&D and (2) sourcing are dominated by Export Orientation, whereas downstream functions like (3) production or (4) marketing & sales are dominated by Business Transfer. This means that Chinese affiliates are more self-sufficient but also more isolated the closer the functional units are to the market. This finding is in accordance with the pattern of functional migration identified by Johanson/Vahle (1977). Internal support functions exhibit average values because they are closely linked to all other four functions.

(1) R&D is highly dependent on German provisions. Two thirds of all R&D efforts for products processed or sold by Chinese affiliates stem from German headquarters, meaning that most companies still refrain from establishing R&D in China. They prefer to rely on German products developed in Germany in order to protect their intellectual property rights (IPR). Given the still inadequate IPR protection in China, this is not surprising. The 15 percent of R&D that are conducted in China for the local market concern mostly product modifications to a worldwide product design to satisfy specific needs of local customers. If Chinese R&D efforts are exported, it is mostly done embodied in exported products (16 percent). Siemens Mobile in Shanghai was a good example before they were sold. Nearly ten of the 14 million mobile phones developed and produced in the industrial park of Pudong were exported, some even to Germany. It is still a very rare exception that German R&D centers in China provide their research findings to affiliates directly in other countries. Yet such exceptions exist (4 percent). The most prominent example we encountered during our interviews was Bicoll, a biopharmaceutical startup that develops small molecule libraries for drug discovery in the biopharmaceutical industry based on endemic Asian plant resources.

(2) Sourcing exhibits a substantially higher share of Business Transfer than R&D, meaning that Chinese sourcing activities are less dependent on German headquarters. Yet still, the share of Business Transfer in sourcing is 16 percentage points lower than that in production. Hence by far not all preliminary products can be sourced locally for Chinese production. Rather, substantial sourcing activities are still provided by German headquarters. The share of Global Integration is five percentage points higher than in production. Thus global sourcing activities – the provision of low cost sourcing from China for production elsewhere in the world – is still in its early stages but is about to gain momentum.

Figure 7: Functional comparison of international expansion strategies in percent (2004–2009)



Source: Own survey. Data deviates from Kaufmann et al. 2005a and 2005b due to a newly used algorithm that reflects inter-functional dependencies.

(3) Production is dominated by Business Transfer, meaning that affiliates produce more in China for the local market (53 percent) than they receive from their parent companies (31 percent) or provide for third markets (16 percent). Typically headquarters still provide their Chinese affiliates with knowledge-intensive intermediates to guard their intellectual property. Also, some components that require high precision or scale in production are typically still export oriented. Products provided by Chinese affiliates for third countries are typically labor-intensive products where benefits from Chinese low cost labor are highest. Heraeus, for example, provides specific metal sensors whose assembly requires substantial manual labor from its Shanghai plant for German customers. Other companies

following Global Integration in production use China as their production base for Asian markets. Rittal, for example, will no longer supply its Asian sales offices from Germany (Export Orientation) but rather from its new production site in Shanghai (Global Integration). Similarly, Siemens Medical Solutions has established a machine factory in the Pudong New Area near Shanghai and will sell products in China (Business Transfer) and throughout the rest of Asia (Global Integration).

(4) Marketing & sales exhibits a very high share of Business Transfer (69 percent). This means that it is uncommon to coordinate exports to China through German headquarters (23 percent) or to use Chinese sales offices for sales to neighboring Asian countries (eight percent). The marketing & sales provisions by German headquarters often concern sales to other German companies with production facilities in China or include such aspects as unified branding. Chinese affiliates provide marketing & sales services such as customer service and technical support for other regional or international affiliates. For example, one machinery affiliate we interviewed in China provides technical support and maintenance for the entire Asian-Pacific region.

Country specifics

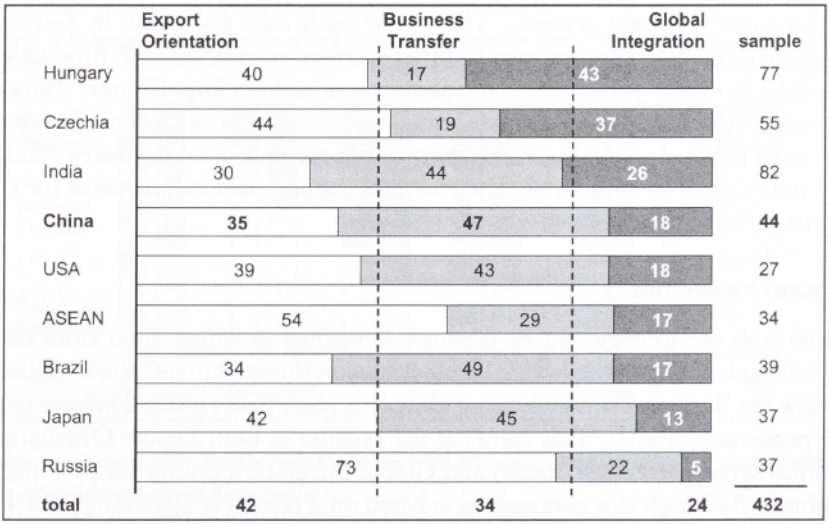
How does the strategy mix by German companies in China differ from their activities elsewhere in the world? Figure 8 answers this question: Chinese affiliates follow the Business Transfer strategy somewhat more than on world average (plus 13 percentage points). This comes at the expense of both Export Orientation (minus seven percentage points) and Global Integration (minus six percentage points). Although this comparison is based on a relatively large sample of 432 German affiliates worldwide, the results should be interpreted with caution, as some investment locations of German companies are overrepresented in our sample, whereas some others are missing.

(1) Export Orientation is somewhat low in India, China, Brazil and the U.S. Comparatively high trade barriers may be the common cause. But whereas hidden trade barriers are the main trade barrier in China, India suffers from high import tariffs and Brazil and the U.S. from high currency risks.

(2) Business Transfer scores above average in China but not much higher than in other large countries such as India, Japan, the U.S. or Brazil. This is not surprising, given that China's market today is already large enough to reach

minimum-efficient scales in many industries even without bundling volume across borders. The dominance of the Business Transfer strategy in China may also be due to a combination of high market opportunities (such as market growth) and some high trade barriers (such as hidden trade barriers). Countries with very little Business Transfer either possess high investment barriers (such as Russia) or function primarily as a production base for neighboring markets and only have a very small domestic market on their own (such as Hungary).

Figure 8: Country comparison of international expansion strategies in percent (2004/2005)



Source: Own survey. Data on China deviates from Kaufmann et al. 2005a and 2005b due to a newly used algorithm that reflects inter-functional dependencies; see also Kaufmann et al. 2006a for Brazil, 2006c for India and 2006c for the U.S.

(3) Global Integration in China is as common as in many other countries with German involvement, such as Brazil, the U.S., ASEAN countries or Japan. Only Russia's share of Global Integration is noticeably lower. The only major services German affiliates in Russia provide are marketing & sales activities for other countries of the Russian Commonwealth of Independent States. India's high share of Global Integration is mostly driven by intangible services provided as internal

support functions and R&D, whereas Hungary and Czechia mainly function as nearby low-cost production platforms for sales to the European Single Market.

3.2 Aces & barriers

The knowledge about aces & barriers is vital for any trade or investment decision. Some aspects of these aces & barriers can be gathered from macroeconomic data. Yet whereas this readily available data may tell much about the intensity of single aspects of the Chinese business environment, it is far from complete. Also, it tells only little about the respective relevance for German affiliates. Therefore, we asked our interview partners to reflect both in their evaluation on Chinese aces & barriers, their intensity in China (e.g., whether labor costs are low) and their relevance for their affiliate (e.g., whether it is important to have low labor costs). The answers were given on a rating scale of one (not important at all) to five (extremely important).

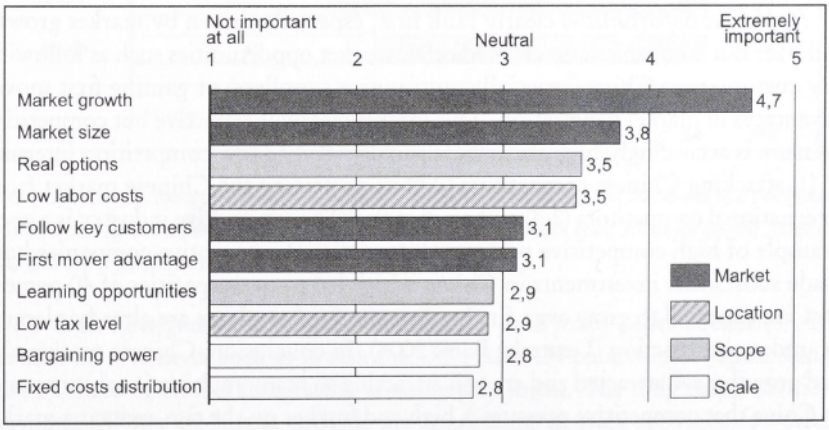
Aces

Figure 9 displays the top ten out of 35 queried aces for conducting business in China. Market opportunities are still by far the strongest driver of German activities in China, followed with some distance by economies of locations, scope and scale.

(1) Market opportunities clearly rank first, especially driven by market growth and size. But companies also claimed other market opportunities such as following key customers to China (especially automotive suppliers) or gaining first mover advantages in market penetration. This market clearly is attractive but competitive pressure is accordingly high. Interview partners denied low competition intensity (2.1), attacking Chinese competitors (2.4) or protecting the Chinese market from international competitors (2.7) as their motives. The automotive industry is a good example of high competitive pressure. International automotive companies have made substantial investments in China, which led to overcapacities of 40 percent that are expected to grow even further because further plants are already planned or under construction (Deutsche Bank 2004). In conclusion, Chinese market size and growth have attracted and are still attracting so many multinational companies to China that competitive pressure is high and further on the rise, reducing market opportunities for both, existing players and new entrants.

(2) Economies of location and scope rank quite similar among the top ten aces, yet overall, economies of location score slightly higher. Its two most important aspects are low labor costs and lower Chinese tax levels. In contrast to market opportunities, factor cost advantages are expected to remain an important driver in the future. China presents a considerable labor cost advantage that can be utilized to a company's benefit. Despite payroll fringe costs up to 100 percent of total labor costs, the wages of a Chinese industrial worker are only six percent of the wages of his German counterparts (EIU 2004b, UBS 2003). In coastal regions these costs may, however, increase by the factor of 1.9 (National Bureau of Statistics of China 2004) and foreign firms typically pay an additional factor of 1.8 for qualified workers (EIU 2005: 24). For industrial workers the labor cost advantage is thus reduced from 94 to 78 percent. However, for positions such as engineers or managers, this advantage is diminished to 50 percent or less (UBS 2003). Thus it is important to take all aforementioned aspects into account when creating a viable business plan for China. For work-intensive operations that do not require highly qualified labor, relocating to China will create added value in most cases. For specialist positions, though, other countries, such as India, may eventually offer a better cost advantage than China.

Figure 9: Top ten aces of doing business in China



Source: Own survey.

(3) Economies of scope are especially seen in real options for further expansion and learning opportunities across affiliates. Companies seek real options based on the idea that it is best to start building competencies on a small scale in China to enable the prompt transfer of value creation activities at a later time. The built-up capacities and capabilities in China can then be used either to capture local market opportunities through Business Transfer (in case market growth exceeds installed capacities) or to capture economies of location through Global Integration (in case trade and investment barriers decline at consistantly low wage levels). Learning opportunities across affiliates are especially used between high-growth countries. German management practices and procedures are sometimes not adequate for the dynamic and intransparent Chinese business environment. Companies with previous experience in other growth markets can gain a competitive edge by transferring these management capabilities to China. The Chinese affiliate can enhance these capabilities and pass them on to third countries at a later stage.

(4) Economies of scale are of less importance, although interview partners acknowledged the importance of bundling volumes across borders to gain bargaining power against suppliers and to distribute fixed costs. This low importance of volume bundling maybe the result of a already large domestic market. However, in branches where facilities are conceived on a regional or world-scale, as for example for some specialty chemicals, scale advantages can be a deciding factor in opting for or against a Chinese center of operations.

Barriers

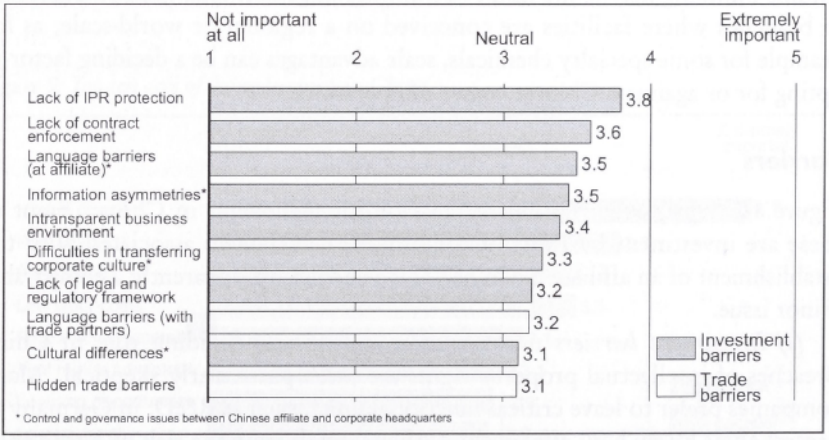
Figure 10 displays the top ten barriers of doing Business in China. Eight of these are investment barriers, highlighting the challenges associated with the establishment of an affiliate in China. Trade barriers are apparently a comparably minor issue.

(1) Investment barriers unfortunately still play a deciding role in China. Breaches of intellectual property rights are rated particularly skeptical. Many companies prefer to leave critical functional units, such as R&D, in Germany to protect their know-how effectively. Others openly take the risk of losing their intellectual property to have a chance at taking part in the Chinese market and business environment. Other legal disadvantages in the Chinese business environment include the insufficient enforcement of contracts and deficiencies in the legal and regulatory framework. But also control and governance issues of trans-

ferring a business concept to China are typical investment barriers and consist of language barriers and resulting information asymmetries between the affiliate and headquarters as well as cultural differences and resulting difficulties in transferring a corporate culture to Chinese affiliates. Fortunately, legal discrimination against FDI does not seem to be a major issue.

(2) Trade barriers are led by language barriers in trade and hidden trade barriers. Yet this top ten ranking hides the fact that in comparison to other countries, trade barriers still play an important role in China. With respect to hidden trade barriers, unclear procedures in obtaining customs clearance, unwavering technical guidelines and complicated licensing procedures are especially critical. Similarly important for China are local content regulations, which can sharply limit or altogether prevent the delivery of inputs from Germany in some branches. Finally, coordination costs that arise from physical and cultural distance play a large role in China. All of these trade barriers compel companies to relocate more portions of the value chain to China than would otherwise be sensible.

Figure 10: Top ten barriers of doing business in China



Source: Own survey.

Impact of aces & barriers on strategic choice

Figure 11 compares the Chinese aces & barriers, each averaged over its top five items. The aces related to the Chinese sales and factor market (market opportunities and economies of location) rank highest. The efficiency related aces (economies of scope and scale) trail behind. Also the barriers exhibit a clear differentiation; investment barriers are regarded much more hindering than trade barriers. So is the strategy mix presented in chapter Strategies indeed suited to exploit the major Chinese aces while avoiding its main barriers?

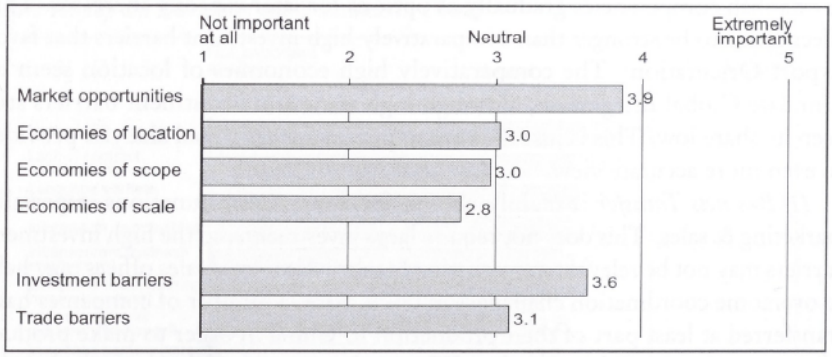
The influence of the aces & barriers on the choice for a China strategy seems to reflect the predictions in our model. Market opportunities were by far the most important driver of German engagements in China. Accordingly, Export Orientation and Business Transfer are the most widespread strategies. The relative relevance of economies of scale and scope as well as trade and investment barriers then decides about the distribution between Export Orientation and Business Transfer. The higher relevance of economies of scope seems to be the deciding factor in favor of Business Transfer. A number of companies only invest in China to establish competencies gradually as options for later capacity increases. This effect seems to be stronger than comparatively high investment barriers that favor Export Orientation. The comparatively high economies of location seem to stimulate Global Integration, although high trade and investment barriers still keep its share low. This is just the overall picture; a functional analysis provides an even more accurate view.

(1) Business Transfer is mainly chosen for downstream functions, especially marketing & sales. This does not require large investments, so the high investment barriers may not be relevant in marketing & sales. Also, local sales offices may help to overcome coordination challenges in trade. Also, a number of companies have transferred at least part of their production to China in order to make product adjustments for the Chinese market. When major parts of production were located to China this was usually done to circumvent hidden trade barriers. Getting a publicly funded order often depends on the company's corporate citizenship, thus substantial investment commitments may well catalyze otherwise extensive permission processes. Likewise, local sourcing activities were often initiated in order to satisfy local content requirements, which constitute another form of hidden trade barriers.

(2) Export Orientation is especially chosen for upstream functions. In particular, R&D is dominated by Export Orientation. This allows companies to distribute high R&D costs over a large sales volume, to benefit from low trade barriers (knowledge can be easily exchanged), and to circumvent high investment barriers in form of insufficient IPR protection. In our model, this combination of economies of scale, low trade barriers and high investment barriers corresponds exactly to the strategy of Export Orientation.

(3) Global Integration may gain in importance in case market opportunities, trade barriers and transfer barriers should indeed decline in the future. We already demonstrated that increasing competitive pressure in the Chinese sales market limits market opportunities for existing affiliates and newcomers. Moreover, trade and investment barriers may decline in the course of transposing directives of the World Trade Organization (WTO) into national law. Thus changes in aces & barriers may directly influence the appropriate strategy mix.

Figure 11: Overview of Chinese aces & barriers (average of top five items per ace or barrier)



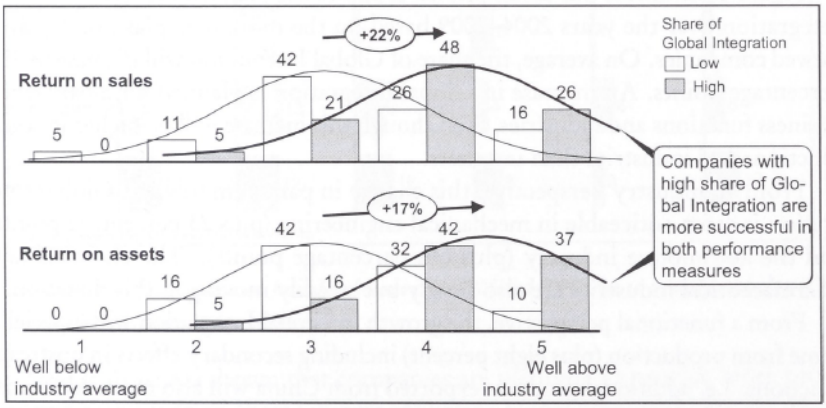
Source: Own survey.

This is just a qualitative analysis of the effect aces & barriers may have on strategic choice. The sample size of our China module alone (n=44) does not yet allow for a proper structural equation model. Therefore, we will conduct such an analysis at a later time, including the complete data set of our comprehensive research project (n=432).

3.3 Performance effects

Does the choice of strategy have an effect on performance? Which strategy is most successful at the moment? To answer these questions, we asked our interview partners to evaluate their business success in regard to return on sales and return on assets in comparison to their direct competitors on a scale from one to five. We asked about performance data relative to the industry average rather than for actual controlling data in order to avoid confidentiality issues, to ensure data availability and to eliminate the distorting influence of industry specifics. For each performance measure, we then divided the sample into two groups of equal size – companies with a high share of Global Integration (dark columns in Figure 12) and companies with a low share of Global Integration (light columns).

Figure 12: Performance effects of international expansion strategies in percent (2004)



Source: Own survey.

We found that companies with a high degree of Global Integration tend to be more successful than companies with a lesser degree of Global Integration. In both performance measures, higher globally integrated companies rated their own success higher than the comparison group. On average, companies with a higher degree of Global Integration rate their company's success 17 to 22 percent better on our scale than the comparison group. Again, this is only a qualitative analysis

and we will try to confirm our findings with a proper structural equation model across the entire data set at a later point of time.

3.4 Future developments

The above-average performance of globally integrated companies identified in chapter Performance effects lets assume that the strategy of Global Integration may be more attractive than reflected in its current extent. Therefore, companies may expand their share of Global Integration to capture new opportunities beyond the sales market. This assumption is supported further by the expected development of aces & barriers presented in chapter Aces & barriers. If market opportunities, trade barriers and investment barriers will indeed decline over the next years, companies should act accordingly and should increase their share of Global Integration.

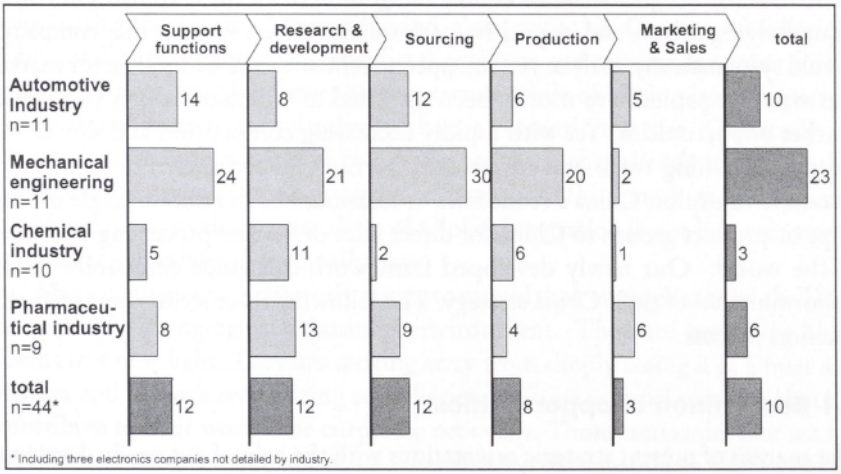
Figure 13 confirms our assumptions. It shows the planned increase in Global Integration over the years 2004–2009 based on the mid range plans of 44 interviewed companies. On average, the share of Global Integration will increase by ten percentage points. An increase in Global Integration is planned for all analyzed business functions and industries, even though this increase will be higher in some functions and industries than in others.

From an industry perspective, this change in paradigm towards Global Integration is most noticeable in mechanical engineering (plus 23 percentage points) and the automotive industry (plus ten percentage points). The chemical and pharmaceutical industries are also slowly but steadily moving in this direction.

From a functional perspective, the growth in Global Integration will especially come from production (plus eight percent) including secondary effects in upstream functions. I.e. additional products exported from China will also mean additional internal services, R&D and sourcing for third markets. Yet the increase of Global Integration in these upstream functions will be even higher than these eight percentage points, meaning that Chinese affiliates will also provide more research findings or product developments directly for affiliates in other countries and that low-cost global sourcing in China for production elsewhere in the world will gain in significance. The increase of Global Integration in production will come fully at the expense of Export Orientation (minus eight percentage points), which means that they will receive less provisions from Germany and will sell more products made in China to third markets. The somewhat lower increase of Global

Integration in marketing & sales means that these additional exports from China will occur mostly intra-firm, i.e. existing sales affiliates in other markets will bring these additional exports to their customers. The planned additional exports from China should help to increase utilization (e.g., in the automotive industry) and scale of German production capacities in China and with it will boost efficiency.

Figure 13: Increase of Global Integration in percentage points (2004–2009)



Source: Own survey. Data deviates from Kaufmann et al. 2005 and 2005b due to a newly used algorithm that reflects inter-functional dependencies.

This analysis has shown that companies are planning to provide more products and services from their Chinese affiliates. Hence they will become more globally integrated, especially in upstream functions. German affiliates in China will experience a trend that can be characterized best as "taking less and giving more". In fact, German affiliates in China will gain a balanced trade account by 2009, receiving 28 percent of value creation and providing the same amount to third markets. Whereas today Chinese affiliates are still often seen as a "child" of the "mother company", these "children" will grow up to equal "sister companies" within their corporate structures. Broadly speaking, this implies that China is becoming increasingly important for the worldwide activities of globally operating companies. Thus almost all functional areas are now being upgraded in China.

This will enable companies to exploit the country-specific advantages of their Chinese affiliate even better in the future. This will open up new opportunities for German companies in China, even if market opportunities should decline.

4 Conclusion

What practical recommendation can be derived from our findings? The identified trend towards a higher share of Global Integration of German affiliates in China, its underlying drivers and its positive performance effects suggests that companies should systematically analyze yet untapped potential on the Chinese factor market. German companies have mostly been attracted to China due to its substantial market opportunities. Yet with rapidly increasing competition and slowly but steadily declining trade and investment barriers, it becomes more and more attractive to exploit China's economies of location, i.e., to relocate single process steps or product groups to China for direct sales or further processing elsewhere in the world. Our newly developed framework can guide companies in the (re)formulation of their China strategy. The following three steps summarize this decision process.

4.1 Recognition of opportunities

The analysis of present strategic orientations with the help of our newly developed model shows that German subsidiaries in China to a large extent follow a mixed strategy of Business Transfer and Export Orientation. Downstream business functions are dominated by the strategy of Business Transfer with 69 percent of marketing & sales and 53 percent of production transferred to China. In these functional units, subsidiaries have already localized a large portion of the value chain to China and have built up the necessary competencies. Upstream business functions are still dominated mostly by the strategy of Export Orientation with 43 percent of procurement volume and 65 percent of R&D results being "exported" to China. In this strategy, a large portion of input still comes from the German headquarters of a company. At this point in time, the share of 18 percent for Global Integration is still comparably small.

For the further development, it can be assumed that trade and investment barriers as well as market opportunities will decline. As a result of the massive inflow of international competitors into the Chinese market, considerable overcapacities

have resulted in, for example, the automotive industry. These overcapacities may extend even further as many current investment projects are still being implemented. The combination of decreasing market opportunities and barriers will, according to our model, make the strategy of Global Integration more attractive. It is precisely this shift that emerges as a conclusion from our survey.

Within five years, the strategy of Global Integration will see a large increase of ten percentage points. This increase will be, above all, at the expense of the presence of Export Orientation. In other words, China will transform from a sales market to a center of operations and, along with this, German subsidiaries in China will provide more (intermediate) products and services for other foreign affiliates within the global corporate network while obtaining less company-internal inputs from other subsidiaries than is currently the case. Our study also shows that the most successful companies are those that already today use their Chinese affiliates to provide products or services to third markets. The planned development towards a higher share of Global Integration is not just a new trend but rather something that actually pays.

Many companies are currently trying to mould their strategies to the challenges of a quickly changing local business environment. They are beginning to see China in a new light. They are moving away from simply seeing it as a huge sales market and towards recognizing subsidiaries in China as equal partners that also contribute to their worldwide corporate networks. Those companies that act first and swiftest on this opportunity, i.e., that develop the capabilities needed to fully integrate China into their international value chains, may profit from China's aces beyond eroding market opportunities.

4.2 Assessment of driving factors

China is one of the world's fastest growing markets, an inexhaustible source of low cost labor but also still a developing country with all of the risks and instabilities that go along with this status. Thus, a comprehensive knowledge of all aces & barriers is an essential requirement for the formulation of a solid China strategy.

Market opportunities are still the most important ace in China, especially driven by market growth and size, following key customers to China, or trying to gain first mover advantages in market penetration. Chinese market size and growth have attracted and are still attracting so many multinational companies to China that competitive pressure is high and further on the rise, reducing market

opportunities for both, existing players and new entrants. Economies of location mainly consist of low labor costs and lower Chinese tax levels. In contrast to market opportunities, factor cost advantages are expected to remain an important driver in the future. Economies of scope are especially seen in real options for further expansion and learning opportunities across affiliates. Economies of scale are of less importance, although interview partners acknowledged the importance of bundling volumes across borders in order to gain bargaining power against suppliers and to distribute fixed costs.

Investment barriers rank higher than trade barriers in China. Breaches of intellectual property rights are rated particularly skeptical. Other legal disadvantages in the Chinese business environment include the insufficient enforcement of contracts and deficiencies within the legal and regulatory framework. But also control and governance issues of transferring a business concept to China are a typical investment barrier. Fortunately, legal discrimination against FDI does not seem to be a major issue. Trade barriers are led by language barriers in trade and hidden trade barriers. With respect to hidden trade barriers, unclear procedures in obtaining customs clearance, unwavering technical guidelines and complicated licensing procedures are especially critical. Similarly important for China are local content regulations. Finally, coordination costs that arise from physical and cultural distance play a large role in China.

4.3 (Re)formulation of China strategy

For new entrants, the formulation of a clear China strategy is crucial as there is already a high level of competitive pressure in the Chinese market and because trade and investment barriers still pose considerable hurdles. For companies that have already established affiliates in China, the dynamics of the Chinese business environment make it necessary to continually reassess the original strategy. In this case, the newly introduced model of international expansion strategies can help to structure decision processes and to ask the right questions. It is essential to balance the trade-offs of aces & barriers on functional and product levels. Companies need to be sure they know what they are looking for in China, be it low labor cost or a large local sales market.

There is no such thing as the one and only "right" configuration of a value creation structure for a company. The decisions about localization and integration have to be made separately for each business function, product segment or region,

as the extent of both aces & barriers is context specific. The relocation of business functions will not only affect China but also Western economies. Companies can increase their competitiveness by integrating their worldwide activities to benefit from economies of location. Competitors are thus forced to react. They may have to follow to defend their own position.

Following these recommendations of strategic orientation alone will not make "China Champions" overnight. It takes dedicated and competent managers to formulate the right strategy and to then translate it into China's demanding business reality.

References

Barlett, Christopher A./Ghoshal, Sumantra (1989), *Managing Across Borders. The Transnational Solution*, Boston: Harvard Business School Press

Buckley, Peter J./Casson, Mark C. (1976), *The Future of the Multinational Enterprise*, London: Palgrave Macmillan

— (2003), "The Future of the Multinational Enterprise in retrospect and in prospect", in: *Journal of International Business Studies*, 34 (3), pp. 219-222

Caves, Richard E. (1971), "Industrial Corporations. The Industrial Economics of Foreign Investment", in: *Economica*, 38 (149), pp. 1-27

Dunning, John H. (1977), "Trade, Location of Economic Activity and the MNE. A search for an Eclectic Approach", in: B. Ohlin et al. (eds.), *The International Allocation of Economic Activity. Proceedings of a Nobel symposium held at Stockholm*, London: Macmillan, pp. 395-418

— (1980), "Toward an Eclectic Theory of International Production. Some Empirical Tests", in: *Journal of International Business Studies*, 11 (1), pp. 9-31

Ghemawat, Pankaj (2003), "Semiglobalization and international business strategy", in: *Journal of International Business Studies*, 34 (3), pp. 138-152

Hanser, Peter (1993), "Marketing-Outsourcing. Schlankheitskur mit Risiko", in: *Absatzwirtschaft*, 36 (8), pp. 34-39

Harzing, Anne-Will (2000), "An Empirical Analysis and Extension of the Bartlett and Ghoshal Typology of Multinational Companies", in: *Journal of International Business Studies*, 31 (3), pp. 101-120

Hedlund, Gunnar (1986), "The hypermodern MNC. A heterarchy?", in: *Human Resource Management*, 25 (1), pp. 9-35

Johanson, Jan/Vahlne, Jan-Erik (1977), "The Internationalization Process of the Firm. A Model of Knowledge Development and Increasing Foreign Market Commitments", in: *Journal of International Business Studies*, 14 (8), pp. 23-32

Kaufmann, Lutz (2001), *Internationales Beschaffungsmanagement. Gestaltung strategischer Gesamtsysteme und Management einzelner Transaktionen*, Wiesbaden: Gabler

Kaufmann, Lutz/Panhans, Dirk (2004), "A Novel Framework for International Value Creation. An Investigation of Latin American Affiliates", in: N. Schweickart/L. Kaufmann (eds.), *Lateinamerika-Management. Konzepte – Prozesse – Erfahrungen*, Wiesbaden: Gabler, pp. 3-28

Kaufmann, Lutz et al. (2005a), *China Champions. Wie deutsche Unternehmen den Standort China erfolgreich für ihre globale Strategie nutzen*, Wiesbaden: Gabler/Financial Times Deutschland

— (2005b), *China Champions. How German companies can successfully integrate China into their global strategies*, Frankfurt: European Management Publications

— (2006a), *Brazilian Brilliance. Success Strategies of Foreign Companies in Brazil*, Frankfurt: European Management Publications

— (2006b), *Investmentguide Indien: Erfolgsstrategien deutscher Unternehmen auf dem Subkontinent*, Stuttgart: Schäffer-Poeschel/Handelsblatt

— (2006c), *American Allstars. Success Strategies of German Companies in the United States*, Frankfurt: European Management Publications

Kim, K. et al. (2003), "The Global Integration of business functions. A study of multinational businesses in integrated global industries", in: *Journal of International Business Studies*, 34 (7), pp. 327-344

Malnight, Thomas W. (1996), "The Transition from Decentralized to Network-Based MNC Structures. An Evolutionary Perspective", in: *Journal of International Business Studies*, 27 (1), pp. 43-65

Meier, Andreas et al. (1997), "Auslagerung der Personaldienstfunktion. Machbarkeit und Grenzen", in: *Zeitschrift Führung und Organisation*, 66 (3), pp. 138-145

Meissner, Hans G./Gerber, Stephan (1980), "Die Auslandsinvestition als Entscheidungsproblem", in: *Betriebswirtschaftliche Forschung und Praxis*, 32 (3), pp. 217-228

Panhans, Dirk/Kaufmann, Lutz (2004), "International expansion strategies. A research efficient framework and its application to the 10 EU accession countries", in: *Proceedings of the 30th annual conference of the European International Business Academy*, Ljubljana: EIBA

Perlmutter, Howard V. (1969), "The Tortuous Evolution of the Multinational Company", in: *Columbia Journal of World Business*, 4 (1), pp. 9-40

Picot, Arnold (1991), "Ein neuer Aufsatz zur Gestaltung der Leistungstiefe", in: *Zeitschrift für Betriebswirtschaft*, 43 (4), pp. 336-357

Root, Franklin R. (1988), "Some Taxonomies of International Cooperative Arrangements", in: F.J. Contractor/P. Lorange (eds.), *Cooperative Strategies in International Business*, Lexington: Lexington Books, pp. 69-80

Rugman, Alan/Verbeke, Alain (2003), "Extending the theory of the multinational enterprise. Internalization and strategic management perspectives", in: *Journal of International Business Studies*, 34 (3), pp. 125-137

— (2004), "A perspective on regional and global strategies of multinational enterprises", in: *Journal of International Business Studies*, 35 (1), pp. 3-18

Stopford, John M./Wells, Louis T. (1972), *Managing the Multinational Enterprise. Organization of the Firm and Ownership of the Subsidiaries*, New York: Basic Books

Tallman, Stephen/Fladmore-Lindquist, Karin (2002), "Internationalization, Globalization, and Capability-Based Strategy", in: *California Management Review*, 45 (1), pp. 115-135

Welge, Martin K. (1989), "Organisationsstrukturen, differenzierte und integrierte", in: K. Macharzina/M.K. Welge (eds.), *Handwörterbuch Export und Internationale Unternehmung*, Stuttgart: Schäffer-Poeschel, pp. 1509-1602

White, R./Poynter, T.A. (1990), "Organizing for worldwide advantage", in: C. Barlett et al. (eds.), *Managing the global firm*, New York: Routledge, pp. 95-113

Yin, Robert K. (2002), *Case Study Research. Design and Methods*, 3rd ed., Newbury Park: Sage