

# **Reconstructing investors' opinions about the valuation impact of corporate multinationality:**

## **A grounded theory approach on the merger between Daimler-Benz AG and Chrysler Corporation**

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**ABSTRACT**

Current research on the valuation impact of corporate multinationality is characterized by contradictory and inconclusive results. Based on an analysis of extant academic research we confront extant research approaches with patterns of argumentation concerning the valuation impact of multinationality discovered in the business press. Based on grounded theory we analyze press reports regarding the cross-border merger of German Daimler-Benz AG with US Chrysler Corporation concerning causal links between corporate multinationality and firm value. We identify patterns of argumentation in which a valuation impact of corporate multinationality is construed, thus supporting the proposition of academic theory that corporate multinationality has an impact on firm value. However, the relationship between multinationality and firm value is explained with arguments, which are not sufficiently considered in the theoretical models used in academic research.

Keywords: academic research, investors' opinions, corporate multinationality, cross-border merger, DaimlerChrysler, international business theory, corporate valuation

## 1. INTRODUCTION

The valuation impact of corporate multinationality is one of the key issues of international business research (Peng, 2004). Despite the substantial number of studies regarding this topic, the findings are however quite inconclusive and contradictory up to now. Whereas some authors argue that multinationality increases value (Bodnar, Tang and Weintrop, 2003), others come to the opposite conclusion, i.e. that multinationality has a negative effect (Click and Harrison, 2000; Denis, Denis and Yost, 2002) and still others find that multinationality leads to a value enhancement if certain conditions are fulfilled and does not lead to value enhancement or even reduces value in the absence of these conditions (Mishra and Gobeli, 1998; Morck and Yeung, 1991).

In the meantime, a substantial number of theoretical arguments has been established why multinationality should have an impact on firm value. These theoretical arguments include concepts from principal agent theory (Mishra and Gobeli, 1998), they comprise theories like the incomplete capital markets theory (Errunza and Senbet, 1984), internalization theory (Morck and Yeung, 1991), theories of operational flexibility (Pantzalis, 2001), as well as theories of organizational learning (Lu and Beamish, 2004) and theories of cultural diversity (Gomez-Mejia and Palich, 1997).

Despite this variety of theoretical approaches there is no satisfactory clarification of the valuation impact of corporate multinationality. The empirical findings regarding these different theoretical arguments are ambiguous, and often even contradictory. In essence, we may have to concede that research concerning the valuation impact of multinationality seems to be stuck in a dead end street. We argue that this situation could be the consequence of a lack of synchronization between academic theory and the theoretical models guiding the behavior of capital market actors. Could it be that academic research regarding the valuation impact of corporate multinationality is just another example of high rigour – low relevance research?

There is no doubt, that the historical development of academic research regarding the valuation impact of multinationality can be characterized as path dependent. Analyzing the historical development of the different theoretical models which guide aca-

demographic research clearly indicates that current research models can be considered as an evolutionary product of previous research. For example, the research model of Morck and Yeung (1991) had a remarkable impact on the theoretical models employed in further research contributions like Christophe (1997), Mishra and Gobeli (1998) or Gande, Schenzler and Senbet (2009).

If, however, academic research on the valuation impact of corporate multinationality draws on theoretical models from previous research without aligning these models from time to time with current capital market practice, it runs into danger of rewriting theoretical misspecifications over and over again. And, the longer the time period during which capital market practice and academic research do not get matched against each other, the greater the risk that these parallel universes drift more and more apart from each other.

In order to shed light on the lack of correspondence between academic research and capital market practice, we try to reconstruct the theoretical models investors have in mind about the valuation impact of corporate multinationality. However, as a direct survey among investors was not considered as an appropriate research method, we decided to reconstruct theoretical models about the valuation impact of corporate multinationality circulating in the capital markets by analyzing articles from the business press. We implicitly assume that the business press has a substantial influence on investors' opinions. The current contribution is part of an (ongoing) research project and presents first results regarding the valuation impact of multinationality in the case of the cross-border merger of the German car-maker Daimler-Benz AG with the US automobile producer Chrysler Corporation.

The remaining part of this paper is organized as follows. In the next section a review of the research literature regarding the valuation impact of multinationality is considered. The methodology of the paper is presented in the third section, as well as an introduction of the case DaimlerChrysler as a first unit of analysis and the sources of data. In the fourth section our empirical results are presented. The last section draws some preliminary conclusions, provides limitations as well as implications for further research.

## 2. LITERATURE REVIEW

### 2.1 Theoretical arguments regarding the valuation impact of multinationality

With regard to the valuation impact of multinationality, different theoretical arguments are proposed in the academic literature.

The theoretical argument which is addressed most often in the empirical research literature comes from internalization theory. The proponents of internalization theory argue, that multinationality leads to value enhancement, if the multinational firm is in charge of certain firm-specific intangible assets, which are – due to their public good character - more efficiently exploited inside the firm than through the market (Morck and Yeung, 1991). In the empirical studies which address this theoretical argument, research and development spending is usually employed as a measure of firm specific intangible assets related to research and development (R&D) and advertising expenditures are used as a proxy for firm-specific intangible assets related to marketing skills and consumer goodwill. Morck and Yeung (1991) can be seen as the pioneering contribution regarding the question whether intangible assets are a prerequisite for a positive effect of multinationality on firm value. The essence of their empirical results is that the existence of firm-specific intangible assets is crucial if internationalization is expected to create value. Mishra and Gobeli (1998), Pantzalis (2001) and Antia, Lin and Pantzalis (2007) who adopt the research design of Morck and Yeung (1991) to some extent, find supporting evidence. In essence, we have to concede that the argument from internalization theory (that multinationality leads to value enhancement if the firm is in charge of intangible assets) is definitely the one most addressed in empirical research. Nevertheless, the findings are not unambiguous: in some studies the value impact of the combination of intangible assets and multinationality proves to be significant for some regression models while for others it does not (Morck and Yeung, 1991; Christophe, 1997; Mishra and Gobeli, 1998). Moreover some researchers find that multinationality leads to value enhancement if combined with intangible assets related to marketing while multinationality combined with intangible assets related to R&D does not (Bodnar, Tang and Weintrop, 2003; Lu and Beamish, 2004).

Another theoretical argument, which is addressed relatively often in extant research is based on the concept of operational flexibility (Kogut, 1985). According to this concept, multinational firms are able to combine and exploit the advantages of different locations. On the one hand MNCs may be able to utilize current differences in prices and qualities on the various national product, factor, and capital markets (Kogut, 1985). On the other hand, due to the multiplication of value chain activities, MNCs may be able to react more flexibly to changes in their business environments than their purely domestic competitors. Operating in a multitude of countries simultaneously, a multinational network has a lot more real options compared with a purely domestic firm. Furthermore, the MNC can absorb inputs from a variety of different locations. These inputs may foster innovation processes inside the MNC. These advantages may contribute to a higher profitability and if investors appreciate them, they might induce a higher value for MNCs compared with purely domestic companies. Various researchers have empirically explored the flexibility-argument. In most cases, the breadth of the multinational network (which is measured by the number of countries, in which the MNC operates) has a positive impact on value (Allen and Pantzalis, 1996; Doukas, Pantzalis and Kim, 1999; Antia, Lin and Pantzalis, 2007; Lee and Makija, 2009) supporting the assumption that MNCs benefit from being in charge of a higher amount of real options.

A third theoretical argument, why multinationality might affect firm value is based on portfolio theory and is labeled as the incomplete capital markets theory (ICMT). According to this argument, firms may be able to reduce the fluctuation of revenues (and hence the variance of profitability) by geographical diversification (Rugman, 1976). The corresponding effects of a reduction in the variability of profitability on value are however unclear. Following the ICMT, multinational firms can be considered as a diversification vehicle for their investors. Investing in different countries may be difficult and costly for investors due to lack of information on foreign firms, certain regulations restricting transfer of capital across borders etc. By investing in a multinational firm investors reap the benefits of international diversification without having to diversify their capital across several countries. In this case multinational firms are in charge of a diversification advantage compared to their investors and hence, multinationality is viewed by investors as something valuable (Errunza and Senbet, 1981, 1984). However, if capital markets are sufficiently integrated, investors

may be able to realize the benefits of international diversification by themselves. Under these conditions, firm diversification bears no value for investors.

Regarding the risk reducing effect of corporate multinationality different empirical studies were undertaken generating inconsistent results. E.g. Kim et al. (1993) showed that multinationality leads to decreases in the variability of corporate profitability. Agmon and Lessard (1977) claim to have found evidence, that MNCs are appropriate vehicles for realizing the benefits of international diversification. Their argumentation was, however, heavily criticized by Adler (1981). Jacquillat and Solnik (1978) showed that international portfolio diversification was more efficient than international corporate diversification by foreign direct investment. Errunza and Senbet (1981, 1984) compare the impact of multinationality on value during two different periods: one characterized by severe restrictions concerning international capital transfers, the other characterized by more liberal regulations, thus testing the incomplete capital markets theory (ICMT). The authors find that multinationality increases value, albeit the effect on value weakens due to the increasing liberalization of international capital markets. Hence, the authors appear to have found empirical evidence on the validity of the ICMT. This theory is again tested by Morck and Yeung (1991), who interpret their findings as a proof that capital markets are sufficiently integrated, so that a valuation impact of multinationality can not be considered as a consequence of the risk reducing effect of corporate geographical diversification. A number of contributions from Markides and Ittner (1994), Markides and Oyon (1998), Christophe (1997), Mishra and Gobeli (1998) support this argument. Nevertheless in a recent study Gande, Schenzler and Senbet (2009) claim to have found empirical evidence on the positive valuation impact of the risk reducing effect of geographical corporate diversification. However, a closer look at these studies reveals that their ability to test the validity of the incomplete capital markets theory must be considered as dubious due to methodological problems (Eckert and Engelhard, 2008).

Another theoretical argument regarding the valuation impact of multinationality is based on agency theory. According to agency theory the objectives of shareholders and management are not identical. Rather, there seem to be conflicting objectives between these groups and given the information asymmetry between management and shareholders it is obvious that managers might use internationalization to pursue

personal objectives instead of shareholder wealth. Mishra and Gobeli (1998), Click and Harrison (2000) or Doukas and Kan (2006) found empirical support that a negative valuation impact of multinationality might be due to agency problems.

Furthermore, researchers try to explain the valuation impact of corporate multinationality by referring to the liabilities of foreignness and newness argument (Hymer, 1976; Zaheer, 1995). Firms entering foreign markets may have to convince potential customers to choose them as new suppliers. These efforts cause costs which firms already “in the market” do not incur (at least not to the same extent). Moreover, firms operating abroad are confronted with business environments, political and economic systems as well as cultural systems, which are different from the ones they are familiar with. These differences may lead to unexpected costs due to erroneous decisions, which are taken by managers not being (fully) aware of the specifics of the foreign market. Although there is no direct empirical test of the liabilities of foreignness-effect, empirical findings from Click and Harrison (2000) and Denis, Denis and Yost (2002) indicate that the costs of doing business abroad might be considerably larger than those at home leading to smaller economic rents than business activities in the home market.

Other theoretical arguments which have received minor attention in academic research concerning the valuation impact of corporate multinationality cover aspects such as the costs of increasing complexity which arise with increasing multinationality (Lu and Beamish, 2004), aspects such as organizational learning (Zaheer and Mosa-kowski, 1997), exchange rate effects (Click and Harrison, 2000) or effects of cultural diversity (Hutzschenreuter and Voll, 2007).

In sum, we have to concede that although the number of studies on the valuation impact of multinationality is rather impressive, the empirical findings up to now are rather sobering: We find contradictory results concerning the overall impact of multinationality as well as concerning the validity of certain theoretical arguments. We argue that these disappointing results could be a consequence of a misspecification of theoretical models employed for empirical research. In order to substantiate our argumentation, we reconstruct the historical development of academic research regarding the valuation impact of corporate multinationality.



## 2.2 On the evolution of empirical research on the valuation impact of multinationality

The publications of Errunza and Senbet (1981, 1984) can be considered as the starting point of academic research regarding the valuation impact of multinationality. Drawing on work from Rugman (1975, 1979), Levy and Sarnat (1970) and Errunza (1977) the authors develop a market value theoretic framework for the valuation impact of multinationality. Although their model is comprehensive in the sense that Errunza and Senbet take consideration of the diverse contemporary theoretical arguments linking multinationality and firm value, they focus especially on the incomplete capital markets theory. The following milestone regarding the valuation impact of multinationality is the paper of Morck and Yeung (1991). The authors introduce Tobin's Q as the pivotal proxy of market value and develop a regression model, where firm value is dependent on multinationality, intangible assets related to R&D and/or advertising, firm size and leverage. Empirically intangible assets related to R&D are proxied by R&D expenses and intangible assets related to marketing are proxied by advertising expenses. In order to test internalization theory they split up the regression coefficient of multinationality in three components: one component of multinationality which is independent of intangible assets related to R&D or marketing, a second component of multinationality, which is dependent on intangible assets related to R&D, and a third component, which is dependent on intangible assets related to marketing. This model explaining the relationship between multinationality and firm value has a significant and lasting impact on further research in this field. Authors like Christophe (1997), Mishra and Gobeli (1998) and Gande, Schenzler and Senbet (2009) follow the approach of Morck and Yeung very closely concerning the consideration of internalization theory as an explanation for the valuation impact of multinationality and concerning the research method how it is empirically tested. But the impact of Morck and Yeung's approach regarding internalization theory can also be found in the research design of authors like Antia, Lin and Pantzalis (2007), Bodnar, Tang and Weintrop (2003), Kim and Mathur (2008), Lu and Beamish (2004) or Pantzalis (2001).

Morck and Yeung (1991) also take consideration of the theoretical argument that multinationality has a positive impact on value due to the fact that multinationals are able to combine the location advantages of different locations in different countries. The authors use the number of subsidiaries in developing countries and the number of subsidiaries in tax havens as proxies for a firm's potential to arbitrage location differences. The idea behind this research design, that developing countries might have different locational advantages compared with developed countries was to some extent continued by authors like Allen and Pantzalis (1996), Pantzalis (2001) and also Berry (2006).

With regard to its theoretic framework, the concept of location arbitrage can be traced back to Kogut's (1985) concept of operational flexibility. According to this concept, MNCs on the one hand benefit from taking advantage of location differences and on the other hand, they benefit from the advantage, that MNCs are multinational networks where certain value chain activities are carried out simultaneously at different locations. MNCs may profit from this multiplication of value chain activities by having the flexibility to react to exogenous shocks by shifting capacities between operations in different countries. The latter aspect (i.e. the advantage of flexibility) was first introduced in the academic research on the valuation impact of multinationality by Allen and Pantzalis (1996). These authors used the breadth and depth of a multinational network as new dimensions of multinationality in order to test the valuation impact of increased flexibility through a broader network of value chain activities. This impact of flexibility has been also considered by other scholars like Doukas, Pantzalis and Kim (1999), Antia, Lin and Pantzalis (2007) and Lee and Makhija (2009), who also used similar proxies to operationalize the breadth and depth of a multinational network.

Another theoretical argument concerning the valuation impact of multinationality can be seen in the differing objectives of managers and shareholders. This theoretical argument was also considered by Morck and Yeung (1991). However, the authors did not directly test its effect. Mishra and Gobeli (1998) who adopted the concept of Morck and Yeung (1991) were the first to test the effect of the alignment of managerial objectives with shareholders' goals. This idea was again adopted by Kim and Mathur (2008). Furthermore, agency theory as explanation of the valuation impact of

multinationality has also been considered by Click and Harrison (2000), Pantzalis (2001) and Fauver, Houston and Naranjo (2004).

Finally, from empirical research on the relationship between multinationality and accounting-based performance, concepts of organizational learning as a moderating variable influencing the valuation impact of multinationality were recently introduced (Lu and Beamish, 2004).

However, what all these research attempts have in common is, that the authors tried to correlate the aggregate outcome of the different decisions of individual capital market actors (i.e. the market price) with certain proxies of multinationality. No one ever asked what investors think about the valuation impact of multinationality. A suggestion that any of these authors would have been discussing their respective theoretical model with investors or analysts is nowhere to be found. Could it be that academic research developed a world of its own? As the respective theoretical models used for empirical analysis have been developed from previous empirical approaches, there seems to be some path-dependency concerning the research on the valuation impact of multinationality. In order to check the empirical relevance of the research design of extant models on the valuation impact of multinationality, we confront extant theory and research with an empirical analysis of the relationship between multinationality and value as it is construed in the minds of investors. In essence, we try to find out, what investors (resp. those who influence their thinking) think about the relationship between multinationality and value.

### 2.3 On the dimensions of multinationality

Another important aspect concerning extant research on the valuation impact of corporate multinationality is construct validity. How does extant research measure multinationality?

If we assume that the frequency of the use of a certain measure of corporate multinationality can be considered as an indicator of its relevance, we may conclude that the ratio of foreign sales to total sales and the number of countries in which a MNC operates are the most important aspects regarding the valuation impact of corporate mul-

tinationality. Foreign sales to total sales and the number of countries are by far the most common proxies of corporate multinationality. A considerable number of studies even further reduces the construct of multinationality to the pure fact of being a multinational or not being a multinational by employing a dummy variable which takes the value of 1 if a company reports any foreign activities and 0 otherwise (cf. table 1).

Neglecting the theoretical discussion in the academic literature on the relevant dimensions of multinationality (Sullivan, 1994; Kutschker, 1994; Johanson and Mattsson, 1988; Welch and Luostarinen, 1988) it may be justified to ask whether investors conceive the construct of corporate multinationality in a way which is compatible and similar with the way academic research measures corporate multinationality, because valid results on the valuation impact of corporate multinationality can only be expected if there is a significant congruence between the conceptions of academic research and capital market actors.

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### **3. METHODOLOGY**

#### **3.1 Principles of Grounded Theory**

In order to reconstruct the theoretical model on the valuation impact of multinationality, we draw on Grounded Theory methodology (Glaser and Strauss, 1967). This methodology is a rather sophisticated approach how to generate theory from empirical data.

In contrast to the logico-deductive methodology which can be characterized as a sequential process where hypotheses are delineated from theory, data are gathered, hypotheses are tested and conclusions drawn one step after the other, grounded theory is characterized by a circular research process that consists of the three components data gathering, generating hypotheses and testing hypotheses. Starting with a certain research question, researchers select a first unit of analysis and begin to extract codes and concepts as well as hypotheses from the empirical material. After

these first patterns of theory have emerged, the researchers immediately test their findings by putting them to the test on a second unit of analysis and so on. Depending on the results they may modify their existing codes, concepts and hypotheses or develop new ones. These findings again are tested on a new unit of analysis. The abort criterion for stopping this research cycle is theoretical saturation: when the theory which has been developed from data has reached a level where the prospect of additional insight through further analysis of further cases is minimal, it is recommended to end the research process.

In grounded theory, the central criterion for selecting a unit of analysis is its theoretical relevance: the selection of units of analysis does not follow a random selection process or considerations about representativeness, but instead is guided by theoretical considerations. In essence, Glaser and Strauss (1967) argue to choose as unit of analysis the case which promises the highest gain in theoretical insight. Usually, this is a unit of analysis where certain conditions are rather extreme compared with the total distribution of relevant cases.

Building on this methodology we are trying to reconstruct the theoretical models that investors have in mind about the valuation impact of multinationality. In order to deduce these relationships we are analyzing reports from the business press.

### 3.2 The merger between Daimler and Chrysler as a first unit of analysis

In order to reconstruct the theoretical models investors have in mind about the valuation impact of multinationality a direct survey of investor's opinions does not appear to be an appropriate research method due to the problems of identifying investors, quantifying their relevance, problems of gaining access to the most relevant investors, problems of reaching a sufficient amount of investors without having to use standardized research instruments which would imply theoretical predispositions that should be avoided. Therefore, we decided to choose an indirect approach. We try to reconstruct the theoretical models investors have in mind about the valuation impact of multinationality by analyzing statements found in the business press, thus implicitly assuming that the business press is important in shaping investors' opinions on the valuation impact of multinationality.

We selected as the first unit of analysis the merger between the German Daimler-Benz AG (Daimler) and the US Chrysler Corporation (Chrysler) to DaimlerChrysler. We chose a cross-border merger because such a unit of analysis is one, where we may expect a rather rapid change in the geographical structure and hence a rather radical shift of the profiles and degrees of multinationality of the companies involved. Therefore, if investors anticipate a valuation impact of corporate multinationality, they can be expected to express these concerns about the valuation effects of corporate multinationality especially pronounced in the case of a cross-border merger.

The merger between Daimler and Chrysler is one of the most prominent cases in economic history. Public attention regarding this merger can therefore be expected to have been extremely pronounced. We may therefore anticipate a rather satisfactory amount of relevant statements concerning the valuation impact of multinationality in the case of the merger of Daimler and Chrysler in the business press.

The official announcement of the merger between Daimler and Chrysler took place in May 1998. Before the merger Daimler had a turnover of 124 billions German Marks and 300.068 employees (Daimler Benz, annual report, 1997), Chrysler achieved 1997 a turnover of 61 billions U.S. dollars and 121.000 employees (retrieved from Thomson Financial Datastream). The merger was estimated to amount to a transaction value of 85 billions euros (Anonymous, 2007). The new corporation Daimler-Chrysler had about 441.502 employees and an annual turnover of 258 millions of German marks (132 billions in euro) in the year 1998 (Daimler Chrysler, annual report, 1998).

Executives from both companies emphasized that the merger should be a “merger of equals”, not an acquisition. The announcement of the merger met a positive response on the stock markets. The stocks of Daimler quoted 12 percent higher on the day of the announcement, Chrysler stocks also increased about 7.5 percent (Anonymous, 2003).

Technically, the merger was organized as a stock swap transaction. On 17<sup>th</sup> of November 1998 for the first time DaimlerChrysler stocks were traded on the stock ex-

changes. The new company DaimlerChrysler was at that time one of the largest automobile manufacturing companies worldwide.

However, contrary to executives' forecasts, the merger did not end in improvements regarding to company performance. Instead the merged company suffered from severe losses in market value: whereas the market capitalization of DaimlerChrysler had been 84 bill. Euro in 1998, in 2002 it had decreased to 38 bill. Euro (retrieved from Thomson Financial Datastream). In 2007 the management of DaimlerChrysler decided to dissolve the merger and sold Chrysler to the financial investor Cerberus.

### 3.3 Sources of data

In order to reconstruct the theoretical models investors may have in mind about the valuation impact of multinationality, we draw on two German business magazines and on one German newspaper due to data availability and budgetary reasons. In details these sources include the weekly magazine "Wirtschaftswoche", the monthly magazine "Manager Magazin" and the daily newspaper "Die Welt". Although not comprehensive, the selection of these different sources nevertheless provides an extensive and representative insight into the (German) media reporting on the merger between Daimler and Chrysler and the performance of the merged company.

The press reports are taken from the online archives of the selected magazines. A retrieval of those databases for the combination of keywords "Daimler" and "Chrysler" and "merger" for the period from 1998 until 2010 resulted in 154 hits for the "Wirtschaftswoche", 71 hits for "Manager-Magazin" and 878 hits for "Die Welt". After this procedure these texts were inspected according to whether they contained patterns of argumentation regarding the performance effect of the merger. Following this procedure we ended up with a sample of 87 hits for "Wirtschaftswoche", 39 hits for "Manager-Magazin" and 281 hits for "Die Welt".

## 4. EMPIRICAL RESULTS

In the course of the inspection of the texts, we were looking for patterns of argumentation where a causal linkage between firm value and corporate multinationality was

construed. However, in order to be able to integrate the impact of multinationality into the overall framework of valuation impacts in general we also took consideration of patterns of argumentation where causes of valuation effects in general were mentioned. An overview of these determinants of firm value which were identified from the argumentation is presented in figure 1.

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According to the press reports considered for analysis, multinationality has an impact on firm value. From the selected texts we were able to identify 394 causal links between firm value and firm value determinants. 146 of these causal links can be described as patterns of argumentation where a relationship between multinationality and firm value is construed.

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An overview over the causal links between corporate multinationality and firm value is presented in figure 2. The main argument concerning the valuation impact of multinationality in the case of the merger of Daimler and Chrysler is geographical complementation. According to the text passages found, the positive impact of a cross border merger on firm value is the stronger, the smaller the geographical overlap between the merged companies and the more the merged companies complement each other in terms of geographical presence. The following paragraph may illustrate this result:

*“Both companies complement each other perfectly” emphasizes Rolla Kautz [BHF-Bank] who keeps recommending to invest in DaimlerChrysler. According to her, the company has an excellent product portfolio. [Robert] Halver [Delbrueck & Co] explains the benefits of the merger: “Where one partner has disadvantages, the other*



*partner has his advantages". According to him, Daimler has only one percent in the US and Chrysler only one percent in Europe. (Anonymous, 1998a).*

However, the argument of geographical complementation as a main driver for the valuation impact of multinationality leaves room for interpretation. First, the importance of geographical complementation could be interpreted as evidence that investors value multinationality due to the risk reducing effect of geographical diversification. Second, investors might value geographical complementation just because the multinational firm benefits from a higher number of growth opportunities and increasing economies of scale. Third, investors could value geographical complementation due to the higher degree of flexibility that a broader multinational network offers. And fourth, investors might also value geographical complementation because geographical overlap implies redundancies with corresponding cost implications. There's no clear empirical evidence on the relevance of these different reasons. Nevertheless, this finding has important implications for further research: if geographical complementation is relevant for the valuation impact of multinationality, research concerning the valuation impact of multinationality should take consideration of the geographical structure of MNCs. However, up to now, empirical research has more or less ignored this dimension of multinationality, probably primarily due to reasons of data availability.

According to our findings another important argument why multinationality might have an impact on value is because of the difference in corporate cultures between the merging companies. The differences in organizational cultures of the merging firms from different countries are heavily influenced by the respective country cultures. These differences are expected to exert a negative impact on value. The following citations may serve as illustrations of this effect:

*On the other hand, West LB is sceptical and has downgraded DaimlerChrysler from "moderate outperforming" to "underperforming". They fear the danger of friction costs caused through the integration of the different companies. (Anonymous, 1998a)*

*„USA Today“ remarked that some of the most talented Chrysler managers had left the company since the merger, among them Stallkamp, Chief-Engineer Chris Theo-*

*dore and Chief of PR Steve Harris. This outflow of human capital raises doubts, whether the marriage of both cultures – the courageous US Chrysler-style and the conservative German Daimler way really works (Rauscher, 2000).*

On the other hand, extant research on the valuation impact of multinationality nearly neglects the aspect of the cultural diversity. (One exception is the contribution of Gomez-Mejia and Palich (1997)). Our results indicate, however, that cultural diversity is an important dimension which should be considered when analyzing the valuation impact of multinationality.

A third important argument why multinationality could have an impact on value is economies of scale. In the press reports concerning the valuation effects of the merger of Daimler and Chrysler we find a number of text passages where it is argued that multinationality offers the advantage of larger size. According to Daimler's situation before the merger one journalist argues:

*The size of Daimler would have been probably not sufficient in order to remain competitive on a global scale (Menzel, 1998).*

However, "economies of scale" is a facet of the multinationality-value-relationship which has also been neglected in extant research. Our findings make a case for considering the potentials to realize economies of scale as a determinant influencing the valuation impact of multinationality. Given the fact, that these potentials for economies of scale may be highly dependent on industry specifics our findings can also be interpreted as a plea to take consideration of industry differences when analyzing the valuation impact of multinationality.

Moreover, following the argumentation found in the press reports growth can be considered as an important determinant influencing the valuation impact of corporate multinationality. According to this argumentation the valuation impact of corporate multinationality depends upon whether the MNC is able to use multinationality as an option for growth. This implies that the MNC is well placed in the fastest growing markets in order to realize high corporate growth.

*The new company will be in charge of potentials for growth which none of the two companies could have realized on its own. "We expect that - as a significant shareholder – we will profit from that" Breuer [Chairman of the executive board of Deutsche Bank] says (Anonymous, 1998b).*

Moreover, in the case of the merger between Daimler and Chrysler a number of other arguments have also been considered as to having a potential impact on the valuation effect of multinationality. Nevertheless, these arguments (exchange rate fluctuations, geographical distance, loss of identity, internationalization of management, transparency of company structure, globalization of markets, differences in business cycles between different countries and tax regulations at the investor level) have been cited much less than the ones listed before.

There are some hints on the negative impact of liabilities of foreignness. However, the example of the liabilities of foreignness effect which is most pronounced by the press is not one which occurred in the product or factor markets of the firm, but one which occurred in the capital market: after the merger DaimlerChrysler was not included in the Standard&Poor's 500 Index, because it was considered a foreign company. This prevented US institutional investors who were imitating this index from investing in DaimlerChrysler. As an effect, the access of DaimlerChrysler to the US capital market was partly restricted.

On the other hand, we have to admit, that there are certain theoretical arguments which we could not find in the argumentation of journalists. This foremost regards internalization theory. In contrast to the theoretical argumentation in academic journals we find no evidence that investors value multinationality due to firms' abilities to internalize intangible assets.

We are also unable to identify any citations in which firm specific advantages related to R&D or marketing are taken as a critical prerequisite for the valuation impact of multinationality. Nevertheless, there is some indication that firm-specific advantages are supposed to have an impact on firm performance and firm value: In one press report, a journalist expects that "Chrysler will benefit from the positive image of the

German car manufacturer Daimler, especially from the quality label “Mercedes inside” (Anonymous, 2000).

Another argument that we could not find in the texts was the argument of operational flexibility. Furthermore, we are unable to uncover any direct link to the incomplete capital markets argument. And we are unable to uncover any indications on the role of organizational learning either.

## **5. CONCLUSION, LIMITATIONS AND IMPLICATIONS FOR FURTHER RESEARCH**

Summarizing, our findings highlight the relevance of three dimensions of corporate multinationality when analyzing the valuation impact of corporate multinationality:

1. The geographical structure of foreign activities
2. The cultural diversity of MNCs
3. The size and growth potential of foreign markets

Unfortunately, these dimensions are hardly considered in extant research regarding the valuation impact of corporate multinationality.

Furthermore, our findings call for a significant modification of current theories on the valuation impact of multinationality. According to our results the geographical configuration of a MNC seems to have a significant valuation impact. However, given our preliminary findings we are unable to specify the causal links beneath this relationship. Our results further indicate that the valuation impact of corporate multinationality is significantly influenced by cultural diversity. Theoretical approaches linking cultural diversity with firm value are up to now unfortunately not sufficiently elaborated. Our findings indicate to a certain extent that the logic of the relationship between multinationality and firm value could be very different between different industries. Industry specifics such as the relevance of economies of scale and the potential to realize them through multinationality seem to be of high relevance in the case of the car maker industry. Unfortunately, extant research regarding the valuation impact of multinationality has not sufficiently differentiated between MNCs from different industries.

Moreover, the theoretical elegance of internalization theory notwithstanding, its dissemination among investors does not appear to be on a scale comparable to its dissemination among IB scholars. Given these remarkable differences which seem to exist between academic theory and the theoretical models which investors seem to have in mind, it seems no surprise that extant findings on the valuation impact of corporate multinationality do not appear to be very robust.

Nevertheless, at the moment our findings suffer from certain limitations. First of all, we concentrated on two German business magazines and one German daily newspaper as sources of data. Business press from other countries should enrich the picture. Second, in order to reconstruct investors' opinions about the valuation impact of multinationality, data sources from other influential capital market actors like analysts should be utilized. Third, analysis of the valuation impact of multinationality should take consideration of other modes of internationalization and of course it should take other cases into consideration as units of analysis. The picture has to be enriched. The initial results presented here can only serve as a basis for estimating the insight potential of further research.

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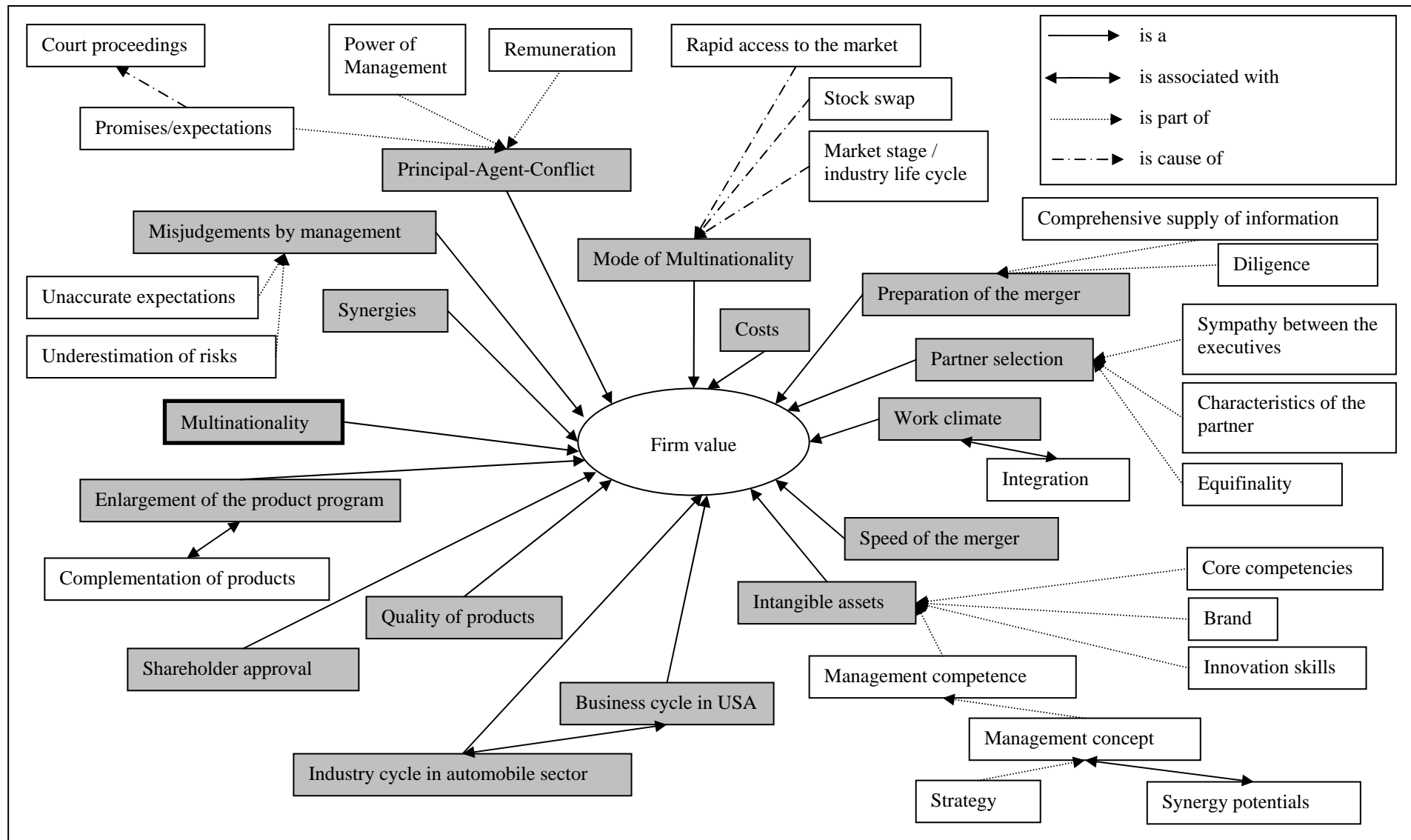
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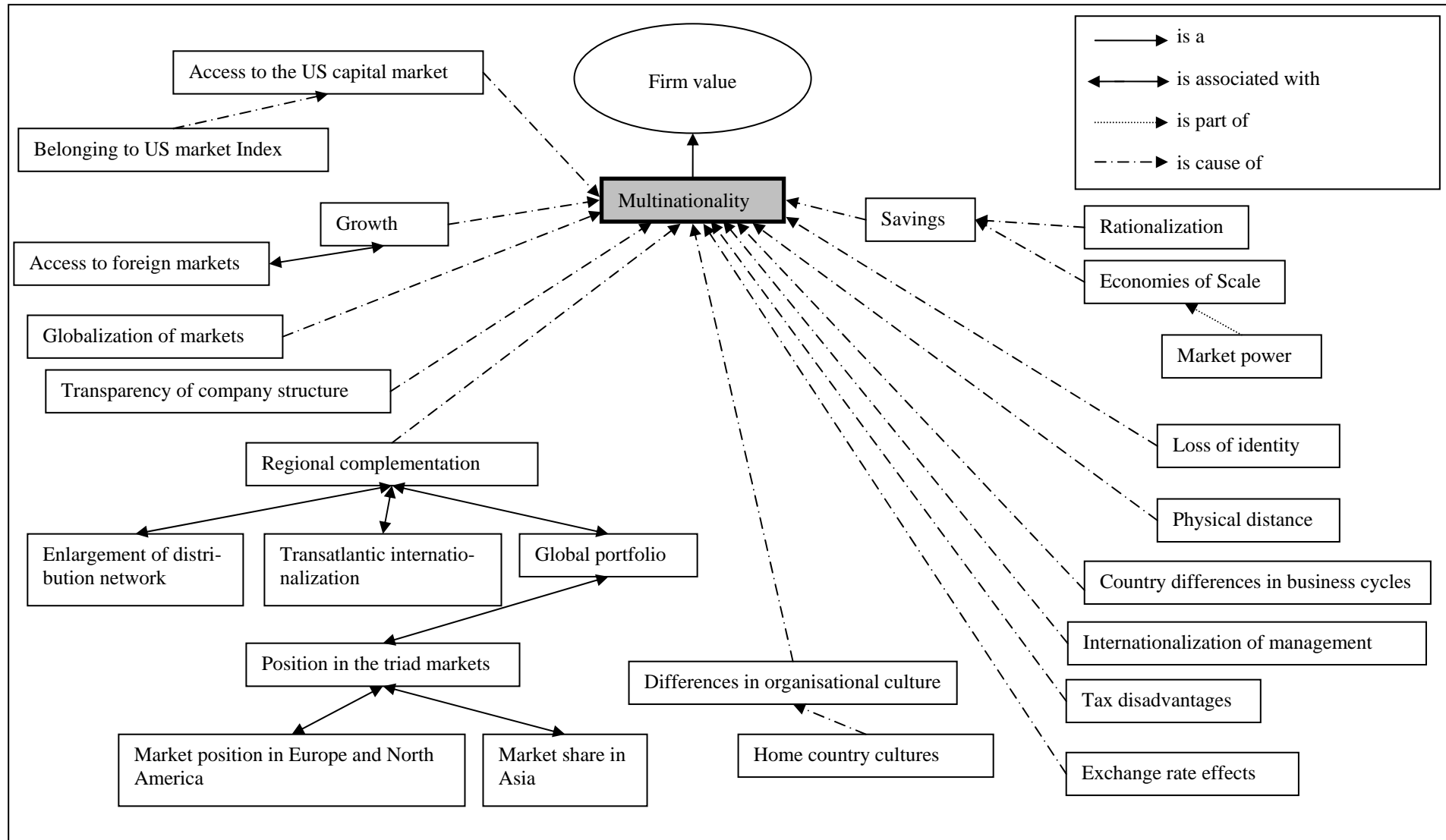
**Table 1:** Measurement of multinationality in empirical studies on the valuation impact of corporate multinationality

Author(s), Year	Indicators of Multinationality
Errunza/Senbet (1981)	1. Ratio of sales from foreign operations to total sales 2. Firm's net assets from foreign sources 3. Firm's net earnings from foreign sources
Errunza/Senbet (1984)	1. Ratio of sales from foreign operations to total sales 2. Number of foreign subsidiaries 3. Entropy measure 4. Foreign sales
Kim/Lyn (1986)	1. Ratio of sales from foreign operations to total sales 2. Number of foreign subsidiaries 3. Ratio of sales from foreign operations to total sales x number of foreign subsidiaries
Morck/Yeung (1991)	1. Number of foreign subsidiaries 2. Number of foreign countries 3. Number of foreign subsidiaries in developed countries, number of foreign subsidiaries in less-developed countries, number of foreign subsidiaries in tax havens
Allen/Pantzalis (1996)	1. Number of foreign countries 2. Number of foreign countries in the two countries with the largest number of the MNC's subsidiaries/MNC's total number of foreign subsidiaries 3. Number of foreign subsidiaries 4. Dummy =1, if MNC network includes financial subsidiaries
Bodnar/Tang/Weintrop (1997)	Companies, which report international activities to the Statement of Financial Accounting Standards No. 14, are classified as „international“
Christophe (1997)	Ratio of sales from foreign operations to total sales
Mishra/Gobeli (1998)	1. Number of foreign subsidiaries 2. Ratio of sales from foreign operations to total sales
Doukas/Pantzalis/Kim (1999)	Number of subsidiaries in the country with the largest number of subsidiaries divided by the firm's total number of foreign subsidiaries, number of foreign countries
Riahi-Belkaoui (1999)	1. Ratio of sales from foreign operations to total sales 2. Foreign asset rate
Click/Harrison (2000)	1. Ratio of sales from foreign operations to total sales 2. Dummy variable for MNCs which equals one if the company reported any foreign sales and equals zero otherwise 3. Number of foreign countries 4. Ratio of exports to total sales
Allayannis/Weston (2001)	Ratio of sales from foreign operations to total sales
Pantzalis (2001)	1. Number of countries with advanced economies, where the company is located, number of countries with developing economies, where the company is located 2. Number of foreign subsidiaries in countries with advanced economies, number of foreign subsidiaries in countries with developing economies
Ramirez-Aleson/Espitia-Escuer (2001)	1. Classification according to Varadarajan (1986) and Ramirez (1997) in very low international diversification, related international diversification, unrelated international diversification, high international diversification 2. Entropy-Index based on foreign subsidiaries
Christophe/Pfeiffer (2002)	1. Foreign sales/total assets 2. Foreign sales/total assets differentiated according to regions
Denis/Denis/Yost (2002)	1. Firm is globally diversified if it reports any sales by foreign subsidiaries

Author(s), Year	Indicators of Multinationality
	2. Ratio sales of foreign subsidiaries to total sales
Bodnar/Tang/Weintrop (2003)	1. Companies, which report international activities to the Statement of Financial Accounting Standards No. 14 and/or SEC Reg. § 210.4-08 (h), are classified as „international“ 2. Number of geographical segments
Fauver/Houston/Naranjo (2004)	1. Companies, which achieve more than 10% of their total sales outside of their home country considered as internationally diversified 2. Ratio of sales from foreign operations to total sales 3. Herfindahl-Index based on geographical segments
Lu/Beamish (2004)	1. Number of foreign subsidiaries 2. Number of foreign countries 3. Combined indicator of number of foreign countries and number of foreign subsidiaries
Prambourg (2004)	1. Average of foreign sales/total sales und foreign costs/total costs 2. Ratio of sales from foreign operations to total sales 3. Foreign assets to total assets
Christophe/Lee (2005)	1. DOI according to Sullivan (1994) 2. Foreign asset rate 3. Ratio of sales from foreign operations to total sales 4. Ratio number of foreign subsidiaries 5. Psychic distribution of activities 6. International experience of the top-management
Antia/Lin/Pantzalis (2007)	1. Number of foreign countries 2. Number of foreign subsidiaries 3. Herfindahl-Index of the concentration of the foreign subsidiaries 4. Interculturality based on Hofstede (1980)
Berry (2006)	Number of foreign subsidiaries in developed countries, number of foreign subsidiaries in less-developed countries
Kim/Mathur (2008)	1. Companies, which reported any foreign sales, are classified as „international“ 2. Ratio of sales from foreign operations to total sales
Dastidar (2009)	1. Companies, which reported any foreign sales, are classified as „international“ 2. Ratio of sales from foreign operations to total sales
Lee/Makhija (2009)	Number of foreign countries, Number of subsidiaries in the country with the largest number of subsidiaries divided by the firm's total number of foreign subsidiaries



**Fig. 1.** Determinants of firm value in the case of DaimlerChrysler



**Fig. 2.** The valuation impact of corporate multinationality in the case of DaimlerChrysler