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Financing the German Mittelstand

Von Günter Dufey und Ulrich Hommel

**Wissenschaftliche Hochschule für Unternehmensführung (WHU)
Otto-Beisheim-Hochschule
Burgplatz 2
56179 Vallendar/Rhein**

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- ◆ Günter Dufey, ist Professor für Internationale Unternehmensfinanzierung an der WHU Koblenz und Professor of International Business and Finance an der University of Michigan Business School in Ann Arbor, MI.
 - ◆ Ulrich Hommel, A.M., Ph.D., ist Wissenschaftlicher Assistent am Lehrstuhl für Internationale Unternehmensfinanzierung der WHU Koblenz.

9. Financing the German Mittelstand¹

Günter Dufey^a and Ulrich Hommel^b

^a University of Michigan Business School, Ann Arbor, MI 48109-1234, USA;
Lehrstuhl für Betriebswirtschaftslehre, insbesondere Internationale
Unternehmensfinanzierung, WHU Koblenz, Burgplatz 2, 56179 Vallendar,
Germany

^b Lehrstuhl für Betriebswirtschaftslehre, insbesondere Internationale
Unternehmensfinanzierung, WHU Koblenz, Burgplatz 2, 56179 Vallendar,
Germany

1. Introduction

Two aspects make German Mittelstand companies notable in an international context. First, they provide significant sources of new technology and employment in a mature, industrial economy whose large industrial enterprises have - rightly or wrongly - a reputation for being conservatively managed to a fault and who have been sluggish performers by international standards. Second, the capabilities of Mittelstand companies have been exemplified by their international competitiveness: individually and as a group they are the source of much of the German export performance and reputation for quality, which has attracted international attention (McKinsey 1995). How such companies fund their activities is the focus of this chapter.

What type of companies, exactly, make up the German Mittelstand? If we use the classification of the Institut für Mittelstandsforschung and the Deutsche Bundesbank, then companies with annual sales of less than DM 100 million fall into this category (Deutsche Bundesbank 1992). By this measure this category includes approximately 98% of the 2 million West German companies. They

produce 52% of the West German GDP, undertake 41% of its gross domestic investments and employ 66% of its labor force. By 1994, 2300 additional Mittelstand companies had been established in the former East Germany, 1,700 of those through management buyouts (Albach 1995, p. 673).

If we want to explore the behavioral differences between the Mittelstand and other enterprises, a classification according to size alone appears to be inadequate. What matters more, we would suggest, is the mode of corporate governance. Mittelstand companies are typically run by an owner-manager¹ who controls most aspects of the day-to-day decision-making. Owner-managers are very conscious of maintaining control over all vital aspect of the company's development and, as a result, often refrain from hiring qualified outside managers or from selling equity to external investors. They are generalists when it comes to management matters, yet they often have detailed knowledge of the technical aspects of the company's manufacturing operations. In contrast, their competence in finance matters tends to be much more limited. For example, we find a pronounced reluctance to use innovative finance solutions such as the hedging of interest rate or currency risk with derivative instruments. Financial executives in such companies do not like to push these buttons either since their reward schedules are generally asymmetric: small rewards if they have saved the company money, but significant penalties for losses, even if the losses are offset by (deferred) gains on the operating side of the balance sheet.

This chapter provides a survey of the different means of finance available to the German Mittelstand today, highlighting features that are unique to this class of enterprises. The Mittelstand's finance needs (see also Table 1) largely center around three objectives: *profitability*, *liquidity* and *risk control*. Profitability refers to the need to finance investments essential for the improvement of a company's competitiveness; liquidity implies that the company must be able to meet its financial obligations at all times; finally, risk control requires the choice of an adequate capital structure (debt/equity) for a given volatility of earnings in order

to avoid financial distress. The subsequent discussion shows that the German Mittelstand faces a variety of unique constraints and tradeoffs in the pursuit of these objectives.

Table 1. Company Development Phases and Financing Needs

| Development Phases | | | | | Bridge-Financing | |
|----------------------------------|---------------------|---------------------------|--------------------------------|----------------------------------|-------------------------------|-------------------------|
| | Seed | Start-Up | Expansion | | Maturity | |
| Operational Tasks for Management | Product Development | Preparation of Production | Bringing the Product to Market | Build-Up of Distribution Network | Diversification and Expansion | Product Differentiation |
| Capital Needs | low | high | high | high | high | normal |
| Capital Type | equity | equity | equity | equity/debt | equity/debt | equity/debt |
| Market Entry Costs | very low | low | rising | high | very high | very high |
| Investment Risk | very high | very high | high | shrinking | normal | normal |
| Market Risk | very high | very high | high | high | normal | normal |
| Product Risk | very high | high | low | low | low | low |

Source: based on Institut für Mittelstandsforschung (1992), p. 26.

We begin this survey by pointing out a number of finance-related peculiarities that distinguish such small- and medium-sized firms from large corporations:

1. Small and medium-sized firms normally do not have direct access to public equity markets. If they do, the degree of liquidity is less and transaction costs are higher than for large corporations.
2. They do not have easy access to on- or offshore money and -credit markets which implies a higher cost of debt (in part because they are subject to the financial intermediaries' enhanced market power).

3. Small and medium-sized businesses display a lower degree of internationalization than large corporations and therefore display a more lop-sided risk profile. The shifting of profits into low-tax jurisdictions tends to involve higher transaction costs.
4. Owners of such companies tend to have a personal portfolio of assets which is dominated by the equity stake in their company. The low degree of portfolio diversification tends to enhance the risk aversion implied in company decision-making.³
5. Decision-making is strongly influenced by the Mittelstands owner-managers' desire to maintain control over their enterprise, especially when financial matters are concerned. Entrepreneurs in Germany display a low degree of mobility and are reluctant to part with equity and control rights even when additions to capital from outside sources would raise firm value.
6. Succession problems are fraught with the inherent conflict between avoiding the depletion of the company's capital base and maintaining family control over the enterprise.⁴
7. The costs of financial distress tend to be higher than for large corporations.

Many of these issues are obviously not country-specific but, as will be shown, they frequently materialize in Germany in the form of regulatory policies which put a particularly heavy burden on the Mittelstand.

Data show a considerable drop of the Mittelstand's equity base since the 1960s. This phenomenon results from a combination of rapid growth by these companies in an expanding economy in contrast to the difficulty of accessing organized equity markets. The resulting undercapitalization must by now be considered a significant threat for the future competitiveness of Germany's small- and medium-sized companies. In addition, chronic liquidity problems - partially explained by the widespread necessity to grant unplanned customer loans and by unexpected and significant write-offs of receivables⁵ - have forced many Mittelstand

companies to exhaust their credit lines with the financing of their day-to-day operations. Finally, the “house-banks” of Mittelstand companies are frequently unwilling to grant follow-up loans without additional collateral even if the funds are needed to pursue a proven, value-creating, investment strategy.

In addition to these finance-related problems, the German Mittelstand has to cope with a variety of other practices which puts it at a disadvantage relative to large corporations:

8. Most social security contributions are collected as a surcharge to the wage bill. As a result, the Mittelstand, with a lower average capital/labor ratio than large firms, is forced to accept an disproportionately large share of the total social security bill relative to their contribution to GDP.
9. The German labor force is represented by industrial unions that negotiate regional labor contracts for entire sectors. The contracts impose binding minimum standards for all firms represented by the respective employer organizations. Large firms tend to dominate these negotiations and are therefore in a position to damage the strategic position of smaller rivals (“raising rivals’ cost”).
10. Regional development programs discriminate against smaller firms by imposing special funding conditions such as a minimum fraction of sales to non-local buyers. General government aid programs cater mostly to large corporations (Albach 1984, pp. 5-8) with well-established lobbying operations, although special government support programs targeted at Mittelstand firms partially compensate for these problems.
11. Equity investments receive a discriminatory tax treatment: company earnings are subject to income tax (*Körperschaftsteuer*) and trade tax (*Gewerbesteuer*)⁶, corporate income faces a higher income tax withholding, and the transfer of company assets after the owner-manager’s death is subject to inheritance tax (*Erbschaftsteuer*)⁷.

12. Public utilities grant quantity discounts to industrial and commercial users (*second-degree price discrimination*), thereby favoring large companies. The same applies to rail transport.
13. Municipalities frequently compete for new investments of large companies with subsidies and infrastructure investments. The Mittelstand is rarely courted with the same generosity.

While the latter two practices can be found in a similar form in the United States; many others have a typical German or even European flavor. In part this is because the more extensive government regulation has a discriminatory effect on Mittelstand companies who are thus less able to exercise their flexibility which tends to be the very factor offsetting the advantage of scale that is characteristic for their large competitors. Analogously, the same goes for taxes.

The remainder of this chapter is structured as follows: In section 2 which follows, we review the empirical evidence on the Mittelstand's asset and capital structure as well as on its aggregate performance. Section 3 discusses novel means of equity financing for the Mittelstand: going public, M&A and equity participation/venture capital companies. Section 4 describes the various means of obtaining debt finance such as bank loans, accruals (reserves) for pensions and partner/employee loans as well as more innovative finance solutions such as participation certificates, leasing and factoring. We further outline the circumstances under which debt capital can take on the characteristics of equity (*quasi-equity*). Finally, in section 5 we discuss the extent to which the Mittelstand can actively manage its product and financial market risks and why there is still great reluctance to take advantage of available risk management opportunities.

2. Asset Structure, Capital Structure and Performance

The capitalization of German companies is a positive function of firm size (as measured by total sales). Smaller firms have less long-term capital available per DM of fixed assets. When considering fixed assets as a percentage of the balance sheet total, we can not detect a significant difference between a typical Mittelstand company with total sales of DM 10-100 million and a larger firm. Smaller companies place a stronger emphasis on core activities which explains a positive correlation between firm size and financial assets. They have fewer subsidiaries and hold fewer securities for risk management purposes. Mittelstand companies also maintain comparatively higher inventories which indicates that they seem to face greater difficulty in applying modern techniques such as just-in-time manufacturing (see Table 2).

Table 2. Asset and Capital Structure of West German Manufacturing Enterprises, 1989

| % of Balance Sheet Total | All Firms | Annual Sales (in Mill. DM) | | |
|---|-----------|----------------------------|----------|------------------|
| | | 10 or less | 10 - 100 | more than 100 |
| Fixed Assets | 26.7 | 33.6 | 27.5 | 26.3 |
| Inventory | 17.8 | 21.7 | 27.1 | 16.1 |
| Receivables | 34.0 | 32.7 | 34.9 | 33.9 |
| Participations | 11.4 | 5.7 | 3.9 | 13.0 |
| Securities | 4.2 | 1.3 | 0.6 | 4.9 |
| Own Resources | 25.6 | 17.5 | 17.7 | 27.2 |
| Debt | 44.8 | 74.9 | 69.9 | 39.6 |
| Supplier loans | 10.2 | 17.0 | 17.4 | 8.7 |
| Total Bank Debt | 10.7 | 32.0 | 24.3 | 7.6 |
| Short-Term Bank Debt | 5.2 | 13.5 | 12.4 | 3.7 |
| Accruals | 29.2 | 7.5 | 13.1 | 32.7 |
| Accruals for Pensions | 12.8 | 2.4 | 5.8 | 14.3 |
| Reserves | 13.9 | 5.5 | 6.1 | 15.6 |
| Own Resources as a % of Fixed Assets | 95.8 | 52.0 | 64.3 | 103.3 |
| Own Resources and Long-Term Debt as a % of Fixed Assets | 193.9 | 148.9 | 165.7 | 200.8 |

Source: Deutsche Bundesbank (1992), pp. 34-35.

A related observation refers to the fact that when compared to larger firms, Mittelstand firms place a greater emphasis on debt finance, in particular bank loans. Small- and medium-sized firms make heavy use of supplier loans for short-term debt financing but are more limited in the use of accruals (reserves) for long-term debt finance. The magnitude of the company's own resources relative to the balance sheet total is significantly lower for smaller firms. All these relationships have become more pronounced over the past 20 years.

Table 3. Equity Capitalization of Mittelstand firms (in %), 1995

| Sectors | West Germany | | | | East Germany | | | |
|----------------|--------------|----------|----------|---------------|--------------|----------|----------|---------------|
| | 0 - 10% | 10 - 20% | 20 - 30% | more than 30% | 0 - 10% | 10 - 20% | 20 - 30% | more than 30% |
| Manu-facturing | 24.1 | 31.0 | 17.2 | 23.9 | 44.2 | 25.9 | 11.6 | 14.7 |
| Con-struction | 37.0 | 32.0 | 14.0 | 13.0 | 53.3 | 20.6 | 10.7 | 9.9 |
| Trade | 28.5 | 34.5 | 16.6 | 18.2 | 32.9 | 31.5 | 16.8 | 16.1 |
| Services | 37.3 | 31.9 | 10.2 | 16.9 | 30.4 | 37.3 | 13.3 | 13.9 |
| Total | 29.4 | 32.4 | 15.5 | 19.4 | 42.6 | 27.3 | 12.5 | 13.2 |

Source: Verband der Vereine Creditreform (1995b), p. 6.

The Mittelstand is heavily undercapitalized. Equity's share of total capital for the approximately two million German Mittelstand companies has fallen from 31.4% in 1967 to around 17% in 1994 which serves as an indication for their inability to finance growth with equity. Recent survey evidence (Table 3) indicates that many Mittelstand firms operate at rates below 10%. Reasons are the discriminatory tax treatment of equity investments, lacking access to organized stock markets and the depletion of the company's own resources due to family conflicts over succession. The undercapitalization problem explains to a large extent the surge of company insolvencies in recent years (Bundesministerium für Wirtschaft 1995). The German Mittelstand shares this problem of undercapitalization with its French and Italian counterparts. In comparison, medium-sized companies in Great Britain and the United States display a much higher equity base (Kaufmann/Kokalj 1996, p. 18) and suffer fewer insolvencies overall.

As expected, capital/labor ratios are a positive function of firm size (Table 4). Larger firms utilize more capital intensive production technologies than the Mittelstand which can however largely be explained by differences in the output characteristics. The descriptive statistics do not reveal a relationship between the Mittelstand's relative undercapitalization and the inability to carry out capital investments. However, more sophisticated econometric analysis has to be carried out to verify this hypothesis.

Table 4. Total Investment Per Employee in Manufacturing and Mining, 1980-1990
(in DM)

| Size of the Labor Force | Year | | | | | | | | | | |
|-------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| 20 - 49 | 5566 | 4855 | 4757 | 5775 | 5783 | 6032 | 6635 | 7270 | 7997 | 8788 | 9096 |
| 50 - 99 | 6345 | 5734 | 4951 | 6208 | 6173 | 6765 | 8310 | 9543 | 8447 | 9255 | 10011 |
| 100 - 199 | 5814 | 5781 | 5523 | 6700 | 6302 | 6924 | 7869 | 8476 | 8947 | 10203 | 11005 |
| 200 - 499 | 5710 | 5734 | 5848 | 6738 | 7063 | 7304 | 8255 | 9010 | 9721 | 10739 | 11275 |
| 500 - 999 | 6499 | 6239 | 6684 | 7124 | 7214 | 7718 | 9602 | 9894 | 10089 | 11760 | 13032 |
| More than 1,000 | 8329 | 8827 | 9335 | 9734 | 9409 | 11305 | 12330 | 12807 | 13219 | 13633 | 14925 |
| All Firms | 7170 | 7296 | 7525 | 8171 | 8015 | 9210 | 10338 | 10903 | 11229 | 11966 | 12978 |

Source: Bundesministerium für Wirtschaft (1993), p. 191 (based on a survey conducted by the Institut für Mittelstandsforschung)

Table 5. Profit as a Percentage of Gross Output, 1989

| Size of the Labor Force | Profit as % of Gross Output | |
|-------------------------|-----------------------------|--------------------------------|
| | Unadjusted | Net of Executive Compensation* |
| 20-49 | 4.7 | 3.2 |
| 50-99 | 4.6 | 4.0 |
| 100-199 | 3.9 | 3.6 |
| 200-499 | 4.7 | 4.5 |
| 500-999 | 2.6 | 2.6 |
| More than 1,000 | 2.7 | 2.7 |

* three times the average employee income

Source: Albach (1995), p. 675 (based on a survey conducted by the Institut für Mittelstandsforschung)

Still, Mittelstand firms that survived have performed better than larger companies in recent years (see also Table 5). This conclusion can be upheld even after accounting for executive compensation using three times the average employee income as a proxy.

3. Equity Financing

Mittelstand companies emphasize traditional forms of equity finance: retained earnings, reserves and equity subscriptions by their owners⁸. The growing importance of the undercapitalization problem has however triggered the emergence of *equity participation* and *venture capital companies* as an important source of temporary outside equity finance. In addition, regulatory reforms have

stimulated the Mittelstand's willingness to raise outside equity by "going public" or via a *private placement* (involving a strategic investor).

To properly assess these trends it may be useful to remind the reader of some fundamental tenets of corporate finance: The primary function of equity is to serve as a shock absorber and to cover temporary company losses. A small equity base will not be a problem as long as the owners face unlimited liability and hold a substantial personal portfolio. Most Mittelstand companies, however, are organized as a "company with limited liability" (*Gesellschaft mit beschränkter Haftung* or *GmbH*). All equityholders are protected by limited liability and will therefore only lose their original investment (which can be as low as DM 50,000) in the case of insolvency. By the same token, if the company is not in the position to offer adequate collateral for additional debt finance, creditors will reduce their risk by forcing owners of Mittelstand enterprises to commit their personal wealth holdings as collateral. In contrast, both the proprietorship/ partnership (*Offene Handelsgesellschaft* or *OHG*) and the limited partnership (*Kommanditgesellschaft* or *KG*) require that at least one of the owners assumes unlimited liability. Hence, for purposes of establishing the company's creditworthiness, the distinction between the company's equity and the owners' personal assets is often blurred for the German Mittelstand.

3.1 Equity Participation and Venture Capital Companies

The German Mittelstand is increasingly subjected to competition on the liability side of the balance sheet (Müller-Stewens et al. 1996, pp. 7-8). A narrow equity base and inadequate means of raising new equity lead to higher cost of debt and prevents enterprises from undertaking promising investment projects. In fact, an unhealthy capital structure can even be the "kiss of death" for a medium-sized company if the failure to invest in new plant and equipment leads to an erosion of its competitiveness.

In recent decades, financial intermediaries (and to a lesser extent others) have responded to the need of the German Mittelstand for additional equity funds and have formed a large number of *equity participation companies* (EPCs, *Beteiligungsgesellschaften*). The explicit purpose of such EPCs is to provide equity funds to private companies without direct access to the capital markets on a temporary basis. The investments of bank-owned EPCs often complement the banks' other business with the respective companies'. They also serve as an emergency vehicle for companies which do not qualify for additional debt finance. It is indeed an important aspect of German banking culture that creditworthiness tends to be evaluated based on the availability of collateral - mostly in the form of real estate - rather than on the firms' prospects. Bank-owned EPCs suffer from the same shortcomings: management has in most cases a bank rather than an industry background and applies the same creditworthiness standards as commercial banks.

EPCs supply funds to private companies which promise a satisfactory expected return given the risk implied in the business venture. They raise capital by setting up (mostly close-end) funds for corporations, financial institutions and high net-worth individual investors. These investments help to lower the cost of capital of the target companies and reduce the likelihood of financial distress (given the direct effect on the capital structure). In addition, it can be argued that EPCs help overcome information asymmetries which prevent other investors from supplying adequate funding (Gerke 1995, pp. 1886-7; Gerke in: Gebhardt et al. 1993, pp. 619-40).

EPCs typically acquire minority stakes, rarely exceeding DM 15 million (Müller-Stewens et al., 1996, p. 42).¹⁰ It is unusual for these companies to take an active interest in the day-to-day management of the company or to extend their engagement beyond a time frame of 10 years (Müller-Stewens et al. 1996, Appendix). Thus, incumbent owners do not have to relinquish control rights over the company's decision-making and retain the option to repurchase the EPCs'

equity stake at some point in the future (Beyel, 1987, p. 657). These features represent the key advantages of EPCs over any other source of equity finance. In a recent survey (Gerke, et al., 1992, p. 39), 56% of the medium-sized companies with anticipated equity needs over the next five years indicated a willingness to accept an EPC as an owner/partner. This choice was ranked higher than any other alternative, in particular other companies (50.5%), company management (29.4%), employees (22.4%) or private investors (27.4%).

Table 6. German EPCs' 1996 Portfolio by Industry Sector

| Sector | Value (in Mill. DM) | % | Projects | % |
|--------------------------|---------------------|---------------|--------------|---------------|
| Agriculture | 3.30 | 0.05 | 2 | 0.06 |
| Chemicals | 374.10 | 6.09 | 146 | 4.67 |
| Mining | 69.37 | 1.13 | 24 | 0.77 |
| Iron/Steel | 427.85 | 6.96 | 278 | 8.89 |
| Mechanical Engineering | 796.37 | 12.96 | 273 | 8.73 |
| Electrical Engineering | 361.53 | 5.88 | 244 | 7.80 |
| Data-Technology | 229.05 | 3.73 | 230 | 7.36 |
| Biotechnology | 147.76 | 2.40 | 83 | 2.65 |
| Environmental Technology | 46.96 | 0.76 | 37 | 1.18 |
| Precision Engineering | 54.12 | 0.88 | 180 | 5.76 |
| Wood/Paper | 379.67 | 6.18 | 191 | 6.12 |
| Leather/Textiles | 250.94 | 4.08 | 66 | 2.11 |
| Food Processing | 209.66 | 3.41 | 130 | 4.16 |
| Construction | 288.75 | 4.70 | 176 | 5.63 |
| Trade | 830.00 | 13.51 | 435 | 13.91 |
| Transportation | 135.89 | 2.21 | 48 | 1.54 |
| Communication Technology | 119.47 | 1.94 | 22 | 0.70 |
| Financial Services | 300.24 | 4.89 | 37 | 1.18 |
| Other | 596.27 | 9.70 | 351 | 11.22 |
| No Information | 524.38 | 8.53 | 174 | 5.56 |
| Total | 6,145.6838 | 100.00 | 3,127 | 100.00 |

Source: BVK (1997), Appendix.

Taking a historical perspective, by 1996 the industry had grown to approximately 102 EPCs with an aggregate portfolio value of DM 6.146 billion¹¹ distributed over 3,127 individual investments (BVK 1997). 93.57% of these investments were carried out in Germany compared to 4% in other European countries and 2.05% outside of the European continent. The sectoral allocation of funds (Table 6) displays a pronounced bias towards industries which have achieved a certain degree of maturity. This bias can be explained by the typology of EPCs operating in the German market.

Traditional EPCs focus on established medium-sized companies and low-risk investment projects which would not be carried out otherwise due to the lack of equity financing. Typical projects are expansion investments and management buy-outs/-ins, representing 59.66% and 17.26% of the investment volume in 1996 (BVK 1997). In contrast, *venture capital companies* (VCCs) target high-risk projects and provide funds for start-up, seed, bridge and turn-around financing. The dominance of traditional EPCs is demonstrated by the fact that the latter four financing types only represent 23.08% of the industry's total portfolio. In fact, only one of the top 10 EPCs qualifies as a VCC¹² and 50% of its investments is located in the United States. In 1994, German EPCs have invested a mere 8% (approximately DM 60 million) of their new investments in high-tech companies - compared to \$1.5 billion invested by U.S. VCCs. This may be one explanation why Germany, with 98% of its firms being of small and medium size, has such great difficulty to succeed in growing markets despite the fact that it produces more technological innovations (as measured by the number of patent registrations) than most other countries.

EPCs normally terminate their engagement after a predetermined number of years. In 56% of the cases (55.9% by volume) the EPC sells its stake back to the incumbent owners, in 30.9% of the cases to another company (i.e., strategic investor). Other exit channels are "going public" (9.3%) or selling the stake to another EPC (3.4%). It is the nature of the business that some investments will be

lost due to business failure (2.121% of the industry portfolio in 1996, BVK 1997) but diversification over a large number of projects ensures that the EPC can earn an acceptable rate of return. One can suspect that the small volume of equity participation capital in Germany is correlated with the fact that "going public" is not available as a typical exit channel.

The German legislature has also recognized the need to supply the German Mittelstand with additional equity funds. A 1987 law introduced a special EPC-type, the *enterprise participation company* (EnPC, *Unternehmensbeteiligungsgesellschaften*). EnPCs are required to go public within 10 years after their registration which grants the Mittelstand an indirect access to the organized equity markets. As a bonus, EnPCs are exempt from trade tax. Few such companies have been formed so far, mainly because they have only restricted access to debt financing and may not issue bonds, warrants or participation certificates (Müller-Stewens et al. 1996, pp. 32-3). In addition, EnPCs are not permitted to invest in publicly traded or foreign companies. They may also not acquire majority stakes (Leopold in: Gebhardt et al. 1993, pp. 358-9).

At the same time, government officials have recognized at an early stage that private EPCs fail to provide adequate funds to heavily undercapitalized and smaller companies as well as to start-up ventures (Beyel 1987, pp. 658-9). In order to remedy the situation, the German Länder have formed non-profit EPCs (*öffentlich geförderte Kapitalbeteiligungsgesellschaften*) which are refinanced through public programs (e.g. *European Recovery Program*). In addition, the German Mittelstand can take advantage of a number of other support programs which supply them with low-interest loans and loan guarantees (see Baier/Pleschak 1996, pp. 108-116 for an overview).¹³

3.2 “Going Public”

The primary motive, which holds true for all companies and not only those of the Mittelstand for a public placement is to widen the company's equity base and raise its debt capacity. It will also ease the raising of new capital in the future by gaining direct access to organized financial markets. Moreover, the company puts itself in a better position for an active management of its capital structure which, above all, will lower the cost of capital. Going public can also provide the necessary funds for strategic investments or can ease the transfer of ownership rights to employees. Finally, one should not underestimate the positive effect of going public on the company's name recognition and prestige in the product and factor markets.

The owners may also pursue a number of personal objectives when taking their companies public. First, the owner may want to raise the liquidity of his equity stake in order to facilitate the diversification of his personal portfolio. Second, going public may help to solve succession problems. The transfer of ownership rights to the next family generation can be accomplished smoothly given that conflicts between family members can easily be resolved by a separation of ownership and control and by hiring qualified outside management.

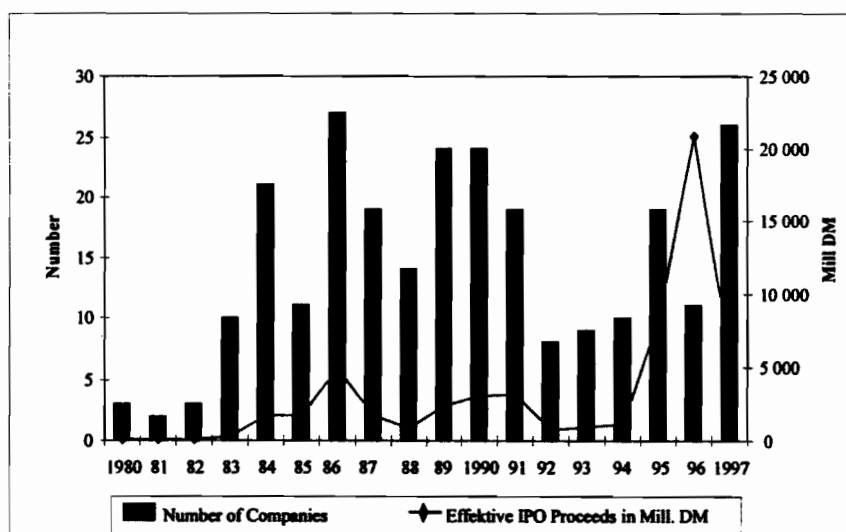
On the negative side, going public will expose the company to a vast number of additional regulations regarding company accounting, auditing and reporting. It will further entail some tax disadvantages and may reduce the owner's influence over the long-term development of the company - all factors that weigh disproportionately heavy in the decision process of the owner-managers of Mittelstand companies.

3.2.1 Publicly Traded Corporations

The German market for public placements has basically been non-existent up to the 1970s. Since then, market activity has picked up substantially with peaks in

the mid 1980s and early 1990s (Figure 1). In Germany alone, 212 companies have gone public between 1977 and 1995 with a total nominal placement volume of DM 25 billion. 175 of these companies belong to the German Mittelstand (data supplied by Dresdner Bank). Going public has therefore displayed a remarkable attractiveness for medium-sized companies. The German Mittelstand has also recognized the need to increase its equity base in order to take advantage of new opportunities in the Single European Market and the Eastern European transition economies. Parallel to these supply factors, the growing popularity of mutual funds has boosted the demand for *initial public offerings (IPOs)* of Mittelstand firms.

Figure 1: IPOs in Germany, 1980 - 1996



Source: DAI Factbook 1997

Mittelstand companies have by now a number of options of how to place their stock on the German Stock Exchange: the *Free Trading segment (Freiverkehr)*, the *Regulated Trading segment (Geregelter Markt)* and the *New Market (Neuer*

Markt). In addition, small- and mid-cap issues of high-tech companies can be offered on the *EASDAQ* in Brussels, a new pan-European stock exchange modeled after the U.S. *NASDAQ*.¹⁴ The Regulated and Free Trading segments of the German Stock Exchange represent the traditional avenues for Mittelstand IPOs. Free Trading had originally been created as the "regulation-free" counterpart to *Official Trading* (*Amtlicher Handel*) and as a trading environment for foreign stocks. By 1994, it had attracted 98 domestic companies with a stock market capitalization of DM 13.67 billion (DM 139.47 for the average company). Chronic liquidity problems triggered the introduction of Regulated Trading in 1987. It represents an intermediate segment with a more stringent regulatory structure.¹⁵ A total of 145 companies had been listed on this market segment in 1994 with a capitalization of DM 20.9 billion (DM 144.14 million for the average company). Both segments capture 36.5% of all traded companies but merely 4.5% of the aggregate stock market capitalization (Kaufmann/Kokalj 1996, p. 25). The limited growth of these markets can partially be explained by the IPO requirements of the underwriting banks: annual sales of at least DM 100 million as an absolute must; further an above-average net income ratio, good growth prospects, planning figures backed up by an independent auditing report and assets which can be used as collateral, if need be.

The New Market and *EASDAQ* represent the most promising stock market innovations for the German Mittelstand. Both markets target small- and medium-sized growth companies, preferably high-tech firms. They also offer companies a close long-term partnership with investment banks who act as advisors and market makers after an IPO. The New Market has assumed trading in March 1997 and has so far benefited from the unwavering support of the German banking industry. Companies can access a wider investor base through partnership agreements with comparable stock market segments of other European countries (within EURO.NM) such as the Nouveau Marché in Paris and the Nieuwe Markt in Amsterdam (Francioni 1997). *EASDAQ* has been active since November 1996

but has so far failed to attract the interest of German banks and companies. Its advantage is the compatibility with NASDAQ which permits a cross-listing on the world's most important over-the-counter market, providing new opportunities for German Mittelstand companies.

Most Mittelstand companies will not qualify for a public placement in the near future, in particular not those with the most urgent need for new equity. Moreover, many firms only want to float a small part of the company or only issue preferred stock. Neither approach promises to generate sufficient market liquidity. This does however not imply that successful IPOs require a change in majority ownership. In fact, underwriters generally encourage owners with a successful family-ownership record to retain at least 50% of the company's stock in order to signal their commitment and their confidence in the company's future. The overwhelming majority of recent IPOs have involved 25-50% of the respective company's equity.

A Mittelstand IPO will only be successful if every phase of the "going public" operation is carefully planned and executed:

1. The firm establishes the company/owner objectives of the going public operation.
2. The firm officially incorporates.
3. The firm develops a placement strategy consisting of the placement volume, the types of stock offered, the placement method (e.g. book-building method), the placement date, the market segment and the marketing plan (e.g. the "equity story").
4. Execution of the public placement is carried out. Regular trading of the company's stock commences.

5. The firm develops investor relations with particular care invested in the first annual report, the organization of the first stockholders meeting, and a consistent information policy during the first year.

Marketing of the placement plays a key role in making the IPO a success (Flach 1991, pp. 98-101) - especially in phases 4 and 5. If the firm lacks professionalism and care in this area, investment analysts and fund managers will quickly adopt a hands-off approach. It is the primary responsibility of the lead-bank to ensure that the company does not commit any blunders in this process. Some Mittelstand IPOs have disappointed investors in the recent past (Hertel, Hermle, Walter, Sartorius, a.o.), either because the underwriting bank failed to subject the company to a thorough check-up to make sure the company is ready for public placement or simply because of management failure. If management-induced failure has occurred, then mostly because managers had been tempted (for the lack of better alternatives) to invest the newly raised funds in losing business propositions.

Given this state of affairs, it is difficult to predict how the market for Mittelstand IPOs will develop in the coming years. German investors are still reluctant to invest in stocks - only 7% of the population owns shares compared to 21.1% in the United States - and the Mittelstand often does not generate the volume necessary to attract foreign investors. As an added problem, a number of large issues (e.g. Deutsche Telekom) have crowded out many smaller issues in recent years. It can however be expected that, as the trading of major stocks becomes concentrated in Frankfurt, other regional exchanges will invest more resources to attract Mittelstand IPOs. It is estimated that up to 2,000 companies can qualify for public trading in the foreseeable future, most of those small- and mid-caps (Flach/Wilhelm 1997, p. 111).

Germany's 1994 insider trading law has hurt the "going public" movement with provisions which, in their effect, are particularly discriminatory against Mittelstand companies. First, corporations are now required to publish all

available information relevant for the stock market's price discovery process. As the examples Krones AG and Weru AG illustrate, the German stock market can at times react in a volatile fashion if analysts overestimate the performance of a medium-sized corporation. The shares of both companies lost close to 50% of their value within a very short period of time after earnings reports did not match earlier predictions - stock price reactions which can not be explained by fundamentals. Second, it becomes increasingly difficult for owner-managers of family corporations to conduct transactions in the company's stock without violating the insider trading provisions. Indeed, Deutsche Börse AG, the company managing the German stock exchanges, has suggested that corporate insiders should completely refrain from trading in their company's stock. While this rule appears to be acceptable for large corporations, it is simply unreasonable to impose the same behavioral constraints on owners of family enterprises. Should they be prevented from buying the stock if they believe it is undervalued? Or alternatively, should they not have the right to pass on stock to the market if the market's expectations are exaggerated? To turn the argument on its head, owners could only engage in active trading of their company's stock, if they build a "Chinese wall" between themselves and any insider knowledge - clearly suboptimal behavior given that their stockholdings will represent a large fraction of their total portfolio. While insider trading rules make sense, there seems a cost involved for smaller, owner controlled firms.

3.2.2 The "Small AG"

In October 1994, the German legislature has introduced the "*Small AG*" ("small" corporation) as an alternative legal structure for firms intending to go public that seems tailored to Mittelstand companies. It aims at companies with a reasonably small number of equityholders which do not want to be publicly traded. German corporation law had been designed with the large corporation in mind: strict regulations and formalities had implied considerable transaction costs, in many

cases exceeding the benefits of incorporating for small- and medium-sized firms (Stehr in: Albach et al. 1988, pp. 225-69). It is therefore not surprising that Germany had more than 500,000 registered GmbHs by the end of 1994, compared to merely 3,219 stock companies - 666 of those publicly traded (Reimnitz, 1995).

The Small AG represents a substitute to the GmbH or the GmbH & Co KG while already removing most of the legal obstacles towards becoming a publicly traded corporation. As a result, companies will not be hindered in their growth subsequently by another costly change in legal structure (Weichert 1987, p. 205). The Small AG also offers a straightforward solution to the succession problem by permitting the separation of ownership and control. Qualified management can be hired while the family maintains its collective ownership. Finally, the Small AG represents an ideal vehicle for private placements.

The Small AG offers an added advantage (Claussen 1991, p. 186): the company's decision to incorporate does no longer depend on the banks' willingness to act as an underwriter. Banks have traditionally applied higher credit rating standards than required by law and have therefore restricted the volume of public placements artificially. In addition, it had previously been necessary for a bank to sponsor a company going public which de facto permitted the extraction of monopoly rents for these services.

The Small AG differs from a traditional German corporation in the following respects:

1. Small AGs can be formed with a single equityholder - just like GmbHs. Traditional corporations require at least five investors.
2. Small AGs do not have to print certificates for individual shares. It suffices to provide stockholders with one certificate for their entire holding.
3. Small AGs with less than 500 employees are not subject to codetermination (just as GmbHs). It implies that supervisory boards of Small AGs can be exclusively made up of stockholder representatives while traditional

corporations are forced to reserve at least one third of the board seats to employee representatives.

4. Small AGs may invite stockholders to the annual stockholders meeting via registered mail. No formal invitations are necessary if all stockholders are in attendance. Traditional corporations have to publicize the meeting in the *Bundesanzeiger*.
5. Stockholders of Small AGs do not need a notary to certify the decisions made at the stockholders meeting (e.g. election of the supervisory board, dividend policy, etc.) unless they are of fundamental importance for the future existence of the company. In contrast, *all* decisions made at annual stockholder meetings of traditional corporations have to be certified by a notary.
6. Owners of preferred shares can not vote on the issue of new equity.

Can the Small AG expected to be the GmbH of the next century? Unlikely. The formation of a "private" corporation can only be attractive for those companies aiming at being publicly traded in the medium or long-run. One must also not ignore the fact that dividend income is subjected to a higher income tax withholding than interest income (Holtmann in: Albach et al. 1988, pp. 190-1).

3.2.3 The Publicly Traded Limited Partnership

Since the mid-1980s, academics and politicians are intensely discussing proposals of how to widen the equity base of the German Mittelstand. In this context, the suggestion to introduce public trading of GmbH and KG shares has enjoyed particular popularity. While the German legislature has so far failed to ease the transfer of GmbH shares - notarized certification is prescribed by law - we have recently been able to witness a revival of the publicly traded limited partnership (*Kommanditgesellschaft auf Aktien* or *KGaA*). The limited partners are stockholders, their shares being traded on organized stock exchanges. The obvious advantage of this legal structure is that, by its very design, the partners will never

have to sacrifice control over the company independent of how much stock they decide to float (see also Dr. Wieselhuber & Partner 1996, pp. 35-9).

3.3 Strategic Investors - Tapping into the M&A Market

On a related front, the M&A market for German Mittelstand companies has not passed the infancy stage according to U.S. standards. Selling part of the equity to a strategic investor or divesting from the company completely has in the past often been considered an admission of failure. A clear indication of the underdevelopment of the German M&A market is the fact that of the approximately 3,000 transaction registered each year, only 10% involve financial advisory specialists (see Humphreys 1995, pp. 30).

M&A pricing is in the majority of cases structurally inefficient - it is based on crude rules of thumb such as multiples rather than on a proper determination of 'shareholder value'. Part of the problem are the owner-managers themselves. They are often "deeply entrenched, highly emotional patriarchs, reluctant to talk to what they refer to as yuppie bankers" (Humphreys 1995, p. 36). Owner-managers have the tendency to overmanage the technical side of the business and, with the same token, overestimate their control of the company's financial affairs. Deutsche Morgan Grenfell for instance estimates that 80% of the German Mittelstand companies work with inadequate internal reporting systems. In addition, the conservative German accounting system gives outsiders only an imperfect view of the true financial situation of the company. Strategic investors have therefore great difficulty to assess the fair market value of a Mittelstand company.

The long-term outlook for the German M&A market is overall very positive. To wit, owners of Mittelstand companies have in recent years become more open-minded about involving strategic investors. Indeed, a rising number of banks and M&A boutiques are focusing on the Mittelstand as their primary source of

business. Reunification and the privatization of 14,000 companies in the former East Germany are undoubtedly a key factor explaining the observed change in attitudes. Generational change may represent another catalyst for a shift in attitudes.

4. Debt Financing

Mittelstand companies still rely heavily on traditional forms of debt finance such as bank loans, silent partnerships, accruals for pensions and supplier loans. Among the more recent finance innovations for the German market, only leasing has achieved some prominence. In contrast, few Mittelstand firms have so far discovered the advantages of alternative instruments such as factoring. A number of debt instruments utilized by the Mittelstand may easily be converted into qualified debt contracts which de facto serve as substitutes for equity.

4.1 The Role of the "House-Bank"

Bank loans represent the single most important financing method for the German Mittelstand. It is a common observation that each Mittelstand firm maintains particularly close ties with a single bank (the "house-bank"), typically the German equivalent of a savings & loan institution (*Sparkasse*) or a credit union (*Volks-/Raiffeisenbank*). The house-bank provides short- and medium-term loans but also manages long-term loans for the *Kreditanstalt für Wiederaufbau*. In contrast, specialized banks offer long-term loans at fixed interest rates and with a preset amortization schedule. The *IKB Deutsche Industriebank AG* for instance grants loans funded through the European Recovery Program while the *Ausfuhrkreditgesellschaft mbH* supplies loans specifically designated for export financing.

The dependence of the Mittelstand on bank financing has increased significantly during the 1980s. Table 7 further illustrates that the importance of bank loans relative to the company's own resources is negatively correlated with firm size (as measured by total sales), a relationship that has gained strength over the last two decades.

Table 7. Bank Loans as a Percentage of the Company's Own Resources, 1978-1989

| Year | All Firms | Annual Sales, in Mill. DM | | |
|------|-----------|---------------------------|----------|-----------|
| | | less than 10 | 10 - 100 | more than |
| 1978 | 62.00 | 112.33 | 107.17 | 52.90 |
| 1979 | 62.04 | 122.97 | 117.26 | 51.56 |
| 1980 | 63.07 | 131.03 | 124.61 | 51.98 |
| 1981 | 64.96 | 140.82 | 128.88 | 53.69 |
| 1982 | 60.08 | 149.22 | 127.66 | 47.79 |
| 1983 | 55.75 | 151.32 | 124.06 | 43.67 |
| 1984 | 52.32 | 159.24 | 126.34 | 39.11 |
| 1985 | 48.97 | 166.30 | 128.80 | 33.83 |
| 1986 | 45.10 | 166.67 | 125.13 | 32.34 |
| 1987 | 41.47 | 177.46 | 125.53 | 28.57 |
| 1988 | 41.25 | 189.41 | 129.35 | 27.94 |
| 1989 | 41.80 | 182.86 | 137.29 | 27.94 |

Source: Deutsche Bundesbank (1992), (based on a survey conducted by the Institut für Mittelstandsforschung), own calculations.

Interest rates on short-term bank loans to the Mittelstand are on average three percentage points higher than rates for comparable loans to large corporations. This phenomenon can partially be explained by the presence of *asymmetric information* (Neus 1995; ifo 1994, 23-31). Bankers have a greater difficulty evaluating the prospects of private firms compared to large corporations with a public listing and several credit ratings from independent agencies. In the aggregate, Mittelstand companies are characterized by a higher incidence of

default, in part, because large companies tend to be bailed out by the state. Bankers, therefore, demand a larger risk premium for Mittelstand loans. Another explanation for the interest rate differential is the presence of monopoly power (Albach 1995, pp. 675-677). As the trend to securitization continues, large companies depend less and less on banks as the providers of debt finance. In contrast, Mittelstand firms lack the same free access to capital markets and are therefore taken hostage by their house-bank. Adverse reputation effects are negligible since the treatment received by Mittelstand firms from their respective financial institution will not be noticed by other market actors. Finally, the interest rate difference between loans to large and small companies is to some extent cost-based. Economies of scale (driven by a smaller fixed cost per loan dollar) guarantee the same net return for larger loans at a lower rate of interest (Doberanzke 1992, pp. 65-70).

Overall, Mittelstand companies appear to be dissatisfied with the services provided by their house-banks. Banks are bureaucratic in their dealings with smaller companies while their products are excessively standardized. Borrowing against future profits is virtually impossible without offering adequate collateral - something Mittelstand companies often do not have.¹⁶ Problems arise especially because Mittelstand firms tend to engage in discontinuous investment activity - e.g. there may be almost no investments over many years and then a doubling or tripling of the company's fixed assets over a very short time period. Last but not least, banks have shown remarkable reluctance to employ non-traditional finance tools such as leasing and factoring.

Recently, a considerable number of German banks have formed consulting subsidiaries (e.g. *WestConsult*, *GenoConsult*). Their primary purpose is to offer advisory services to bank customers, especially companies facing financial or economic difficulties. While Mittelstand companies are eager to explore financing alternatives, they are reluctant to sign on to the concept of 'consult banking.' The reason is obvious: the information acquired by the house-bank's consulting

subsidiary is expected to influence the relationship with the house-bank itself. In particular, insider knowledge may lead to a higher cost of debt and a lower availability of bank loans.

4.2 Other Forms of Debt Finance

Supplier loans represent another important source of short-term debt finance for Germany's small- and medium-sized firms (just as in the United States). Such credit facilities are easier to obtain than short-term bank loans, mainly because suppliers use them as a market penetration tool while banks view loans as their core business. The creditworthiness tests are less stringent and collateral is rarely granted (Sertl 1996, p. 178). Supplier loans may be obtained on the basis of an implicit agreement if the supplier grants a certain standard lag time for payments (typically 30 to 90 days). Alternatively, suppliers may grant a non-conventional loan by extending the grace period - a common observation for markets with highly cyclical demand.

Table 8. Accruals for Pensions as a Percentage of Medium- and Long-Term Debt, 1979-1989

| Year | All Firms | Annual Sales, in Mill. DM | | |
|------|-----------|---------------------------|----------|-----------|
| | | less than 10 | 10 - 100 | more than |
| 1979 | 47.4 | 14.6 | 27.8 | 55.2 |
| 1980 | 50.5 | 15.2 | 28.6 | 58.7 |
| 1981 | 53.3 | 15.0 | 29.9 | 60.5 |
| 1982 | 56.6 | 14.4 | 29.5 | 62.5 |
| 1983 | 59.8 | 14.4 | 30.6 | 66.3 |
| 1984 | 62.2 | 14.4 | 32.2 | 69.0 |
| 1985 | 63.5 | 14.4 | 32.4 | 70.7 |
| 1986 | 66.8 | 14.3 | 32.6 | 72.5 |
| 1987 | 68.4 | 12.9 | 33.3 | 76.3 |
| 1988 | 69.3 | 12.0 | 33.7 | 77.2 |
| 1989 | 69.9 | 11.5 | 32.8 | 78.6 |

Source: Deutsche Bundesbank (1992), (based on a survey conducted by the Institut für Mittelstandsforschung)

Last but not least, German companies depend heavily on accruals (reserves) for pensions as a source for medium- and long-term debt. They represent an implicit part of the wage bill which can be retained by the company and used for investment purposes. Given that additions to such reserves initially appear as an expense in the company's books, they also entail income tax benefits. Accruals for pensions have increased in importance over time, but are more relevant for larger firms rather than Mittelstand companies (Table 8).

4.3 Leasing

Leasing assets have soared from DM 200 million in 1967 to DM 210 billion in 1993. 44% of all '92 investments funded with outside finance (Buhl 1995, p. 1356) and 10.9% of '94 aggregate investments (Kaufmann/Kokalj 1996, p. 54) have utilized leasing. Thus, this alternative form of finance has gained considerable prominence among German firms in recent decades. Leasing entails a number of advantages over the outright purchase of fixed assets which are of particular interest for the Mittelstand: (1) the company can acquire productive assets without using any equity, (2) the investment affects cash flows at the time when the productive assets are actually received and not before, (3) the terms of the contract can be tailored to the company's needs, (4) the company is exposed to less technological risk and (5) leasing may generate tax benefits.¹⁷ Most leasing contracts take on the form of finance leasing rather than operational leasing, i.e., the contracts have a minimum duration and impose all of the investment risk on the lessee. Leasing entails substantial financing potential for Mittelstand companies but is currently underutilized.

4.4 Factoring

If Mittelstand companies fail, it is often because of an unhealthy dependence on one or a few large downstream firms. When those firms hit rough waters, troubles spill over to their Mittelstand suppliers.

In its simplest form, factoring represents the sale of credit risk to a financial intermediary. The credit risk can be sold individually (*maturity factoring*) or as a bundle together with the receivables themselves (*bull factoring*). The company may in addition leave the management of the accounts receivable to the factoring company (*old-line factoring*) but may still be liable for any delinquent accounts (*with-recourse factoring*).

Few Mittelstand companies have so far taken advantage of this straightforward opportunity to finance themselves on the basis of their current assets. In a survey conducted by the Mittelstandsinstitut Niedersachsen in the late 1980s, 90% of the Mittelstand companies included in the survey were relying exclusively on their house-bank for advisory services regarding financing. 70.9% of the companies stated that they had so far only discussed traditional financing with their house-bank while only 22.1% of the responding firms were actually using factoring at the time of the survey (Hamer 1989, pp. 14-15).

The German factoring association had 12 members by the end of 1992 with a total volume of DM 20 billion, approximately 1% of the aggregate short-term debt of German firms (Betsch 1995, p. 561). Industry sources expect total factoring volume to grow at a faster rate than the market for short-term bank loans in the years to come. Some of the prerequisites for using factoring are (Betsch 1995, p. 557): a stable set of commercial buyers, sales of DM 5,000 - 10,000 per buyer, an average transaction size of at least DM 1,000 and a 90 day maximum period allowed for payment (180 days for export business). Of course, this does not solve the dependency on large customers.

4.5 Debt Capital as Quasi-Equity

Nominal debt capital may, under certain circumstances, assume the liability characteristics of equity (Schäfer in: Albers et al. 1989, p. 239). We refer to these investments as quasi-equity (or hybrid capital) because they actually represent a mixture of debt and equity finance and such funding sources are particularly suited to solving Mittelstand financing problems. In particular, debt instruments will enhance the company's equity base if:

1. the investments can be used as a financial buffer to cover company losses, i.e., their return is to some extent dependent on company performance;
2. the funds have been made available to the company on a long-term basis.

Quasi-equity will mostly appear in the form of atypical silent partnerships, loan contracts and participation certificates.

4.5.1 Atypical Silent Partnerships

Silent partnerships in their typical form represent qualified debt contracts and do therefore not qualify as quasi-equity. Specifically, typical silent partnerships guarantee investors a share of the company's profits and some control over company decision-making. These investments are not available for loss coverage and are not compensated with a share of the company's hidden reserves at the time of divestiture. German law however permits the formation of atypical silent partnerships which include the latter two aspects as well (Schäfer in: Albers et al. 1989, pp. 239-40).

Partnerships will de facto generate additional equity for the company as long as they can not be dissolved unilaterally and on short notice by the silent partners. The equity character of such investments is further strengthened by the fact that their repayment can be contested by the trustee in case the company goes into receivership within one year after the silent partnership has been dissolved. In

borderline cases, the courts are more likely to treat the investment of silent partners as equity if

- they also hold an outright equity stake in the company,
- the silent partners have exerted a strong influence on company decision-making,
- the investment of the silent partner has been vital for the overall financing of the company.

As always, there are exceptions to the rule. EPCs frequently choose the silent partnership for their investments. They usually have the legal character of equity investments independent of the particular contract design. Minor oversights may at times convert investments of silent partnerships into equity, even if they are explicitly excluded from loss coverage. In one case, a company had advertised that its equity consists partially of investments from silent partnerships. A federal court ruling followed this interpretation despite the fact that the partnership had been designed as a qualified debt contract (Lwowski in: Albers et al. 1989, p. 173).

4.5.2 Loans

As with silent partnerships, loan contracts may take on the function of equity as a result of judicial ruling or by contract design. As discussed in the previous section, courts may assign equity status to a loan contract against the explicit wishes of the creditor if his role for the development of the company is *de facto* identical to the one of an equityholder.

Loan contracts can be designed to serve as quasi-equity by

- adding a provision which makes the loan subordinated to all other company debt (i.e., by placing it “between” the company’s debt and equity),

- concluding the contract at a time when the company would not have gotten outside debt finance without providing adequate collateral (applies primarily to loans from equityholders).

4.5.3 Participation Certificates

These instruments have traditionally been issued as a compensation for assets and services rendered. Typical examples are innovations, licenses and know-how utilized by the company. Nowadays, participation certificates (*Genußscheine*) are primarily sold on the open market for a certain price, i.e., they target the investment community at large rather than company insiders. Participation certificates can be issued by any company qualifying for the issue of financial assets, independent of its legal form. If the issuing company so chooses, they can also be traded on organized exchanges just like any other standardized asset.

If the company guarantees investors a fixed rate of interest per annum, then a securitized participation certificates will resemble a corporate bond. If it is not securitized, it will be equivalent to a subordinated loan. Alternatively, the company may grant the owners of participation certificates a share of the profit (as well as a share of the liquidation value) in which case these instruments become equivalent to non-voting preferred shares and are therefore quasi-equity. Contrary to silent partnerships, participation certificates do not grant their owners any influence over day-to-day company decision-making, certainly one reason why family-owned companies such as Bertelsmann have chosen this method of raising “equity” capital.

Participation certificates represent a potentially important instrument for channeling equity funds to the Mittelstand in future years. Up to now, mainly large companies have utilized this financing option.

5. Risk Management

At first sight, concerns about risk management should be high on the list of executives of Mittelstand companies: many of these firms sell a large proportion of their output abroad, often with a high concentration in a limited number of export markets or at least currency areas. Even those companies which are not exporters are, as a rule, exposed to considerable foreign competition in the relatively open German market. Obviously, such company characteristics suggest they have a great deal of exposure to purchasing power parity risks, i.e., the discrepancy between changes in nominal foreign exchange rates and inflation rates. By the same token, the relatively high reliance on debt financing, of which a large part consists of short-term bank credits, makes German Mittelstand firms very much subject to changes in interest rates. Last, but not least, many of these high-tech manufacturing firms are highly dependent on the cost of specific commodities (e.g. aluminum, steel, energy). When seen in the context of the relevancy of financial distress for such companies, such circumstances would create considerable demand by German Mittelstand firms for a variety of risk management techniques, products, and services.

When viewed from a supply side perspective, there are likewise many developments in the German market that would make risk management much easier. In particular, Germany has had a long history of internationally open financial markets. Thus, all the major and many of the not-so-major German banks are able to provide foreign currency loans. Usually, they can do so quite efficiently through their Luxembourg branches and Swiss affiliates, entities in so-called "off-shore markets" where they are well represented and their funding largely driven by access to flight capital from German savers. In addition, the larger German banks, including the foreign banks established in Frankfurt, have begun to aggressively offer financial derivatives since the mid-1980s, lagging only a few years behind their competitors in London.

Table 9. Currency Risk Management Practices of German Companies 1996, in %.

| | Employees | | | | | |
|----------------------------------|-----------|-------|-------|---------|---------|-------|
| | 1-19 | 20-49 | 50-99 | 100-199 | 200-499 | ≥ 500 |
| <i>No Active Risk Management</i> | 75.3 | 74.6 | 65.6 | 63.1 | 49.7 | 23.9 |
| because prices fixed in DM | 12.3 | 12.5 | 12.9 | 13.6 | 10.7 | 3.0 |
| no export business | 15.1 | 17.8 | 9.6 | 10.8 | 5.7 | 0.0 |
| too costly | 4.1 | 0.0 | 2.3 | 3.4 | 3.1 | 3.0 |
| <i>Active Risk Management</i> | 24.7 | 25.4 | 34.4 | 36.9 | 50.3 | 76.1 |
| hedging with derivatives | 5.5 | 7.1 | 17.9 | 22.7 | 35.2 | 53.7 |
| contractual price | 6.9 | 8.9 | 9.6 | 9.1 | 13.8 | 17.9 |
| fixing DM prices | 0.0 | 2.9 | 3.7 | 4.0 | 2.5 | 4.5 |

Source: Fieten et al. (1997), p. 297, based on a survey conducted by WSF (multiple answers were possible).

Data presented in Table 9 as well as information obtained through informal surveys of relationship managers from a number of German banks show, however, that neither demand nor supply conditions have been sufficient to cause widespread use of financial risk management techniques by German Mittelstand companies. This is all the more surprising as one of the obstacles often cited by large German companies, namely the biased accounting treatment for hedges, is not present. Conservative German accounting principles, most prominent among which are the "lower cost or market" valuation principle (*Niederstwertprinzip*) and the "single asset" valuation principle (*Einzelbewertung*), are probably less of a factor in the privately held Mittelstand companies where numbers do not have to be presented to external shareholders but have to satisfy only the owner-managers, the bankers, and of course the tax authorities.

The reasons why the bulk of German Mittelstand companies do not engage in financial risk management are complex, but may shed some interesting light on corporate risk management practices in general. First, the impact of foreign exchange rates, interest rates, and commodity prices on corporate performance over time has many dimensions. The effects depend very much on competitors'

reactions and shifts in technology in production and output markets. Thus, in technical terms, the correlation between asset prices in financial markets and corporate cash flows is very unstable and definitely not linear. When this fact is combined with a lack of sophisticated staff resources that can perform the requisite numerical analysis and also explain their complexities to (a) busy owners often with engineering backgrounds, (b) bankers who may understand financial markets but are often not sufficiently familiar with the company's operations, including competitive conditions and cost structures, it is not surprising to find that the risk management efforts of the Mittelstand are concentrated on the asset side of the companies' balance sheet.

The very strength of the firms reduces the operating exposure of the Mittelstand companies: they either have monopolistic positions in small market niches which allows them to adjust prices to offset adverse exchange rate changes; alternatively, they have the ability to quickly and flexibly adapt products and production processes to changing market conditions, including those caused by exchange rate changes and shifts in commodity prices. Last but not least, while Mittelstand firms rarely have the financial and personnel resources to engage in large-scale foreign direct investment, a surprising number of companies have moved component production to low-cost locales, especially those in the newly emerging countries of central and eastern Europe (Logue 1995, pp. 39-48).

While the above holds for the great majority of the population of German Mittelstand companies, there is a small minority of firms, some of which have made the news, that use risk management instruments aggressively, especially derivatives. However, too often this is motivated in order to offset flagging operative results. The affair of *Balsam AG* is only one of the cases that has come to light: for years the company enhanced its returns by writing options, serving as counterparties to a number of financial institutions who claimed that each, individually, was not aware of the risky positions that the corporation built up. When an unexpected change in exchange rates and interest rates occurred at the

end of 1993, the consequences were widespread losses, apart from the bankruptcy of the company.

There is also evidence that a small number of companies enter into currency swaps against the Swiss Franc and, more recently, Japanese Yen, in order to take advantage of the low (nominal) interest rates in these currencies. However, the motivation has little to do with offsetting the impact of Swiss or Japanese competitors on operating margins, but simply a belief that the lower nominal interest rates available in the currency will not be drastically changed by adverse currency movements. Such speculative tactics are particularly attractive for firms who fight for survival in adverse product markets. Clearly, there is moral hazard in evidence: as long as their financial speculation activities work, they are saved - if things go wrong, they are dead anyway. While this is true for companies anywhere in the world, German Mittelstand companies may be particularly subject to that temptation because of the high incidence of manager-owners and the effective lack of controls by independent boards of directors or frequent financial disclosure.

6. Concluding Remarks

The Mittelstand has historically been the driving force behind Germany's economic success and it will continue to play a critical role for its development in the years to come - despite its persisting problems on the liability side of the balance sheet. European integration and the economic opening of Eastern Europe presents Mittelstand companies with new growth opportunities but also with more intense competitive pressures. In our view, the German legislature must continue to liberalize the Mittelstand's access to organized capital markets in order to remedy the undercapitalization of medium-sized businesses which constitutes the single most important threat for their future competitiveness.

First and foremost, the German legislature needs to end the discriminatory tax treatment of equity holdings relative to other forms of investment. It must involve (a) the complete abolishment of the trade tax, (b) an equal income tax treatment at the time of accrual for stock and interest bearing instruments, and (c) lowering the tax rate differential for company earnings relative to EU partner countries.¹⁸

Second, Germany must ease the restrictions on Mittelstand firms going public by, for instance, permitting the trading of GmbH shares on organized exchanges or by fostering the growth of existing stock market segments for small caps. The legislature must also remove restrictions which prevent institutional investors such as investment funds and insurance companies to invest in the free-trading segment (*Freiverkehr*) of the German stock market in order to raise the liquidity of Mittelstand stock.

Notes

- ¹ We thank Prof. D. Brophy of the University of Michigan Business School, M. Fabich of Dresdner Kleinwort Benson, Prof. A.-F. Jacob of WHU Koblenz, P. Riemer-Hommel, Ph.D. of IAAEG (University of Trier) and C. Schneider of Bankhaus Lampe for helpful comments. We also thank the Institut für Mittelstandsforschung (Bonn) for granting generous access to its archives. All remaining errors are solely the authors' responsibility.
- ² As a matter of convention, we refer to all equityholders as owners, independent of whether they are partners, limited partners, stockholders, etc. Owner-managers are defined as equityholders with a controlling stake and with an active role in day-to-day decision-making.
- ³ This effect was somewhat alleviated recently with the change of Germany's personal bankruptcy law. Before, German entrepreneurs had a legal obligation to honor all claims arising from bankruptcy proceedings. Failure to meet these claims effectively precluded them from restarting another business.
- ⁴ Estimates for the number of companies undergoing succession range from 300,000 (or approx. 21% of all family-owned enterprises) for the period 1995-2000 (Bös/Kayser 1996) to 675,000 (or 4.3% of all small- and medium-sized companies) for the period 1997-2002 (Verband der Vereine Creditreform 1997a, 23). The studies differ with respect to the population (the latter captures a greater portion of small-sized companies).
- ⁵ The Verband der Vereine Creditreform reports that 12.4% of all West German firms (26.5% of all East German firms) included in the survey (3114 West German and 2013 East German firms) have lost more than 1% of total turnover in 1997 (Verband der Vereine Creditreform 1997a, p. 17). 73% of West German firms (77.8% of East German firms) were forced to write off receivables due to the insolvency of downstream firms (Verband der Vereine Creditreform 1997b, p. 5).
- ⁶ Trade tax actually consists of two different taxes: one collected on company earnings (*Gewerbeertragsteuer*) and the other collected on the value of the company (*Gewerbekapitalsteuer*). The value-based component is scheduled to be phased out in the near future. Trade tax revenues constitute one of the most important sources of funding for German municipalities (see also Wöhe/Bieg 1995, ch. 1.4 and 2.3).

- ⁷ The inheritance tax is set up as a progressive tax system with rates ranging from 7.5% to 35% for direct descendants and 38% to 70% for non-relatives.
- ⁸ U.S. start-ups often gain the support of so-called "Business Angels" (estimated number: 250,000) - high net-worth individuals with entrepreneurial skills and experiences (Fuchs 1997, p. 2). No such tradition exists in Germany.
- ⁹ EPC services are typically incorporated into the respective bank's marketing strategy for corporate clients (see for instance Deutsche Bank 1995).
- ¹⁰ Average individual investments in 1996 (shares of total investments): early stage investments DM 1.26 million (14%), expansion investments DM 5.28 million (55%), management buy-out/-in DM 4.72 million (18%), bridge financing DM 10.13 million (5%), government-supported investments DM 0.56 million (BVK 1997, p. 18).
- ¹¹ 9.871 billion after accounting for companies outside of the industry association BVK.
- ¹² TVM Techno Venture Management, ranked 6th with an investment volume of approx. DM 300 million allocated over approximately 80 projects (Müller-Stewens et al. 1996, p. 195; Anonymous 1995).
- ¹³ See ifo (1994) for recent survey evidence.
- ¹⁴ EASDAQ = European Association of Securities Dealers Automated Quotation, NASDAQ = National Association of Securities Dealers Automated Quotation.
- ¹⁵ A detailed discussion of the regulations governing Official, Regulated and Free Trading can be found in Kaufmann/Kokalj (1996), pp. 112-5 and Rasch (1996), pp. 122-9.
- ¹⁶ Mittelstand companies can however obtain loan guarantees from the Deutsche Ausgleichsbank and the Federal Government at a cost of 0.5-1% per annum (Baier/Pleschak 1996, p. 107).
- ¹⁷ If the duration of the initial lease contract is less than the typical lifetime of the asset and if the asset stays with the company at a lower annual cost after the expiration of the contract, then tax benefits may result from shifts of the tax burden into future periods and lower tax rates for progressive tax systems (Wöhe/Bilstein 1991, pp. 197-8). Leasing may also be used to reduce trade tax and others (Gabele/Kroll 1995, 113-22).

¹⁸ The total tax burden on retained earnings equals approximately 65% in Germany compared to 30-40% for many other industrialized countries (Verband der Vereine Creditreform 1995b, p. 6).

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