Deutsche Bank Research

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Dynamic diversity opens up opportunities

An international assessment of SMEs

Attempting to make universally valid statements about small and medium-sized enterprises (SMEs) is doomed to failure. Whether in Germany, the EU or the US, differences do exist between SMEs depending on company size and the sector in which they operate. The operating environment, which includes regulatory conditions and access to financing, does not impact on all SMEs in the same way.

The economic significance of SMEs is substantial. In every country SMEs dominate the corporate landscape, accounting for more than 99% of firms. SMEs contribute more than 50% to total employment and value added in most countries. In external trade, by contrast, SMEs play a smaller part than big firms. SMEs in CEE countries are posting high growth rates as they make up ground.

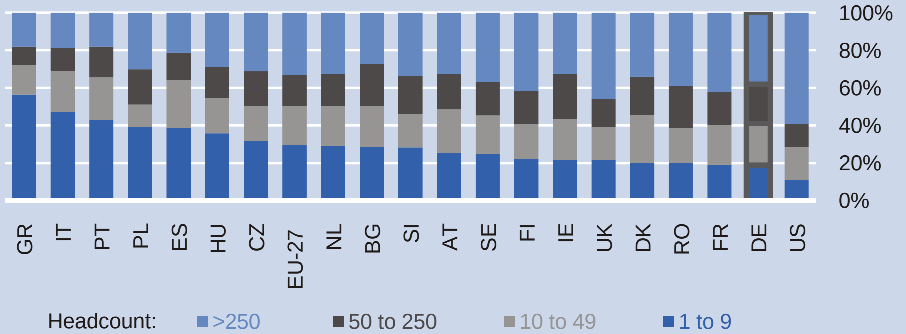
The significance of micro enterprises is very high in many cases. In Mediterranean countries above all they employ exceptionally large numbers of workers. This contrasts with Germany and the US where the main employers are medium-sized and large companies. A close correlation exists between the share of micro enterprises and the SME employment ratio.

SMEs exhibit flexibility and growth. High self-employment ratios indicate a highly developed entrepreneurial spirit. With regard to friendliness to entrepreneurs and company fluctuation rates Germany occupies a midtable ranking internationally. In countries where micro firms have a high employment share high fluctuation rates result in a more volatile working environment.

Easy access to financing is vital to the survival of SMEs. The banking sector plays an essential role in providing external financing to SMEs in both Europe and the US. German SMEs choose debt financing more often than SMEs in other EU countries. SMEs in the US often fall back on credit cards.

Innovation, internationalisation and human capital are the keys to future success. More and more SMEs are using globalisation via international markets and cooperations. The outward migration of skilled personnel represents a challenge for SMEs in their countries of origin.

Employment share by company size



Sources: Eurostat 2005, SBA 2005

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Author
Katharina Hohmann

Editor
Barbara Böttcher
+49 69 910-31787
barbara.boettcher@db.com

Technical Assistant
Sabine Berger, Angelika Greiner

Deutsche Bank Research
Frankfurt am Main
Germany
Internet: www.dbresearch.com
E-mail marketing.dbr@db.com
Fax: +49 69 910-31877

Managing Director
Norbert Walter

1. Introduction

Small and medium-sized enterprises (SMEs) are regarded as the lifeblood of the German economy, and the *Mittelstand* (the collective name for Germany's SMEs) considers itself to be something special. Critics, by contrast, call SMEs the "spoilt recipients of economic policy largesse". How much do German SMEs differ from those in neighbouring European countries or the US? An international comparison reveals that SMEs dominate the corporate landscape. Both in Europe and the US virtually every company is an SME: over 99% of all firms fit this description. But despite their major economic importance SMEs often still appear to be "black boxes" or unknown quantities. It is virtually impossible to make universally valid statements about and international comparisons between small and medium-sized companies, because they differ greatly in terms of company size, employment share, sector affiliation, legal form, degree of internationalisation and innovativeness. The operating environment with regard to regulation, recruitment of skilled staff or access to funding also impacts SMEs in different ways depending on their sizes and the sectors in which they operate.

SME statistics overview

	DE	EU	US
Number of SMEs (million)	3.6	19.7	6
Share of all companies (%)	99.5	99.8	99.4
Persons employed in SMEs (million)	12.5	85	58.7
Share of entire workforce (%)	61	67	41
Value added (EUR billion)	553	3,090	n.a.
Share of total value added, %	53	57.6	n.a.
Export share, %	11	8	5

Sources: Eurostat 2005, SBA 2005 **1**

This report provides a general examination of a variety of SME indicators and proffers an international comparison of SMEs in Germany, the EU and the US. The aim is to investigate which factors determine the economic importance of SMEs as well as how and with which intensity they do so.

2. Differing definitions

There are major differences between the definitions of small and medium-sized businesses both internationally and within Europe, which makes comparisons difficult.[1] As a rule, the term used internationally is "Small and medium-sized enterprises" (SMEs) or "Small Businesses" (SB). In German-speaking countries the term commonly used is *Mittelstand*. To put an end to the confusing variety of definitions used within the EU (and to provide harmonised criteria for funding or incentive programms), the European Commission has laid down a standard definition. It is based on four factors – staff headcount, annual turnover, balance sheet total and autonomy (see Box p. 4).

"Mittelstand" or SMEs

The term used internationally is SME, but the word *"Mittelstand"* has established itself as an export item, especially in the English-speaking world. For example, one quote from the New York Times reads: "*Mittelstand*, a collection of mostly family-owned companies […] forms the backbone of employment". In addition to the quantitative aspect of the definition, the term *"Mittelstand"* is mostly also associated with a particular mindset and entrepreneurial spirit: *Mittelstand* companies are often family-run and have close ties with a region and a business location. The purely quantitative label "SME", which applies to very large numbers of micro enterprises, does however also include firms with a stock market listing or with alternative ownership structures, and therefore does not sufficiently reflect the connotations of the term "*Mittelstand*" as used in Germany.

According to the EU definition, SMEs are companies with fewer than 250 employees. Distinctions are made between *micro enterprises* with fewer than ten employees, *small enterprises* with 10 to 49 employees and *medium-sized enterprises* with 50 to 249 employees. Companies with at least 250 employees are *large enterprises*. The definitions are different in Germany and the US: traditionally they both categorise firms with up to 500 employees as medium-sized. This means that a substantial portion of Germany's *Mittelstand* (companies with 250 to 500 employees) are no longer SMEs according to the EU's narrow definition, although they are not perceived to be large firms in Germany.

The EU definition is geared towards the business structure in southern European countries where very large numbers of very small firms co-exist with several very large economic entities. The

[1] The huge number of SMEs worldwide makes it virtually impossible to collect complete data sets or to make accurate projections. European statistics in particular are not yet harmonised, nor are they updated constantly. Differing data collection methods across the member states and costly collation at the EU level make it difficult to gain access to standardised, reliable and comparable data. This means that identifying trends is the best that can be achieved.

virtual autonomy of the companies is also an important factor: firms that belong to large groups are not classified as SMEs.[2]

On account of the availability of data and for the sake of better comparability we shall use the quantitative, headcount-based EU definition of SMEs.

No single definition for SMEs

Country	Small enterprise	Medium-sized enterprise
Belgium	Up to 100 / 250 employees	
Denmark	Up to 100 employees	
Germany (Institut für Mittelstandsforschung, Bonn)	(1) Up to 9 employees (2) Annual turnover of up to EUR 1 m	(1) 10 to 499 employees (2) Annual turnover of EUR 1 m - EUR 50 m
France	Up to 499 employees	
UK	At least two of the following three criteria	
	(1) Annual turnover of max. GBP 2.5 m	(1) Annual turnover of max. GBP 11.2 m
	(2) Balance sheet total: max. GBP 1.4 m	(2) Balance sheet total: max. GBP 5.6 m
	(3) Maximum of 50 employees	(3) Maximum of 250 employees
Ireland	Up to 50 employees	50 to 249 employees
Italy	Up to 499 employees	
Netherlands	Up to 9 employees	10 to 100 employees
Portugal	Up to 500 employees	
Sweden	Up to 200 employees („micro enterprises": up to 10 employees)	
US U.S. Small Business Administration (SBA)	*Employees:* Up to 500 employees for the majority of the manufacturing and mining sectors: Up to 100 employees for wholesaling *Turnover:* < USD 5 m: retail; services < USD 17 m: construction < USD 7 m: „special trade contractors" < USD 0.5 m: agriculture	

Source: Grichnik (2003): Finanzierungsverhalten mittelständischer Unternehmen im internationalen Vergleich 2

3. *Mittelstand* – a "black box" of major economic importance

Irrespective of national boundaries SMEs constitute the resounding majority of all companies. In Germany there are around 3.6 million SMEs, representing around 99.5% of all companies. In the EU-27 there are some 19.6 million SMEs (99.8% of all companies). Even in the US the SME share is 99.4%, since the 6 million or so SMEs contrast with "just" 20,000 large companies. This means there are just small differences between the SME share of companies from one country to another.[3]

Furthermore, SMEs in most countries make the largest contribution to *employment and value creation*. In external trade, by contrast, SMEs play a smaller part than big firms. In order to determine their economic importance we shall utilise three indicators: company size structure, number of employees and value creation.

SME: EU definition

	Micro enterprise	Small enterprise	Medium-sized enterprise
Head-count	<10	10 to 49	50 to 249
Annual turnover, EUR	Up to 2 m	2 to 10 m	10 to 50 m
Balance sheet total, EUR	Up to 2 m	2 to 10 m	10 to 43 m
	Autonomy (no stake of 25% or more held in the enterprise)		

Source: European Commission 3

[2] According to the Commission recommendation (2003/361/EC), autonomy means that no other company may own a stake of more than 25% in the company concerned.

[3] Eurostat, 2005; Institut für Mittelstandsforschung (IfM) Bonn, 2007; U.S. Small Business Administration (SBA), 2005.

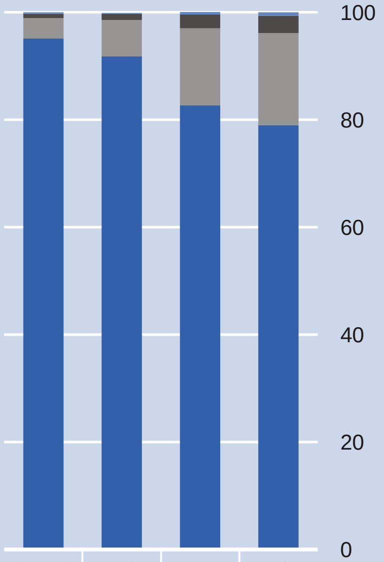
3.1 *Company size structure – almost identical, but different after all*

One look at the enterprise size classes and the country-specific differences become apparent. The dominant size class across all national boundaries is that of the micro firms, which make up over 80% of companies.

One major structural difference between Germany and other countries is revealed by looking at the medium-sized firms. In Germany there is a relatively large share of "large *Mittelstand* companies" (with 250 to 500 employees), which are not SMEs according to the narrow definition, but are nevertheless referred to as belonging to the *Mittelstand*. Furthermore, in Germany and the US the share of SMEs with 10 to 250 employees is much higher than the European average (DE: 17%; US: 20%; EU-27: 8%). Numerous European countries, by contrast, have very large proportions of micro enterprises (EU-27: 92%; DE: 83%).[4]

Enterprise size classes differ internationally

%



	CEE-12	EU-27	DE	US
>250	30	22	48	65
50 to 249	80	110	260	319
10 to 49	380	680	1,430	1,714
1 to 9	9,510	9,180	8,270	7,902

>250 ■50 to 249 ■10 to 49 ■1 to 9

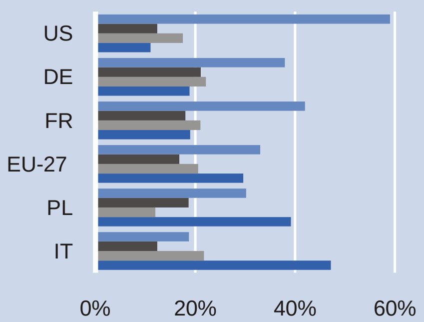
Sources: Eurostat, SBA 2005 **4**

This picture is confirmed by the SME density statistics. Nationally, the density of SMEs per 1,000 inhabitants ranges from less than 25 to more than 75. The higher the SME density, the larger the number of small firms in the country concerned. SME density in Germany is comparatively low by international standards, which is due to the relatively large proportion of medium-sized firms. However, SME density provides little information about whether a country has achieved "SME saturation" since it is impossible to determine an "optimum" number of SMEs.

3.2 *Employment structure – dispute about whether SMEs are "the engine of job creation"*

SMEs are frequently hailed as being the engine of job creation in an economy. In so doing, however, a distinction must be made between the relative share of the workforce employed by SMEs, the rises and falls in employment over the business cycle and the individual size classes. A sweeping judgement on whether SMEs are the engine of job creation would thus be too simplistic.

Employment share by enterprise size



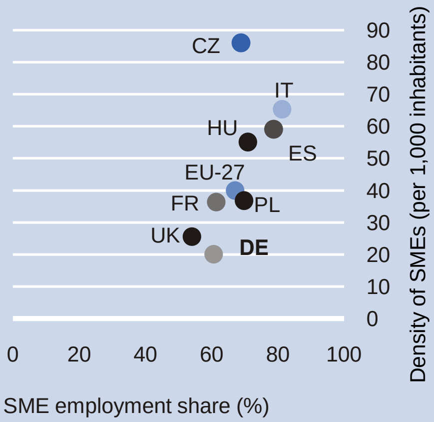
Sources: Eurostat 2005, SBA 2005 **5**

Despite the substantial number of SMEs they are much less significant in terms of the number of people they employ. In all the European countries surveyed SMEs employed at least 50% of all people in work. In the US, by contrast, the share was around 42%. In Germany the share of the workforce employed by SMEs comes to around 61%, which is roughly on a par with the international average.[5] In southern European countries such as Italy, Greece, Portugal and Spain the corresponding figures are particularly high, with roughly 70-80% of all people in work being employed by SMEs. SMEs in the countries of Central and Eastern Europe (CEE) also provide employment to some 70% of the workforce. This means that taken together SMEs are the biggest employers. However, the corollary of this is that the few large firms that constitute just 0.5% of

[4] Regional differences in Central and Eastern Europe (CEE): Baltic states: micro enterprise share of 77-82%; Poland, Czech Republic, Slovakia, Hungary and Slovenia: micro enterprise share of more than 90%.

[5] Eurostat calculates that SMEs provide jobs for 61% of the workforce in Germany, whereas the Institut für Mittelstandsforschung in Bonn arrives at a figure of 55% using the same definition. This clearly illustrates the problems associated with data collection on SMEs not only in Germany, but also across Europe as a whole and in the US. According to the German definition (up to 500 employees) the share of employment would however be 70.6%. We can therefore conclude that companies with 250 to 500 employees provide jobs for roughly 15% of the workforce.

Density of SMEs and employment share

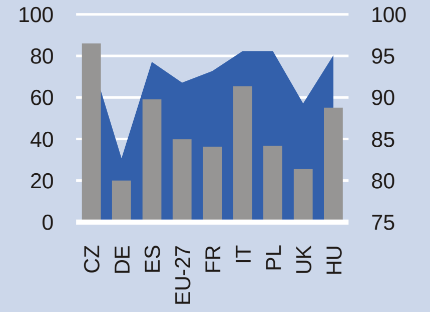


Source: Eurostat 2005 **6**

Employment effects

Average headcount figures smooth the effects of company size structure and employment and are another indicator of the importance of various enterprise size classes. In the US in 2004 the average SME employed ten workers in a single facility. The average large firm in the US, by contrast, employed 3,313 workers at 62 facilities. Average company size in Germany is 7.7 employees, whereas in Mediterranean countries such as Italy or Greece the average SME headcount is just two or three persons respectively. The very small average company size reflects the high proportion of family-run micro enterprises, whereas in the US it is the big companies that have the largest share of the workforce on their payrolls.

Density of SMEs and micro enterprises



Source: Eurostat 2005 **7**

all enterprises employ an average of roughly 35-40% of the entire workforce.

Distinguishing between the size of companies, several differences can be found between various countries and country groups:

— Whereas in CEE countries more than 1 in 3 people in work are employed by micro enterprises (with up to 9 employees), in the US the ratio is only slightly above 1 in 10.

— Compared with other countries Germany has above-average numbers of people working in small and medium-sized enterprises and for larger members of the *Mittelstand*. This confirms the uniqueness of the German structure, as already shown with the size classes.

— Although the US and Germany share similarities regarding company size structure, there are major differences between their respective employment structures. Nevertheless it is true that in countries like Germany, France and the US micro enterprises employ fewer staff than the small and medium-sized firms. In many other EU-27 countries the opposite is the case.

Given their high contribution to employment it is often assumed that SMEs provide a bigger boost to the labour market (primarily by creating jobs) than large companies over the business cycle, cope better with declines in employment during economic downturns and dismiss fewer employees than large firms. Research conducted in several countries[6], however, reveals that at least in micro enterprises high job growth rates often go hand in hand with high job loss rates, which calls into question the assertion that SMEs are “the engine of job creation”. Although SMEs create more jobs overall most of the time, they do this in a very dynamic manner, as shown in the chart on German companies on page 7.[7] Smaller companies are responsible for a large proportion of jobs created and jobs lost. Nearly 40% of companies whose staff numbers have risen or fallen employ fewer than ten people. The numbers for the US are similar, where SMEs have created proportionally fewer jobs as they become larger.

This means that larger companies tend to undergo fewer fluctuations than smaller companies. Small firms by contrast are subject to much more volatile employment processes than larger ones, which means less job security for employees of smaller companies. Smaller companies have the advantage that they can act more flexibly and move faster in the labour market besides being able to adjust more rapidly to structural and cyclical fluctuations. Conversely, the disadvantage is the uncertainty that these fluctuations trigger among employees, which means that higher-skilled people find small companies less attractive employers. In terms of net changes in employment, the largest swings occur at very small and very large firms. Overall, it is discernible that in the US and Germany there is an inverse correlation between job

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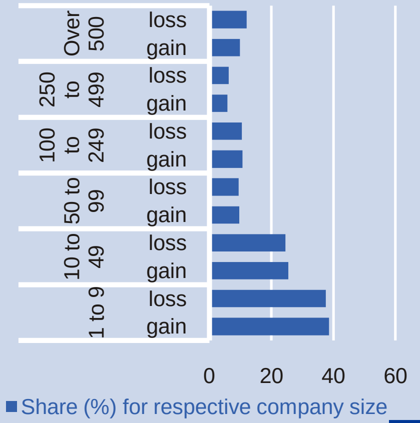
[6] Wagner, Koller und Schnabel (2007). Sind mittelständische Betriebe der Jobmotor der deutschen Wirtschaft? Günterberg und Wallau (2007). Beschäftigungsbeitrag des Mittelstands 2007 in Deutschland, IfM Bonn. Helfand, Sadeghi und Talan (2007). Employment dynamics: small and large firms over the business cycle, BLS USA, Monthly Labor Review. Van Praag (2007). What is the value of entrepreneurship? A review of recent research, IZA Discussion Paper.

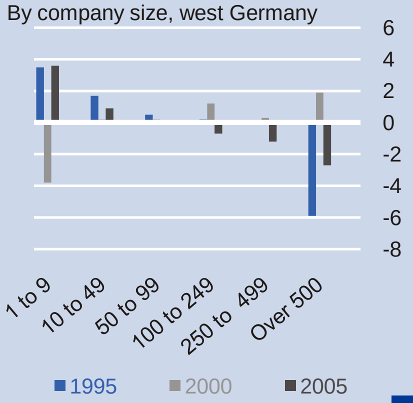
[7] IAB Discussion Paper 2/2008. KMU und Arbeitsplatzdynamik − Eine Analyse auf Basis der Beschäftigten-Historik-Datei. This data is for west Germany as only separate statistics are available for the western and eastern parts of the country. The trends in east Germany are, however, comparable.

Employment gains and losses
1995-2005, west Germany



Source: IAB 2008 **8**

Net changes in employment
By company size, west Germany



Source: IAB 2008 **9**

gain/loss rates and company size. The bigger the company, the lower the turnover rate.

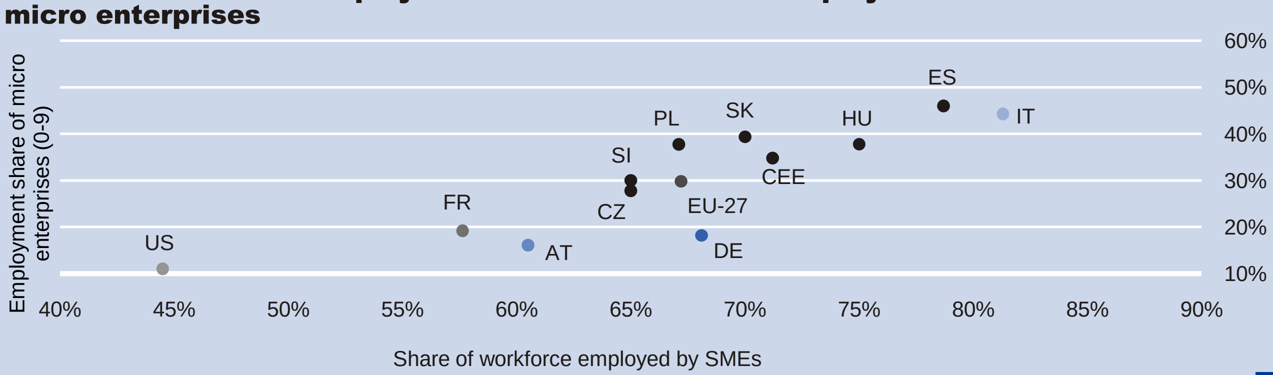
Overall, however, no universally valid conclusion can be drawn from these figures. Companies in a single size class do not all respond in the same way to the business cycle and structural changes, and they differ in terms of sector, export behaviour and the like. In the US it was small firms that were responsible for the majority of job losses during the recession in 1991, whereas in 2001 most job losses occurred at large firms. The only explanation for this observation is structural and cannot be attributed to company size alone.

Micro enterprises play a major role in many countries

Above all in Mediterranean countries such as Greece and Italy it is micro firms that employ the largest proportion of the workforce.

The large number of micro enterprises in turn results in higher employment by SMEs. Generally there is a positive correlation between the percentage share of the workforce employed by micro firms and the contribution to total employment of SMEs in an economy. This observation shows that micro enterprises are the driving force of job creation in many countries on account of their numbers. Whereas in the US only comparatively few people work for micro firms or SMEs, in Spain and Italy for example there are many more workers than average who are employed by micro firms or SMEs.[8] In Germany this correlation between micro firms and SMEs is less pronounced, which suggests that the "medium-sized" SMEs play a bigger role as mentioned above. Micro enterprises in Germany thus prove to be somewhat less dynamic engines of job creation than in other countries.

Correlation between employment share of SMEs and employment share of micro enterprises



Sources: Eurostat 2005, SBA 2005 **10**

[8] To qualify this, it should be noted that the low proportion of workers employed by micro firms in the US is partly due to the way the data is collected, as many sole proprietorships do not appear in the SMEs statistics.

3.3 *Value creation – SMEs are the biggest contributors*

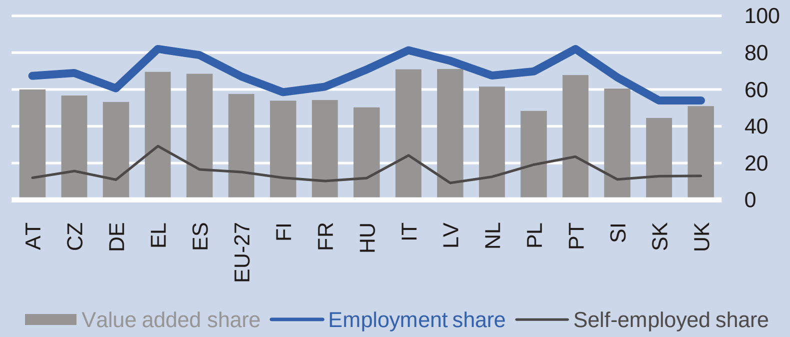
SME share of value added higher in Mediterranean countries

Besides their impact on employment in an economy SMEs' overall economic significance is reflected in their share of value added, which is above the 50% threshold for nearly all countries surveyed. This means that SMEs make a decisive contribution to gross domestic product. SMEs in Germany generate about 53% of value added, which is higher than in Slovakia, Poland and Romania, where the share is less than 50%. In many Mediterranean countries and the Baltic states, by contrast, the share is higher than in Germany at over 60%.

Both factors – share of employment and value added – are indicators of the economic significance of SMEs. As the chart shows, in countries with a higher SME employment share (which is in turn closely correlated with the self-employment ratio), the value added share is also higher.

Value added share

Compared with total employment share and self-employed share (%)



Source: Eurostat 2005 **11**

4. Opening the "black box" – SMEs are subject to numerous interconnected phenomena

Small companies operate in sectors typified by flexibility and limited economies of scale

Differing company size classes, employment shares and value-added contributions of SMEs from country to country are the result of a variety of factors. The following eight factors are intended to enable readers to become better acquainted with the phenomenon of SMEs and the interconnected variables to which they are subjected:

1. Countries have strengths in different *sectors*, which has an impact on company size structure. In some sectors smaller companies have an advantage because of their flexibility or the limited availability of economies of scale. This applies, for example, to tourism and to the skilled trades. On the other hand, it is only larger companies that can exploit synergies in many sectors such as plant engineering or large-scale industry.
2. *Regulation and the external environment* such as bureaucracy, taxes or regulation costs impact on company growth, company size structures and fluctuation.
3. A large number of startups and a high *fluctuation* in market entries and exits could result in more micro firms tending to be in the market since startups usually begin as micro enterprises and expand over time as they become more successful (corporate growth) or exit the market.

4. A high *self-employment ratio* indicates that entrepreneurial spirit is highly developed. The motives for starting up a business can, however, be completely different.
5. Access to *financing* is essential for SMEs of all sizes. In this respect the raising of equity capital is a particularly important issue. *Legal form* frequently determines not only the access to sources of funding, but also the tax burden and thus the ability to form equity.
6. *Innovation* means economic growth via progress. But not all SMEs invest in the same way. How well SMEs are equipped for the future thus also depends on the access to funding and the (international) environment.
7. SMEs utilise and participate in globalisation via *internationalisation* by being export oriented, entering into foreign partnerships or forming joint ventures.
8. Both the availability as well as the costs and the skills of *personnel* will play a bigger role for SMEs.

The last three factors are particularly important for SMEs to enjoy future success.

4.1 Sectors of the economy and industries – where is "small" the strongest?

One factor that determines company size and employment structure is the sectoral structure of the economy. The countries frequently referred to as industrial nations have long since transformed themselves into service nations. Indeed, it is the service sector in which most SMEs operate in both the EU and the US. There are, however, also various industrial segments to which small companies gravitate.

Similar sector structure in the EU-15 and the US

The sectoral structure of US and EU-15 SMEs is almost identical. This is a consequence of a parallel sectoral development over the last fifty years. In all these countries more than half of SMEs operate in the general service sector. In many CEE countries, by contrast, it is the trade sector which is more developed, and a relatively larger number of SMEs produce goods in the manufacturing sector. This difference is one consequence of CEE countries not yet having completely concluded the transition process and at the same time reflects the investment preferences of foreign investors there during past decades.

Sectoral affiliation of SMEs

Country	Distributive trade	Manufacturing	Construction	Business services	Other services
AT	17%	12%	8%	16%	48%
DE	22%	9%	10%	22%	38%
EL	60%	4%	14%	5%	18%
ES	31%	10%	11%	18%	30%
FI	23%	9%	13%	21%	34%
IT	28%	15%	12%	20%	26%
GB	13%	10%	22%	21%	33%

Sources: OECD, Eurostat 2005

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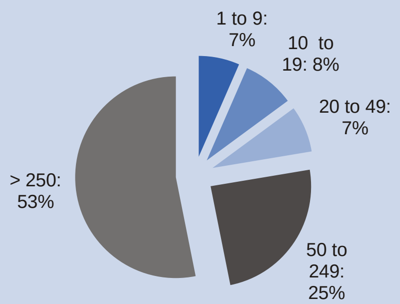
If we look specifically at micro enterprises in EU member states, we find that they are particularly heavily concentrated in the construction, real estate and hospitality sectors as well as in wholesaling and retailing. In these countries more than one-third of all companies have fewer than ten employees and at least two-thirds of firms have fewer than 50 employees. In all countries there are sectors which are dominated by SMEs, as shown by data from the US where the construction sector is largely made up of SMEs. Since in many service sectors only minor synergy effects or few economies of scale can be exploited as companies get bigger, a staff of fewer than 50 employees frequently represents the ideal company size.

Nearly 75% of German SMEs operate in the service sector

In Germany nearly three-quarters of SMEs are service companies. In 2007 there were seven times as many new companies registered in the real estate and housing sector (186,000) and retail trade (176,000) as in manufacturing (24,000).[9] However, the fluctuation in the number of companies in the service sector is also much higher than in manufacturing, where the companies are often bigger. Just like in Germany, in France, too, the number of startups in the property, business services and construction sectors has risen in recent years.[10]

Manufacturing
Germany, employment shares by company size class



Source: Eurostat 2006 13

A classic service-SME sector is tourism, as a look at Austria shows. There, above-average numbers of SMEs operate in the tourism sector, and overall tourist firms are the leading employers among SMEs. One of the most important service sectors is the distributive trade. In the US the wholesale segment is dominated by small and medium-sized companies, but the retail trade is largely made up of big companies that increasingly dictate the American market via chain stores. Small "Mom-and-Pop stores" have been increasingly been squeezed out of the market by big national or international businesses.

Despite the overwhelming number of service companies, industry remains an important economic sector for the *Mittelstand*. Manufacturing constitutes the biggest share (80%). Around 94% of industrial firms are SMEs and more than half of these firms have fewer than 20 employees.[11] Nevertheless, Germany's manufacturing sector SMEs are larger than the EU average: twice as many SMEs (40%) as in France, Italy or Poland (less than 20%) have more than ten employees.

If we then abandon the narrow definition used by the European Commission, it becomes clear that no other major industrial nation has such broad, internationally oriented small and medium-sized enterprises as Germany.

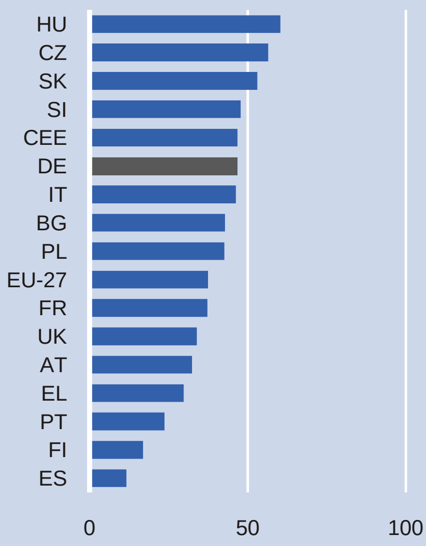
9 German Federal Statistical Office (2008).
10 Institut national de la statistique et des études économiques (INSEE) (2006): Les grandes évolutions – La demographie des PME.
11 IfM Bonn/BDI: Mittelstandspanel 2007.

The Lightness of Being … Doing Business 2009

In its regular “Doing Business” report the World Bank’s International Bank for Reconstruction and Development (IBRD) has synthesised indicators into an ”Ease of Doing Business“ index, in which Singapore ranks the highest. The index aggregates regulatory indicators like regulatory costs, international trade, the time and effort taken to pay taxes and other administrative factors. The European countries that made it into the Top Ten are Denmark, the UK and Ireland. At the bottom of the EU league table come the Czech Republic, Poland and Greece. Germany occupies 25th place out of 181 countries, because tax havens or lightly regulated countries are ranked higher in this index. Since the index gives equal weighting to the indicators and excludes macroeconomic factors, stability, infrastructure and similar criteria it has only limited informative value.

Administrative obstacles

% of companies with problems



Source: Eurobarometer 2006 **15**

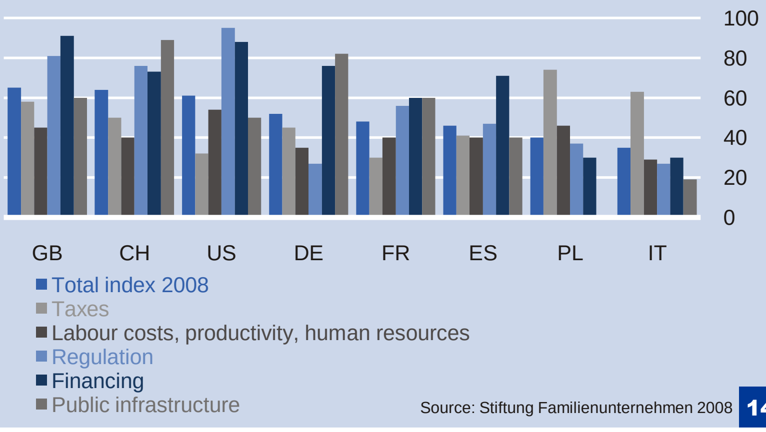
4.2 Regulation and the operating environment determine structure and success

Criteria such as bureaucracy, taxes, costs of regulation or education offerings are among the factors that determine how difficult or easy it is to set up a company or how many skilled personnel are available. This in turn has an impact on the level of company fluctuation (i.e. market entries and exits) or how often companies expand.

Regulatory framework

The country index of Stiftung Familienunternehmen[12] provides an outline of the regulatory framework in selected countries. While the US, Switzerland and the UK have the most business-friendly regulatory regimes and also occupy leading positions in the overall index, Poland has the most attractive tax provisions. Despite dissatisfaction among German companies this index suggests that the financial environment is not nearly as negative as occasionally suggested by the responses given in company surveys (see Financing chapter). Furthermore, Germany’s tax environment earns an almost identical rating to Switzerland’s, while France’s tax regime is deemed to be relatively anti-business.

Country index 2008



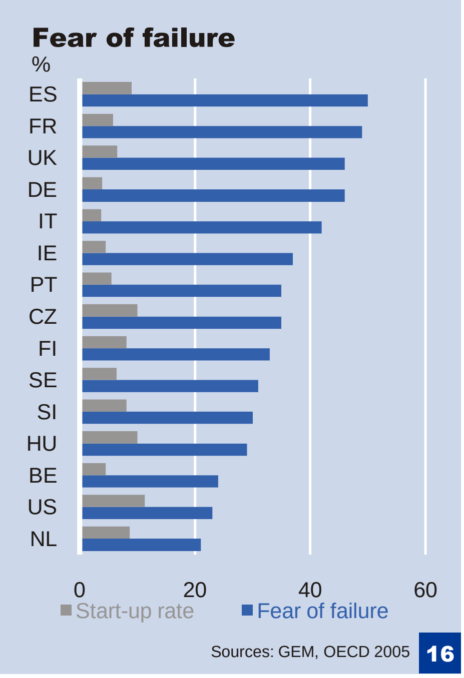
Source: Stiftung Familienunternehmen 2008 **14**

Company size and costs of regulation

The smaller the company, the more onerous regulatory restrictions become. The burden weighs less on big companies as it is shouldered by a larger number of people. The marginal costs of access to financing, the overcoming of administrative obstacles or the fulfilment of legal requirements decline as the company size increases.

Statistics confirm that smaller companies suffer more from financing restrictions, regulation, red tape or even corruption than do large firms.[13] In Germany administration-related costs per employee at small firms are up to four times as high as at large firms.[14] A report on SMEs in the US[15] comes to a similar conclusion. Although the US in general has a good, flourishing regulatory climate for companies, smaller SMEs there are also worse off when it comes to complying

12 Länderindex Stiftung Familienunternehmen, http://www.familienunternehmen.de, Maximum number of points 100: the higher the score, the better the conditions.
13 World Bank (2008): Doing Business 2009
14 IfM (2004). Bürokratiekosten kleiner und mittlerer Unternehmen; IHK Schwaben (2004). Initiative gegen Bürokratie.
15 SBA (2005). The Impact of Regulatory Costs on Small Firms.



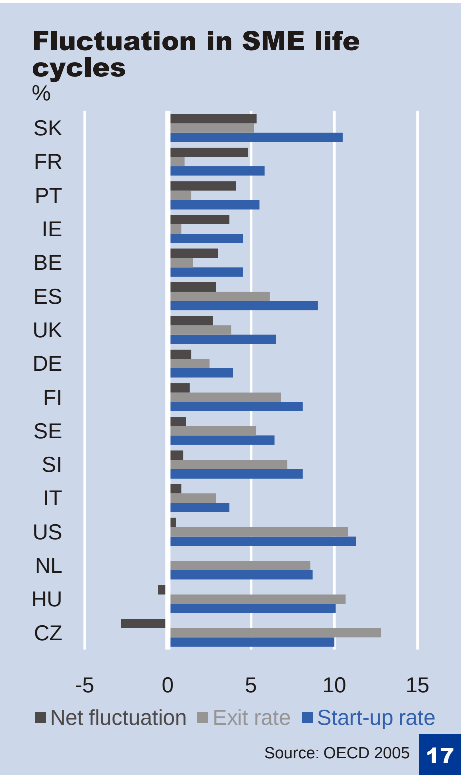
with regulatory provisions than bigger SMEs or large firms. Complying with regulatory rules costs small firms with fewer than 20 employees up to 45% per employee more than large firms with over 500 employees. The difference is particularly stark if one compares the costs of complying with environmental regulations.

4.3 Growth and change – dynamic SMEs show flexibility

Numerous company startups despite bureaucracy

To set up a company, the main things needed besides a bright idea are capital and time. Turning a business idea into reality can take anywhere from seven days to 50 on average, depending on the country. The process goes faster in some of Germany's EU neighbours and the US (6 days) than it does in Germany (18 days).[16] Moreover, there are differences in the outlays required to set up a new business. Measured as a percentage of a country's per capita income, startups are relatively cost-intensive in Italy, Spain and Poland. In Germany, expenditures on startups run to roughly 5% of per capita income.

It is difficult nonetheless to ascertain just how seriously bureaucracy hinders entrepreneurs in the various countries on average, for nations with a high startup rate do not face a demonstrably smaller amount of red tape. Apparently, neither startup costs nor the fear of failure have a major influence on an entrepreneur's decision to set up a company. The negative correlation between the startup rate and the costs of incorporation or the fear of failure[17] does not come unexpectedly. This relationship is not very pronounced, though. Administrative regulation is considered more of a problem for existing companies than as an obstacle for startups. On the other hand, the startup rate might presumably be higher in some countries if there were less bureaucracy.



Fluctuation – life cycles of SMEs are often too short

Fluctuation looks not only at the startups entering the market but also at the number of companies exiting the market – whether due to insolvency or simply closing down. Higher fluctuation in the course of the business cycle can be caused by a more flexible market, but also by an uncertain or volatile environment. Net growth rates are usually linked with the business climate or predicated on structural change. The relationship between market entries and market exits fluctuates much less in Germany than in countries such as the US, the Netherlands or an array of countries from Eastern Europe. Nonetheless, Germany still has a positive startup balance, for besides the startup rate the insolvency rate is also relatively low. Entry rates exceed exit rates by a particularly wide margin in Slovakia, for example, with its growth reading of over 5%. The Czech Republic and Hungary registered a decline in the number of SMEs during the past few years, as the number of insolvencies exceeded that of new companies entering the market. In Hungary and the US, where either the time and money or the costs involved in starting up a business are relatively low, the high fluctuation may be partly explained by the relative simplicity of procedures for setting up a company. In countries where there is a greater fear of failure, such as Germany, startup entrepreneurs are presumably more

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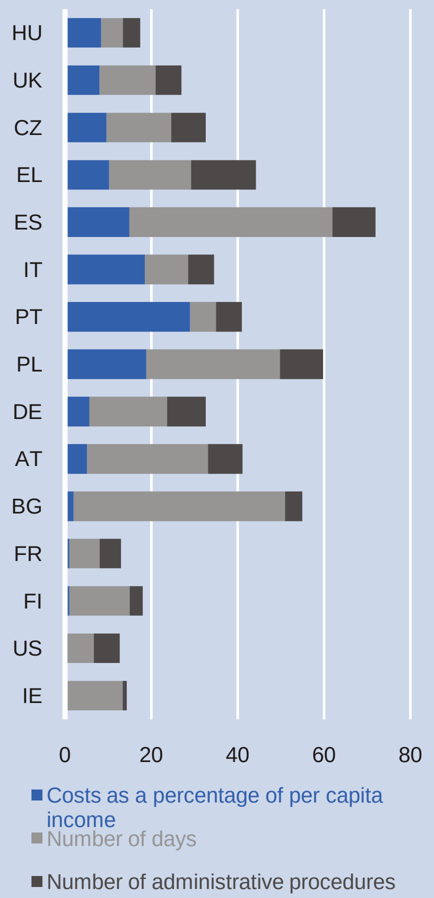
16 Among the EU-15 it takes a particularly long while to overcome administrative hurdles in Spain, Austria and Luxembourg; nearly 50 days are necessary in Bulgaria. OECD (2005).
17 Global Entrepreneurship Monitor (GEM). Fear of Failure.

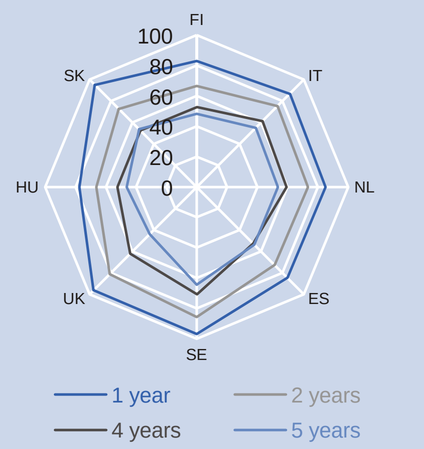
Founding a company - Ease of starting business



Source: World Bank 2007/08 **18**

Survival rate for SMEs

%



Source: OECD 2005 **19**

reticent. However, it is not possible to lend empirical underpinning to this plausible explanation.

Survival rates for the first year of a startup's existence tend to differ little from country to country. More than 80% of all SMEs exist for more than one year. In Spain, for example, more than 80% of the firms survive their first year, 75% of them their second year, and more than 50% are still around after their fifth year. Companies in the service sector tend to falter more than companies in the manufacturing sector. On average, about half of all SMEs survive the first five years of their existence.

Company growth is one indicator of success

Besides survival, another factor determining a company's success is growth. Fast-growing companies that survive for at least five years are referred to as "gazelles". Most of Europe's "gazelles", both in terms of headcount and sales turnover, are to be found in the Baltic states and Bulgaria. This is partly attributable to the economic modernisation processes in these countries. If new startups – which usually display fairly strong fluctuations and faster growth than established firms – are factored in, the share of SMEs with a rapidly growing headcount ranges from 5% to 9% in parts of Central and Eastern Europe. This compares with around 5% in the United States.

4.4 The self-employed as SME initiators

Even though it is difficult to differentiate statistically between self-employment, sole proprietorships and SMEs, the self-employment ratio plays a special role. A high ratio of self-employed persons indicates self-starters and entrepreneurs prepared to put their ideas into action. Moreover, the self-employment ratio correlates positively with the employment rate and the share of value added.

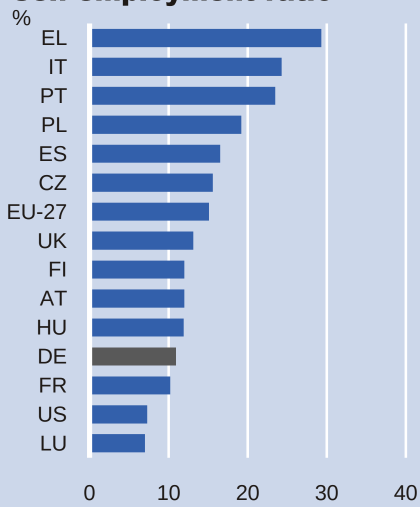
SMEs are in most cases run by a family or partners or are set up as sole proprietorships. Because of this there is a natural correlation between the number of self-employed and of SMEs, because neither variable is statistically independent.

There are very diverse motivations for becoming self-employed or starting up one's own business. Motives for a startup in the EU, for example, include the desire to be one's own boss, to earn more money or to master the challenges connected with self-employment. Besides, a virtue is often made out of necessity: many people become self-employed to avoid unemployment.

According to the EU definition, self-employed persons are sole or joint proprietors of an enterprise in which they work.[18] Since several persons, e.g. also family members, may be registered as self-employed, the number of self-employed is higher than the number of SMEs. Over 4 million people are self-employed in Germany, while the figure for the EU is nearly 33 million (in both cases including farmers). There are about 16 million self-employed in the broader definition in the US, while slightly over 5 million are incorporated. Moreover, Germany also differentiates statistically between self-employed with employees and self-employed without employees.

[18] In the US, statisticians differentiate more precisely between the "self-employed" and "business owners". Owners do not necessarily have to get involved in the day-to-day operations of their business, but as partners they may do so. By contrast, it is essential that the self-employed control the operations and manage the business themselves in order to generate their income. In Germany, the self-employment ratio is captured in an annual micro-census and expressed as the percentage of self-employed persons in relation to the total labour force.

Self-employment ratio



* EL = Greece

Source: OECD 2006/2007 **20**

Banks finance SMEs worldwide

A study conducted under the auspices of the World Bank compares the patterns of bank lending to SMEs in 45 countries.

A lack of information on performance or credit history as well as inadequate amounts of collateral at startups lead banks' loan officers most often to harbour doubts about company creditworthiness. Established older firms, by contrast, build up a relationship with their bank over time or have a good enough credit standing or collateral to be classified as creditworthy and low-risk borrowers, and thus obtain access to loans with more favourable conditions.

Over 80% of the banks in developing and industrial countries consider SME business to be a profitable undertaking. The SME market tends to be covered by domestic banks as opposed to foreign banks. Banks view macroeconomic instability (developing countries) and/or competition (industrial countries) as the key obstacles to SME funding. The most important criteria for credit decisions are: the assessment of a company's financial health, credit standing, personality of the owner, purpose of the loan and collateral (more important for smaller banks). The most important forms of collateral, usually, are mortgages, equity capital and personal securities. Banks often demand higher fees and interest rates from SMEs than from large companies, but also have more overdue loans to SMEs in their portfolios. The result of the study is that the financing of SMEs is not so much a factor of their size as of the overall financing environment in their country.

Source: Beck/Demirgüc-Kunt/Peria (2008): Banking SMEs around the World – Lending practices, business models, drivers and obstacles. World Bank.

Thus, about 56% of the self-employed operate as sole proprietors, while 44% have staff working for them[19].

The introduction of the internet immensely boosted the possibilities for the self-employed to turn a business idea into reality on a very small scale. For over ten years the self-employment ratio climbed continually in Germany before peaking, and it has declined slightly since 2006. This is partly attributable to the booming economy over the past few years which resulted in companies upping their headcounts while reducing the number of people compelled to become self-employed for lack of alternatives, and partly to changes to the incentives for forming an "Ich-AG", i.e. a "Me plc".[20]

In the EU, the Mediterranean countries have the highest self-employment ratios. Over 20% of the labour force is self-employed in Greece, Italy, Portugal and Romania, and thus the self-employed have a very important – and higher – macroeconomic significance than in Germany, for instance, where the self-employment ratio (around 10%) is lower than the EU average (EU-27: roughly 17%).

In an international comparison there is not only a high employment effect thanks to a high self-employment ratio but moreover a positive cross-country correlation between the contribution of SMEs to employment, the share of micro enterprises, the self-employment ratio and the contribution to value added, as already indicated earlier.

4.5 Access to funding is essential for an SME's survival

Access to external funding is essential for the survival of small and medium-sized enterprises since they are usually unable to prosper on equity capital alone. Various types of financing are available, although not all of them are equally recommendable for all cases. Furthermore, there is a particular focus on the equity base. The legal form of a business is of significance insofar as it plays a part in decisions regarding the availment of various types of financing instruments.

Legal form – the relationship between ownership and risk

The particular relationship between ownership and performance, or liability and risk, is perhaps the crucial difference between SMEs and large corporations.[21] For this interlinkage is also reflected in company policy decisions and thus shapes funding requirements. Whether a company is risk averse or risk tolerant hinges in many cases on the personality of the owner or owners – and of course on its equity cushion.

In Germany, an SME is typically set up in the legal form of the sole propietorship, and its owner is in most cases also the company's chief executive. Of the nearly 700,000 new firms registered in 2007, some 81% were sole proprietorships, 12% were launched as a private limited-liability company (GmbH) and 5% constituted a Civil-code company (GbR).[22] While companies set up as partnerships do not need to have a minimum capital stock in view of the owners'

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[19] OECD, Eurostat, IfM Bonn.

[20] Germany's unemployed may apply for a government subsidy to set up an "Ich-AG". This funding is designed to pave the way to becoming self-employed and establishing a business.

[21] Grichnik, Dietmar (2003). Finanzierungsverhalten mittelständischer Unternehmen im internationalen Vergleich. In Kienbaum/Börner. Neue Finanzierungswege für den Mittelstand. Dusseldorf.

[22] German Federal Statistical Office (2008). Neugründungen im Jahr 2007, http://www.destatis.de

SMEs typically choose legal form of sole proprietorship

personal liability, companies formed as a "GmbH" or an "AG" (private and public limited company, respectively) are required by law to have a minimum level of equity paid in. This means that the liability risk is higher for owners of partnerships. For creditors, the equity level is of major significance since a company is liable for its debts to the extent covered by its assets. The lower the degree of capital adequacy, the larger is the probability of a company defaulting on its debts.

In the US, 44% of SMEs are sole proprietorships, 47% corporations, and 9% partnerships. The key difference between proprietorships and corporations is that with proprietorships and partnerships the owners are liable to the amount of their private assets, while this is usually not the case with corporations. Incorporation offers tax advantages, and corporates can use a plethora of financing instruments. An argument favouring proprietorships is that they encounter little red tape when being set up.[23]

In most of the EU member states, too, more than half of all SMEs are in the hands of personally liable owners. Then there are mixed forms, depending on the country, which stipulate limited liability for company owners. Besides, the EU has instituted European transnational legal forms aimed at making life easier for companies operating across national borders. Such an arrangement is also provided for SMEs in the Small Business Act for Europe (see box), which offers companies operating in Europe the possibility of setting up subsidiaries outside their national borders using a single legal structure.

Small Business Act for Europe (SBAE)

SMEs have topped the European Commission's list of priorities for several years. The EU is striving to create more uniform, more comparable conditions for small companies in Europe in order to improve the administrative and legal environment. The ten basic principles contained in the SBAE are headlined by the maxim "Think small first":

— More favourable conditions for companies and family businesses
— Second chance for entrepreneurs who have faced bankruptcy
— Implement "think small first" principle
— Make public administrations responsive to SMEs' needs
— Facilitate SMEs' participation in public procurement and better use state aid possibilities for SMEs
— Facilitate SME's access to finance
— Help SMEs to benefit more from the single market
— Promote the upgrading of skills and all forms of innovation
— Enable SMEs to turn environmental challenges into opportunities
— Encourage and support SMEs to benefit from the growth of markets outside the EU

Besides, a new regulation on the European private company will allow subsidiaries to be set up across borders in all EU member states as private companies, unlike the current practice with a different legal form in every member state. Further reforms provide for a reduced VAT rate for labour-intensive services performed locally and payment deadlines limited to 30 days.

The EU also offers promotion programmes for SMEs. These include funding options which are directly available to SMEs and particularly promote the areas of environment, research and education, structural funds to promote structurally weak areas and regions and various financing instruments. These instruments are usually offered via financial intermediaries in order to expand the lending volume for SMEs as a whole. The European Investment Fund (EIF), the European Investment Bank (EIB) and the European Bank for Reconstruction and Development make available loan guarantees, startup capital facilities and financing facilities for this purpose.

EU: Financing customs differ

Small companies typically finance their activities differently than large companies do. Since access to funding is essential for company expansion, new jobs and growth, it is an important lever for economic policymakers in seeking to create a better climate for innovation and growth. Internationally, the banking system is the most important institutional provider of financing and loans for SMEs. The critical factor that is often the key to funding is how much information is available to the bank pertaining to the company and the collateral at hand.

In both the US and Europe, banks play the biggest role in providing funding for SMEs. Some 65% of American SMEs rely on banks for capital, while the share in Europe is 79%. Leasing firms (24%) and public institutions (11%) follow in second and third place in the EU. But there, too, the national differences loom large: while only half of Finnish SMEs approach their banks for funding, the share in, say, Ireland or Austria is over 90%. Other types of financing such as leasing are widespread in Germany (71%), but considerably less so in Finland (27%). Overdraft loans are the preferred option for Danish and Irish firms. Another worthwhile option for producers of industrial goods is supplier credit, a type of financing that usually makes sense either for a short period (since the interest rates for longer-term supplier credit are higher than normal borrowing rates) or for SMEs without access to other sources of funding. A lower level of bank financing is not necessarily attributable to supply, though. It can also be due to demand.

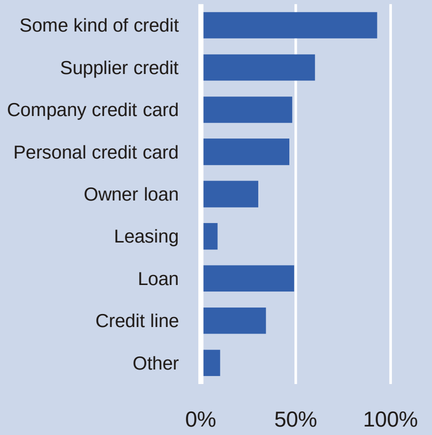
The company financing structures and their differences across Europe are more the product of country-specific financing systems and customs as well as of structures that have grown over time than

[23] Federal Reserve Board (2006). Financial Services Used by Small Businesses: Evidence from the 2003 Survey of Small Business Finance.

Share of SMEs using external financing

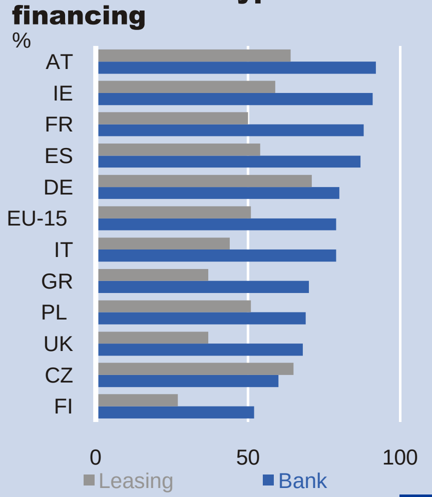
Source: Eurobarometer 2005 **21**

Types of SME financing in the US



Sources: SBA, Federal Reserve 2003/2006 **22**

Most common types of financing



Source: Eurobarometer 2005, 2006 **23**

High rate of company card use among American SMEs

of company size, respective sector or years of existence. The tax system, financial system (bank-based, market-based), legal framework (such as capital adequacy rules) as well as cultural reasons and family ownership play a part.

Germany: Relationship with "house bank" still valued highly

The European Commission has attested that Germany has the best promotion concept for SMEs, including financing aspects, within the EU. Nevertheless, even before the onset of the economic and financial crisis, German companies themselves had indicated that they were dissatisfied with financing conditions.[24] It is not possible to find the key to their dissatisfaction at the macroeconomic level. The relationships between SMEs and their local "house banks" continue to be valued highly in Germany. Roughly 80% of the SMEs obtain funding from banks, with over 70% of the companies doing the bulk of their banking with their local savings bank, mutual bank or credit cooperative. But nearly one-third of the companies also look to government promotion programmes for funding. Small companies in particular consider this assistance essential for their investment decisions.

United States: Credit cards used for financing SMEs

Anyone who starts up a small business in the US or owns a relatively unprofitable company usually relies on credit cards (private or corporate) or on mortgage loans. As soon as such companies gain a foothold or experience a growth phase, their owners increasingly start to apply for regular bank loans or small business loans that offer more favourable borrowing conditions but have more demanding standards and require a better credit standing. Even though the US has a market-based financial system (*arm's length lending*) compared with Germany's bank-based system (*relationship lending*), smaller US businesses in particular do prefer to obtain their funding from banks (65% of SMEs) and rely on traditional loans such as credit lines, loans and leasing. Most of the American SMEs are located in urban regions. This gives them greater access to large banks. The share of large banks focusing on small business lending and micro-business lending has thus grown accordingly over the past few years. Nondepository institutions (mortgage firms, leasing firms, credit card companies, families, suppliers and venture capital firms) have also experienced a strong increase. One peculiarity of the American SME is the high rate of company credit card use (48% at small firms, up to 71% at larger companies). The advantage of credit cards for many entrepreneurs is their being a combination instrument for payment transactions as well as pre-financing which enables a simple, flexible way for micro firms in particular to acquire liquidity rapidly and at short notice. Mainly younger and smaller companies which are usually classified by creditors as riskier enterprises with only limited access to regular SME loans use credit cards as a substitute for other types of credit.

Statistics confirm that as a company grows, its demand for loans increases. There is hardly any correlation between the age of a company and its type of financing. On the one hand, younger firms

[24] Flash Eurobarometer 2005. Other European countries score better than Germany in terms of satisfaction with access to bank financing. For roughly 25% of the German SMEs surveyed in 2005 said that they were not satisfied with access to financing facilities or the financial underpinning of the projects in question; over 80% said that access to bank loans had become more difficult compared to one year earlier; this is one of the highest rates of dissatisfaction among the EU members.

(in existence for less than five years) tend to obtain, and demand, fewer loans, which may be attributable to the fact that they have not yet established their credit standing or personal relationship with their bank. On the other hand, longer-established companies no longer have to pay back startup costs and have amassed more equity, meaning that they do not have to fall back on alternative types of financing as often.

No clear correlation between age of company and type of financing

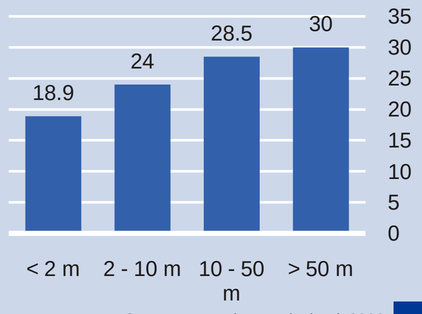
All in all, SMEs are frequently dependent on private relationships and funding sources and/or the personal creditworthiness of the company owner. It is important for all SMEs that they have a balanced financing mix and bolster their equity capital so they are better able to deal with the ups and downs of the business cycle.

Focus on the equity ratio – cushion and springboard

Equity ratio tends to increase as the company expands

In Germany, the spotlight is repeatedly trained on company equity ratios. Even though they are trending up, equity ratios at SMEs still fall far short of those at large companies. Small businesses with annual revenues of less than EUR 2 m have a mean equity ratio of nearly 19%. The problem here is that SMEs in the lowest quartile have an equity ratio of merely 3%, while the reading in the top quartile is nearly 40%. Moreover, the equity ratio increases as the company expands. Large companies in Germany have an average equity ratio of 30%; the differences between the quartiles in this group are not that pronounced. The trend towards rising equity levels was unbroken also in 2008. At end-2008 around 27% of Germany's SMEs showed an equity ratio of over 30%. Furthermore, 32% of the SMEs remained undercapitalised with less than 10% equity.[25] Besides, it is also necessary to differentiate according to sector and not only company size. Most of the adequately capitalised companies are found in the manufacturing sector. In certain segments of this sector[26] nearly half (48%) of the companies have more than 30% liable capital at their disposal.[27]

Equity ratio in Germany
by turnover category (%)



Source: Deutsche Bundesbank 2006 **24**

On average, the equity cushion of SMEs is thicker in most European countries than in Germany. Data on the equity base of European SMEs as classified by company size shows, firstly, that in Germany the equity ratio across both sectors and size categories is much lower than it is in, say, Portugal, Spain or France and, secondly, that in other European countries there are less pronounced differences between the equity ratios of smaller and larger companies.[28]

Possible explanations are that it used to be easier to borrow money in Germany, which required less equity to be held, and the traditional financing patterns of the SME sector. The strongly developed "house bank" principle in Germany along with certain insolvency and tax guidelines obviated the need for an abundance of equity. Studies[29] show, moreover, that the actual liable capital of German SMEs is frequently a great deal higher than the equity level posted in the balance sheet. This concurs with the perception of entrepreneurs who, by a large majority (80%), used to regard their equity ratio as adequate.

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[25] Deutsche Bundesbank 2006, Creditreform 2008. Wirtschaftslage und Finanzierung im Mittelstand 2008.
[26] Manufacturing of iron products, sheet metal and metal goods, furniture, music instruments, sport equipment, games and jewellery.
[27] Creditreform 2008. Wirtschaftslage und Finanzierung im Mittelstand 2008.
[28] Grichnik, Dietmar (2003). Finanzierungsverhalten mittelständischer Unternehmen im internationalen Vergleich. In Kienbaum/Börner: Neue Finanzierungswege für den Mittelstand, Dusseldorf. Observatory of European SMEs, SMEs and Access to Finance, 2003. BACH Datenbank 2007. Deutsche Bundesbank 2006.
[29] KfW Mittelstandsmonitor (2003). Mittelstandsfinanzierung im Umbruch.

High equity ratio serves as cushion in crisis

Changes in financial market structures including integrated global markets and intensified competitive pressures have resulted in German SMEs now also starting to boost their equity. Most of the companies surveyed said back in 2005 that equity financing would gain importance for them going forward. A healthy capital adequacy policy is urgently required for new startups, innovative companies and crisis sectors in particular so they can be better prepared for changes in financing conditions. In light of the current financial and economic crisis the equity base and the diversification of financing have become more important for SMEs to enable them to ride out the downturn and rapidly regain their footing for the coming upswing.

5. Where will the journey lead? Future determinants for SMEs

Technological progress is the ultimate engine of economic growth. Economist Joseph Schumpeter said that the distinguishing feature of entrepreneurs is their desire to continually improve their economic position through innovations. Entrepreneurial spirit creates innovations and hence economic growth and structural change.

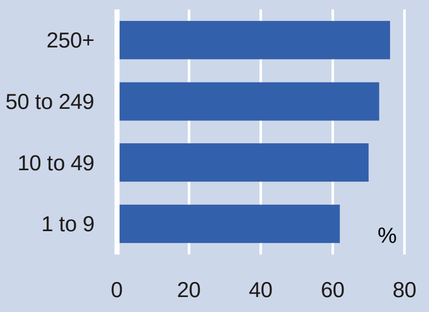
Innovations: also important for SMEs

Whether innovations become established in the market depends strongly on how companies go about it, but this also depends on the degree of cultural acceptance and demand for innovative products, without which fewer innovations would be created. Both the innovation climate in the respective countries as well as the size of the company and its sector affiliation determine the intensity of innovation. In the transport and construction sectors, innovations are less probable or necessary a factor for a firm to be able to hold its own than they are in distributive trade or the manufacturing sector, which thrive on new products.[30]

5.1 Innovation – economic growth driven by progress

EU-27: SMEs generating income from innovations

Headcount



Source: Eurobarometer 2006 **25**

The EU's Lisbon Strategy is an attempt to use a variety of political measures to boost productivity and the pace of innovation in order to match the economic performance of Japan and the US. The target set by the EU in 2000 to increase R&D spending to 3% of GDP (from 1.9%) by the year 2010 was retained when the Lisbon Strategy was revised. Moreover, the aim was for the share of the private sector in R&D investment to rise.

In the EU, about three out of every ten firms have new products in their portfolio or are generating income from them. There are more of these SMEs generating income from innovations in the new member states than in the old ones. In a nutshell: the bigger a firm, the more likely it is to be innovative. While 62% of all micro firms generate income from new or improved products, the figure for large companies is over 75%. Across all size categories there is only a small difference in the share of revenues generated through company innovations (roughly 12%), while the share of innovative firms itself grows as firms increase in size. This results in smaller, innovative firms generating a comparatively large share of their revenues from innovations.[31]

The chief obstacles to innovations in the EU are cited as being financing problems, a scarcity of skilled labour, a lack of demand

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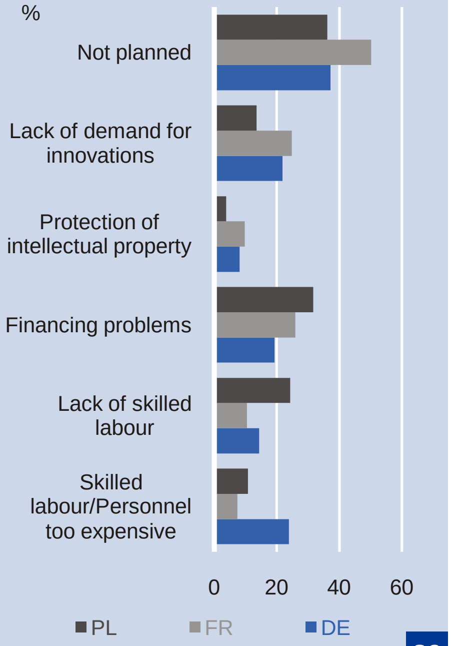
[30] On the other hand, there is also an interpretation problem in distributive trade, since retailers who market innovative products automatically generate turnover through innovative products without being innovative themselves.

[31] Flash Eurobarometer Survey 2007.

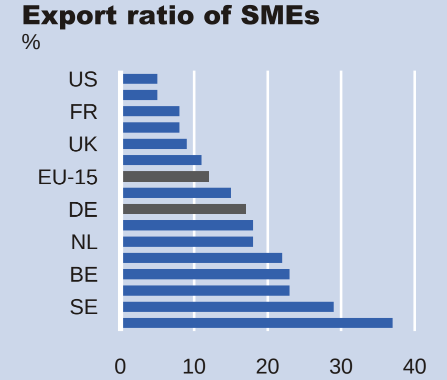
Main constraints on innovation activities



Source: Eurobarometer Survey 2006 **26**

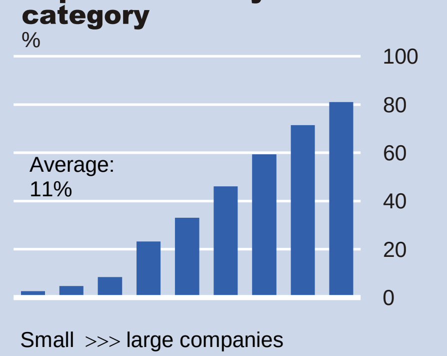
German SMEs more willing to embrace innovations than their French competitors

Export ratio of SMEs



Source: KfW 2004 **27**

Exporter ratio by turnover category



Source: IfM Bonn 2005 **28**

and personnel costs. On the positive side, it ought to be noted that hardly any companies consider the (absence of) protection of property rights or a lack of skills to use new technologies as obstacles. All in all, though, there are substantially more companies that do not even plan to engage in innovative activities than ones that decide against innovation because of the difficulties involved. Besides, it was found that the CEE countries narrowed the performance gap slightly further again in 2006. While the newer EU member states considered themselves to be more hindered in their innovation drive by limited access to funding and a dearth of qualified personnel than the EU-15, they had the advantage of lower personnel costs and stronger demand for innovations. Compared with their peers in neighbouring Poland and France, German SMEs are impacted more on the innovation score by personnel costs, but less by restrictive access to funding. Furthermore, the share of companies open to innovation is higher than in France, for instance. In industrial sectors, roughly two-thirds of Germany's SMEs and nearly 90% of its large companies are big on innovation.[32] All in all, about 12% of total R&D spending in Germany is done by SMEs. About 20% of R&D personnel is employed at SMEs.

While examining the influence of innovation on GDP, American researchers discovered a correlation between innovation and entrepreneurship as driving factors behind regional economic growth. Small enterprises develop more patents per employee than large ones do; the smallest firms have the highest patent-to-employee ratio. Hightech and growth industries such as biotechnology or pharmaceuticals tend to be served best by innovative SMEs. Even though SMEs account for merely 6.5% of all patents in the database examined, they play a key role for technological advancement since innovations of small firms are often adopted by large firms where they are used or refined further.[33]

5.2 Internationalisation of SMEs – seizing the benefits of globalisation and focusing on inherent strengths

As the globalisation trend spreads, SMEs are also increasingly gearing themselves for the world market, both to tap new sales markets as well as new sourcing arrangements and joint ventures. Export trade offers sizeable market opportunities and growth potential. Many SMEs, a number of them in Germany, are world leaders in their segments ("hidden champions") and can market their strengths globally.

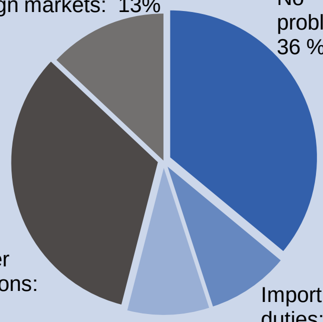
Exports chiefly aimed at the single European market

It is difficult to compare European data because in many cases they include intra-European trade. When beer is shipped across the German-French border from Freiburg to Strasbourg, it is recorded differently in the statistics than the whiskey shipped from Tennessee to Florida in the US or textiles from Guangzhou to Beijing in China. If the euro area or all the EU member states were classified as a single European market, up to 62% of external trade would disappear from the statistics; roughly 40% of German exports go to the euro area. On the other hand, the euro area as a single market cannot be regarded as equal to the US domestic market. In spite of having a single currency in the 16 member countries, language

[32] Eurostat 2004, IfM 2006.

[33] SBA (2005). The Innovation-Entrepreneurship Nexus. SBA (2008). An Analysis of Small Business Patents by Industry and Firm Size.

Export obstacles for SMEs (EU-27)



Source: European Commission 2007 **29**

barriers, different legislation and sales markets as well as trade barriers caused by differing regulatory regimes hamper goods and services flows to a greater degree than in the US. The Small Business Act for Europe is meant to dismantle the remaining barriers in intra-European trade and help to lighten the load on SMEs.

Fewer than 10% of European SMEs are exporters, whereas 28% of large companies generate revenues this way.[34] According to surveys, most European SMEs see the main trade barriers as a lack of knowledge about the foreign market (13%), import duties (9%) and capital constraints (9%). Nonetheless, in some countries over 20% of the SMEs are engaged in export trade. In small domestic markets such as Luxembourg more than elsewhere, companies look more intently for opportunities abroad.

Furthermore, in order to reduce the geographical distance from their customers, 5% of European SMEs opt to form joint ventures or maintain subsidiaries abroad. Contrary to frequently heard worries, these foreign links usually have either no impact on domestic employment figures or even have a positive impact.[35]

Even though the Central and Eastern European countries are increasingly growing in stature as trade partners, European SMEs are in some cases still sceptical about the enlarged EU. However, the higher their export ratio becomes, the more positive the SMEs' attitude.

When the little dragons awake – China's SMEs

It is a complex job to define and differentiate SMEs in China, since Chinese statistics in some cases include firms that are very large also by Western standards with up to 2,000 workers. Besides, not all SMEs are in private hands, which makes it even more difficult to define the term. Up to the 1980s most SMEs were still referred to as "town and village enterprises".

According to data from the census of 2004 there are roughly 40 m private SMEs operating in China. This contrasts with the roughly 19 m SMEs in the EU and around 6 m in the US. To achieve the same density of SMEs to total enterprises like in other countries the number would have to rise to about 60 m.

Only slowly increasing domestic demand is compelling many companies to enter the international market – a step which is encouraged by new technologies. Unlike in the OECD countries most of China's exports come from small and medium-sized enterprises.

Frequently, it is returned emigrants who were educated abroad that are now setting up successful, internationally operating Chinese companies. A low wage level gives China's SMEs a large cost advantage.

Source: CESifo Forum, Chris Hall Macquarie School Sydney, 2007.

German SMEs: Foreign business is worthwhile

The past few years have seen German SMEs post an increase in both their export ratios and in the number of exporters among their small firms. According to Germany's KfW, over 20% of the SMEs have reported foreign turnover (21% of the SMEs with five or fewer employees). By contrast, in the turnover tax statistics it emerges that only about 11% of all SMEs export goods or services. However, it is assumed that the exporting activity of micro firms is higher than reported in the company tax statistics.[36] In 2004, around 250,000 SMEs and 5,000 large companies exported goods to countries outside the EU.[37] Taken together, a clear trend emerges showing that the export ratio increases in line with company size – up to and including large companies, of which 81% are involved in export trade. Even though most of the internationally operating firms focus solely on exports from the home market, around 50% also maintain cooperative ventures and/or direct investments abroad.[38]

The main exporter is manufacturing industry, which is responsible for two-thirds of all exports. However, the biggest growth over the past few years was registered by distributive trade and services. Manufacturing industry is also the chief customer in terms of

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34 European Commission (2007). The Observatory of European SMEs.
35 IfM Bonn – Bedeutung der außenwirtschaftlichen Aktivitäten für den deutschen Mittelstand.
36 KfW Mittelstandsmonitor (2008). Mittelstand – auch kleine Unternehmen – erfolgreich im Ausland. KfW (2008). Wie international ist der deutsche Mittelstand? Wirtschaftsobserver Online, No. 34. Besides, newer data evaluations suggest that 15-25% of micro firms export their product, since many micro firms are not captured by company tax statistics.
37 IfM Bonn's calculations from turnover tax statistics. Wallau, Frank (2007). Internationalisierung der mittelständischen Wirtschaft – Chancen und Risiken. A report issued by the KfW (Wirtschaftsobserver No. 34) attributes differences in the data from the turnover tax statistics and surveys to the fact that exporting activity is overestimated in surveys yet underestimated in official statistics.
38 IfM Bonn (2007). SMEs with turnover of more than EUR 125,000.

imports, absorbing roughly 50% of the total. In 2006, France, the US and numerous EU countries were the most important export destinations of German companies.[39]

The most important reasons by a wide margin for SMEs to engage in business abroad are access to new sales markets (78%) and the shoring up of existing markets, followed by proximity to clients (34%), access to procurement markets (34%) and personnel and non-personnel costs (26%).

The fact that foreign business is worthwhile can be seen by the fact that nearly two-thirds of the companies have expanded their activities abroad over the past few years. Moreover, the companies operating abroad have a more positive evaluation of their earnings and employment situation than the companies that operate only in Germany. Higher growth rates in the exporting countries, the EU's eastern enlargement and the expansion of the euro area pave the way abroad.[40] The extent to which this trend will continue unbroken in the face of the current global economic problems remains to be seen.

US goes China (and back)

Less export orientation in the US – among companies large and small

In the US, close to 5% of the smaller firms export goods and services; they account for 96% of the country's exporters. Roughly 25% of the export turnover comes from SMEs while the other 75% is generated by large companies, of which about 40% are active in foreign trade. In the US, the top 20 exporters in 2006 accounted for no less than 20% of total exports. The chief export destinations (25%) are Canada and Mexico owing to their geographical proximity and integration in NAFTA. Over the past few years the share of SME exports to China has expanded at an above-average pace. Since 1992 the number of American SMEs exporting to China has increased more than six-fold. Note that a comparatively small number of SMEs generate export revenues in China, suggesting that primarily larger SMEs venture across the Pacific while smaller ones tend to focus on the American continent.[41] The reasons are the sizeable obstacles to trading in China caused by regulatory, language, access and cultural barriers. On the other side of the Pacific, China's SMEs are strongly represented in exporting industry (see box: China's SMEs).

5.3 Recruiting problems dogging SMEs?

Demographic trend leading to lack of skilled labour not only in Germany

Another factor which plays a key role in the capability of SMEs to master future challenges is the employment outlook. Given the demographic trend it is partly a matter of the quantity of labour available and partly a matter of their qualifications and costs.

Qualifications and availability

SMEs in various countries complain to differing degrees about the supply of skilled labour available in their area. In the Baltic countries and Greece more than half of the companies surveyed bemoan the fact that they cannot find enough skilled labour, whether because of inadequate education and training at home or emigration abroad. The Baltics and Poland are suffering particularly from the emigration

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[39] German Federal Statistical Office (2006).
[40] KfW (2008). Wie international ist der deutsche Mittelstand? Wirtschaftsobserver Online, No. 34.
[41] http://www.census.gov/foreign-trade/Press-Release/edb/2006/edbrel.pdf ; U.S. Department of Commerce, Exporter Database. Excluding service exports, only goods. Small & Medium-Sized Exporting Companies: Statistical Overview, 2006.

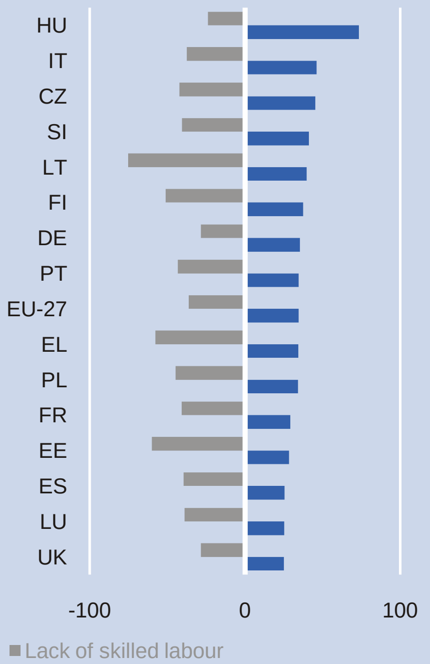
of skilled labour. Labour streams westwards have no small influence on the countries of origin, and can even lead to a medium-term slowing of economic growth. Employers in countries with a lack of skilled employees stated that they have a 15-20% job vacancy rate on average. German entrepreneurs have less reason to complain than other European nationals: only around 5% of the jobs remained unfilled in 2006. About half of the SMEs Europe-wide say that, altogether, they have no problems in their search for suitable staff. Since the unemployment numbers in all the member countries are higher than their natural rate of unemployment, it is, in the short run at least, not so much the number of workers available that will make the difference as their qualifications and distribution. If countries are unable to dissuade their skilled labour from migrating abroad, companies will face gaps in their headcount. On the other side of the coin, 5% of the surveyed EU firms also say they have registered a lack of unskilled labour. Furthermore, worries focus on the skill shortages exhibited by company founders and those in their inner circle, which is very much considered a more serious problem than the matter of SME funding.[42]

Employee qualifications are key factor of competition

Cost development

A further problem for SMEs is the cost of personnel. It holds at least for Germany that SMEs have a wage cost advantage over large companies. This is partly attributable to the fact that large companies tend to employ a greater share of highly skilled workers, and partly that the ancillary labour costs at large companies are higher. However, SME processes are at the same time considerably more labour-intensive, with personnel costs accounting for 23.3% of total costs, or nearly 10 percentage points more than at large companies. This puts the wage cost advantage back into a reasonable perspective. According to a Eurobarometer survey[43] particularly Hungarian entrepreneurs (over 70%) feel that expensive labour limits their corporate success. In Germany, 35% of those surveyed agreed with this statement. The wage level in Hungary is about one-third below the EU level, but it has risen strongly over the past few years. Since the increase in productivity has not kept pace with the rise in wages, personnel is relatively expensive. The gap between productivity and wage demands may continue to cause problems for all companies in future, and naturally not just SMEs.

Where do firms face recruiting problems and why



Source: Eurobarometer Survey 2006 **30**

The assumption that company location is decisive for a sufficient supply of qualified labour is not borne out in Germany. It is even to be seen that companies from small towns or rural areas have fewer problems in recruiting personnel than SMEs in urban agglomerations. In large cities, the competition for skilled labour is tougher: both from similarly sized peers and also from large companies. Additionally, the same survey determined that 62% of the SMEs approached do little strategic planning in the area of personnel marketing, but 90% regard the building of employer branding as the most promising weapon in the war for talent. SMEs have to struggle at regular intervals to overcome their reputation of being "wallflowers".

[42] SUERF Conference 2008, Von Derwall (ING).
[43] Eurobarometer survey of the European Commission 2006/2007.

Some of them may be able to shake off this reputation or enhance it, however, thanks to their status as hidden champions or thanks to growth opportunities in the sector.[44] The degree to which SMEs are innovative and operate internationally is partly a factor in determining how attractive they are for (highly) skilled labour.

Conclusion

SMEs play a key role for economic and employment growth in Germany and in most of the countries under review. This has to be borne in mind in shaping the regulatory framework as well as when – in view of the economic and financial crisis – attention focuses on "bailout packages" for large companies that are more in the public eye.

Katharina Hohmann

[44] Supply or demand? According to a Compamedia survey among German job applicants, about 35% think that large employers offer the ideal labour environment. 50% feel that SMEs offer the best environment, 14% are self-employed or work in the liberal professions. If these figures are set in relation to the job situation, an interesting correlation emerges: the conditions of labour demand match those of labour distribution. So the question is: does the supply of jobs determine demand or vice versa?

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