

# KfW SME Panel 2013

October 2013

## Solid overall impression, despite sand in the works

Authors:

Dr Michael Schwartz, phone +49 (0) 69 7431-8695, research@KfW.de

Marlene Braun

The SME sector has not been able to escape this current phase of weak economic activity. Companies are still resilient, but the first clouds are gathering on the horizon, as demonstrated by the *KfW SME Panel 2013*.

**Performance:** Employment and turnover are up at small and medium-sized enterprises (SMEs). Turnover growth is slowing, however, and this has implications for profitability. Return on sales and equity ratios are stable on the whole, but these figures are falling sharply for small enterprises, making them more vulnerable to crises.

**Financing:** Access to loans is historically good, and the gaps in credit supply are low. Despite this, companies are reluctant to borrow. Bank loans are losing some of their importance, caused particularly by the conservative approach of large SMEs. Companies are still in a very good position to finance themselves with equity.

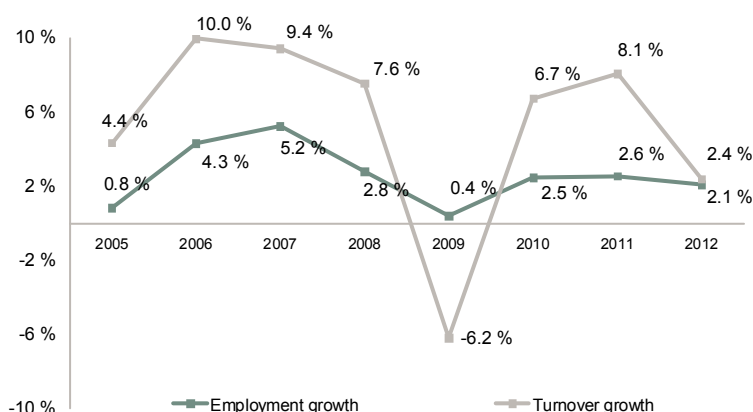
**Investments:** Investments are not (yet) benefiting from unrestricted and favourable access to loans: the volume of investments and willingness to invest are dropping, especially with smaller companies. New investments are being hindered by the great uncertainty, which has implications for the corporate substance in the long run.

**Outlook 2014:** SMEs do not foresee any improvement in their situation. Access to loans is still unrestricted, but the reluctance to invest is only gradually being redressed, if at all. This is subject to a growing economy and a reduction in uncertainty, especially in the eurozone.

### Turnover reflects the crisis: growth down 70 percent

Turnover growth in 2012 was "just"

Figure 1: Annual growth rates of employment and turnover



Note: Extrapolated with the number of employees. Extrapolations include other industries. Missing information about the number of employees was imputed.

Source: KfW SME Panel 2006–2013.

2.4%. While positive, this is approximately 70% lower than in the previous year (Figure 1). A rather subdued trend in SME development in the medium term was signalled in the previous year, and this prediction seems to have come true. One possible cause is the sharp increase in the pressure on prices triggered by more intense competition – nine out of ten SMEs believe they are now exposed to fiercer competition.<sup>1</sup>

Falling rates of turnover growth are cropping up in (almost) every size class and sector (cf. detailed documentation in the *Tables for KfW SME Panel 2013*).<sup>2</sup> Larger and older companies are particularly severely affected. Given their strong focus on exports they are more exposed to the recession in many sales markets around Europe, especially Southern Europe.

What is particularly worrying is the trend in R&D-intensive manufacturing<sup>3</sup> (turnover growth falling from 12.3 to 3.2%) and in other manufacturing (from 12.6 to

1.7%). It is these companies in particular that are so important for Germany's competitiveness.<sup>4</sup> The latter have also come under pressure from the strong competition of foreign rivals, which has increased sharply in recent times.

### "SME job engine" still going, but sputtering slightly

The growth rate for full-time equivalent employees<sup>5</sup> totalled 2.1% in 2012 (previous year: 2.6%) (Figure 1). All segments made a contribution towards this growth, and measured against the comparatively severe setback in turnover this increase is rather impressive.

However, for the first time in six years the number of people employed by SMEs is falling slightly. In 2012, SMEs employed a total of 28.1 million people (-87,000 or -0.3% compared to 2011<sup>6</sup>). This means that the increase of roughly 500,000 people in the active working population throughout the economy is due solely to large businesses and the public sector. In spite of modest de-

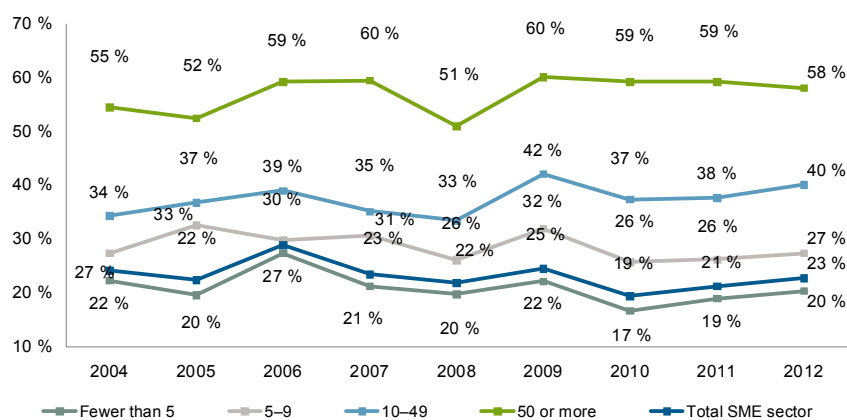
clines, small and medium-sized enterprises still employ 67 % of the workforce in Germany.<sup>7</sup>

Thus, small and medium-sized enterprises were not able to escape the turbulent year of 2012 completely unscathed. This was primarily absorbed in 2012 by a reduction in numbers of part-time workers (-15%). Yet since this was accompanied by simultaneous growth in numbers of full-time employees (+2%) as well as trainees (+6%), the number of full-time equivalents overall has continued to rise to its present level of 23.9 million. This means the reduction in SME employment is not to the detriment of those in full-time employment. On the contrary: flexible working arrangements are on the decline, as shown by similar studies.<sup>8</sup> What is more, SMEs now account for 86 % of all trainees as large companies increasingly tend to shy away from this option. This commitment by SMEs to professional training constitutes a guarantee for the dual education system, which serves as a showcase for the world.

In spite of sand in the works, German SMEs so far have managed to survive the crisis relatively unscathed in comparison to other large countries around Europe. The variety of company sizes, a balanced industry structure, a strong industrial base and a strong focus on services as well as a comparatively high willingness to innovate are the reasons for this resilience. This must be sustained.<sup>9</sup>

**Figure 2: Share of companies active abroad**

Size classes by full-time equivalent employees



Note: Extrapolated with the number of companies.

Source: KfW SME Panel 2006–2013.

**Internationalisation increasing: downward trend seems to be stopped**

In 2012, roughly 743,000 SMEs were active on foreign markets (22.8%, compared to 21.3% in 2011 – Figure 2). As a result, the share of SMEs generating turnover abroad has risen for the second year in a row. As always, larger SMEs (with 50 or more employees) have a more international set-up, with approximately 58% of these companies generating turnover in foreign markets.

The growth of smaller SMEs with fewer than five employees is remarkable. Both the share of companies active abroad (+1.4 percentage points) and the share of foreign turnover in total turnover (+7.2 percentage points) are rising.

SMEs active abroad generate around 29% of their total turnover internation-

ally, which is comparable with the previous year. After the record year of 2011, the foreign turnover of SMEs dropped by roughly 2% in 2012, and currently stands at EUR 584 billion (2010: EUR 537 billion). Given the weak economy in the eurozone (Western Europe is and will remain the most important target region for SME exports and direct investments by far) a much sharper decline would not have come as a surprise.

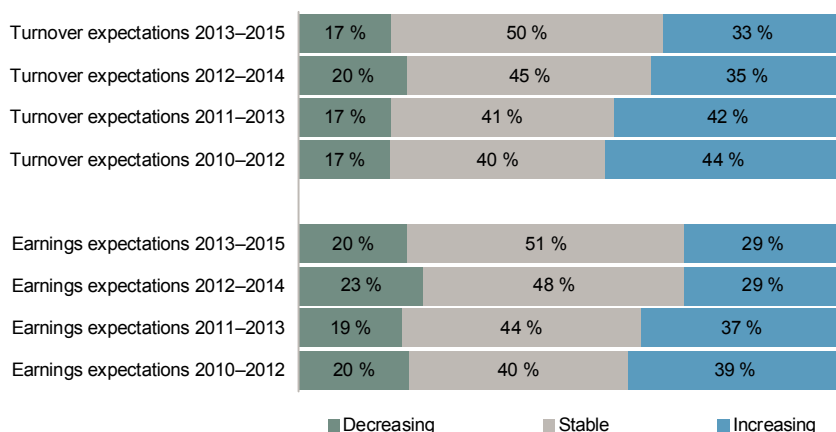
A segment comparison throws up some clear differences: the moderate minus figure overall can be attributed to the larger SMEs (with at least 50 employees, where volume is down by 12%), which are more international and therefore more affected by the crisis, while smaller SMEs (fewer than five employees, where volume is up by 63%) have produced some significant growth.

The current trend can be taken as a sign of the closing gap in foreign activity between large and small SMEs. This should be welcomed since international activity is a crucial factor for competitiveness, but SMEs still lag behind in this respect by international comparison. If economic activity picks up in the eurozone we can expect to see continued growth in international activity.

**Business expectations stable at low level until 2015**

Small and medium-sized companies barely expect to see any improvement in their current turnover and earnings in the next three years. In comparison to estimates from the previous year, SME ex-

**Figure 3: Turnover and earnings expectations**



Note: Extrapolated with the number of companies.

Source: KfW SME Panel 2010–2013.

pectations for the years 2013–2015 are at similarly low levels (Figure 3). With both indicators, the share of positive expectations exceeds that of negative expectations, by 16 percentage points for turnover (+1 compared to the previous year) and 9 percentage points for earnings (+3 compared to the previous year).

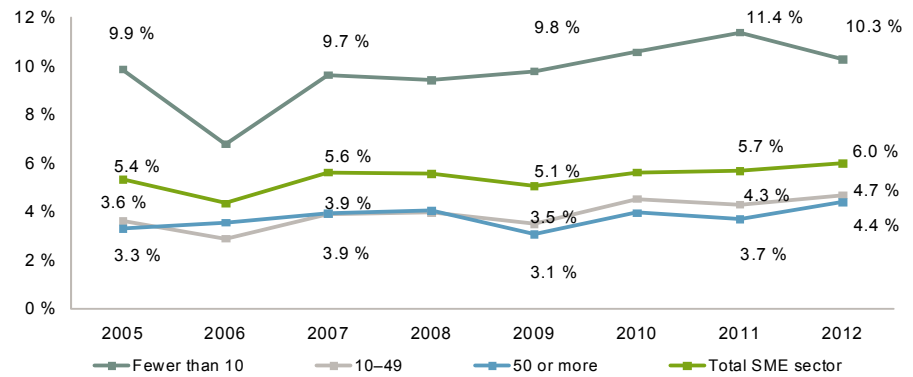
"Business expectations" as a consolidated indicator of turnover and earnings expectations<sup>10</sup> are also practically unchanged. The balance of optimistic and pessimistic expectations stood at +14 percentage points in 2012, after +12 percentage points in 2011.

Taking a look at the segments, established SMEs that have been around for more than 20 years (-4 percentage points on balance) and construction companies (-12) are almost traditionally pessimistic by comparison. The expectations of young companies on the market for fewer than five years (+49), larger SMEs with 50 or more employees (+33) and SMEs engaged in R&D-intensive manufacturing (+39) are decidedly optimistic. Against a backdrop of lower turnover in this segment in particular – and given its relevance for the entire SME sector – the outlook is extremely positive. The structural pattern of a more positive forward-looking attitude is also evident at companies which are more active in business (innovators, exporters, investors).

Companies in all sectors offer a more

**Figure 4: Returns on sales of SMEs**

Size classes by full-time equivalent employees



Note: Extrapolated with the number of employees. Mean values weighted with revenues.

Source: KfW SME Panel 2006–2013.

positive view (sometimes markedly so) of their own development in comparison to the assessment of their industry. 25% of all SMEs are more upbeat about their own progress – especially SMEs working in both manufacturing segments. By contrast, 12% of SMEs have more pessimistic business expectations about their own company in comparison to the overall sector.

**Return on sales: strong overall impression – details reveal sluggish development**

Returns on sales at small and medium-sized enterprises<sup>11</sup> remain relatively stable (Figure 4). The average returns on sales at SMEs rose by 0.3 percentage points to 6% compared to 2011. This is the highest figure since the KfW SME Panel survey started. As an indicator of

SME creditworthiness, return on sales plays a crucial role in gaining access to investment loans.

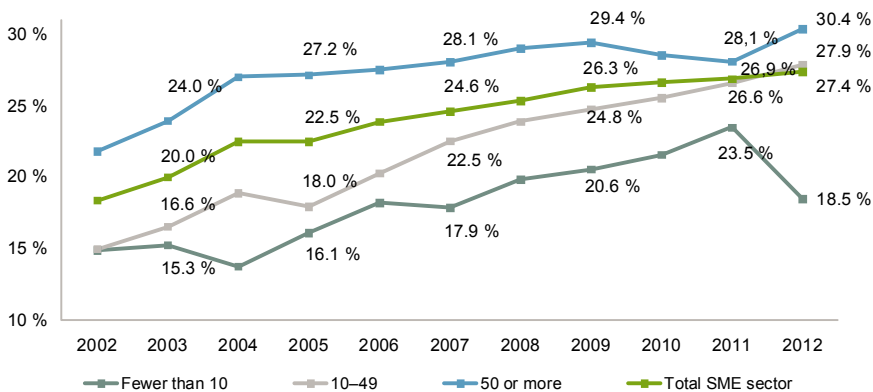
The encouraging overall impression is reinforced by two further developments. On the one hand there is the continuing decline in the proportion of loss-making SMEs – from 12% in 2011 to 11% in 2012. Back in 2009 this figure amounted to 16%. On the other hand, the proportion of companies with high returns of more than ten percent rose to 56% as well (2011: 54%, 2010: 53%). This outlines a clear-cut trend with both indicators over the past few years: a large number of SMEs are operating profitably.

By contrast, small SMEs (with less than 10 employees) cannot benefit – the lull in economic activity is reflected in a decline in return on sales by 1.1 percentage points to 10.3% (2011: 11.4%). Small companies are often active on narrow markets with too few products / services – the opportunities to compensate for falls in demand are limited in their markets. Larger SMEs, meanwhile, have been able to record higher returns on sales.

The relatively sharp declines in turnover growth in the manufacturing sector also have implications for profits. Other manufacturing companies lost 0.1 percentage points (return on sales of 4.5% compared to 4.6% in 2011). SMEs in R&D-intensive manufacturing lost 0.7 percentage points in 2012 (return on sales of 5.0% compared to 5.7% in 2011).

**Figure 5: Equity ratios of SMEs**

Size classes by full-time equivalent employees



Note: Extrapolated with the number of employees. Mean values weighted with revenues.

Source: KfW SME Panel 2003–2013.

**Equity ratios of small SMEs contracting ...**

Declining returns on sales led to a fall in equity ratios at *small SMEs* for the first time in five years (Figure 5): the equity ratio<sup>12</sup> of companies with fewer than 10 employees dropped by 5 percentage points in 2012 from 23.5 to 18.5%. This is equivalent to a 21% contraction in the equity base.

For example, small SMEs also resort to own funds and reserves to finance *ongoing operations* when turnover declines. In other words, they survive using assets they have previously accumulated.

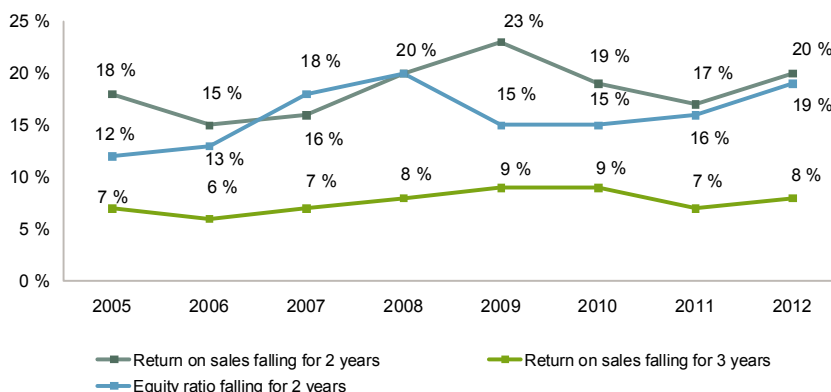
In contrast to this, the average equity ratio for the *entire SME sector* rose by 0.5 percentage points to 27.4% in comparison to 2011 (26.9%). As opposed to small SMEs, medium-sized businesses managed to increase their equity ratio considerably (+1.3 percentage points to 27.9%). Large SMEs also increased their equity capital resources massively in 2012 – for the first time since 2008 and to the highest level ever calculated (+2.3 percentage points to 30.4%).

**... what else is going on and what it could mean (in a worst-case scenario)**

Falling profits (and the resulting gradual erosion of equity funds previously accumulated) are only part of the explanation. There is another factor at play: the historically good conditions regarding access to loans.

Small companies feel less pressure overall on their equity positions and less

**Figure 6: SMEs with risk potential**



Source: KfW SME Panel 2006–2013.

need to use them to signal a good credit rating. Unrestricted access to credit is reducing the incentive to lower borrowing costs by stocking up on equity capital, which is also demonstrated by the share of bank loans in investments (Figure 7).

The lower incentives at present to accumulate equity capital are also highlighted by the proportion of SMEs with negative equity ratios. Looking at small and medium-sized enterprises as a whole, the sideward movement in previous years (with readings of 6–9%) was followed by a doubling in 2012 to 12%. Furthermore, the share of SMEs with relatively low equity ratios of less than ten percent rose (from 30% in 2011 to 36% in 2012). This development for the whole SME sector is triggered by the development of small SMEs, for whom the proportion jumped from 26.5% in 2011 to its current level of 39.1%.

While it is understandable that there is

no real reason for small SMEs to build up equity capital just now, this approach does have its risks. It will not be as easy to make greater use of own funds to compensate in future for tighter restrictions regarding the disbursement of investment loans.

Should economic activity remain weak, this will exert more pressure on profits too. This in turn generates problems: access to credit will become more difficult, borrowings will suffer and investments will be put off. It remains to be seen just how much German SMEs would then continue to be "unaffected by the crisis". This should not be forgotten.

**To what extent are German SMEs actually at risk?**

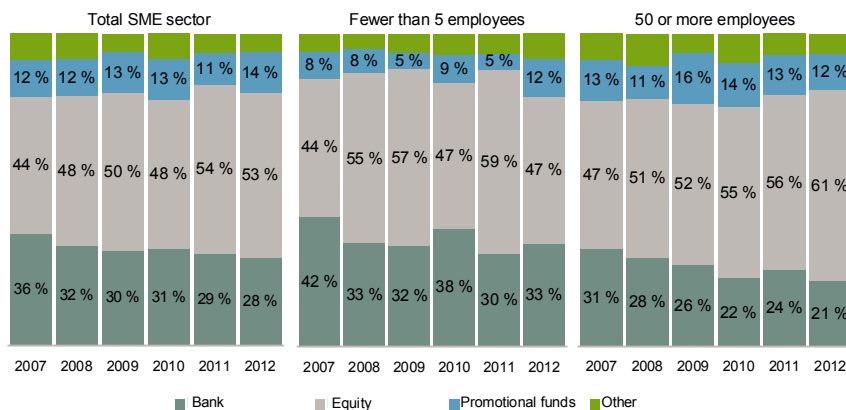
Contracting equity bases and slowing returns on sales can be indications of a crisis if they prevail for a lengthy period.<sup>13</sup> If there is no improvement in the mid or even long term, consequences affecting competitiveness and ultimately the stability of a company are almost inevitable.

The KfW SME Panel offers a method to conduct a general analysis of risk potential.<sup>14</sup> This analysis demonstrates that the risk potential in connection with SMEs rose marginally in 2012 (Figure 6).

Roughly one in every five SMEs recorded contracting returns on sales two times in a row (20%) and/or falling equity ratios two times in a row (19%) between 2010 and 2012. Regression analyses suggest that this is particularly related to larger SMEs (with ten or more employees) in the services sector.

**Figure 7: Investment financing among SMEs**

Funding sources by full-time equivalent employees (share of investment volume in percentage terms)



Note: Extrapolated with the investment volume in SMEs with the number of employees. Others include venture capital and mezzanine financing.

Source: KfW SME Panel 2008–2013.



While the "risk potential" is still below the peak calculated for the crisis years of 2008/2009, when the equity indicator totalled 20% (2008) and the return on sales indicator came in at 23% (2009), a modest upwards trend can be identified at present, which is likely to prevail in the medium term as well if economic activity remains weak.

From a longer-term perspective (expanding the analysis period to three years) the risk potential does not rise. The proportion of SMEs whose returns on sales fell for the *third time in a row* in 2012 is currently 8% (long-term average for three-year periods between 2004 and 2012: 7%). Continuous monitoring is required in any case to recognise and counter warning signals early with a view to thwarting crises.<sup>15</sup>

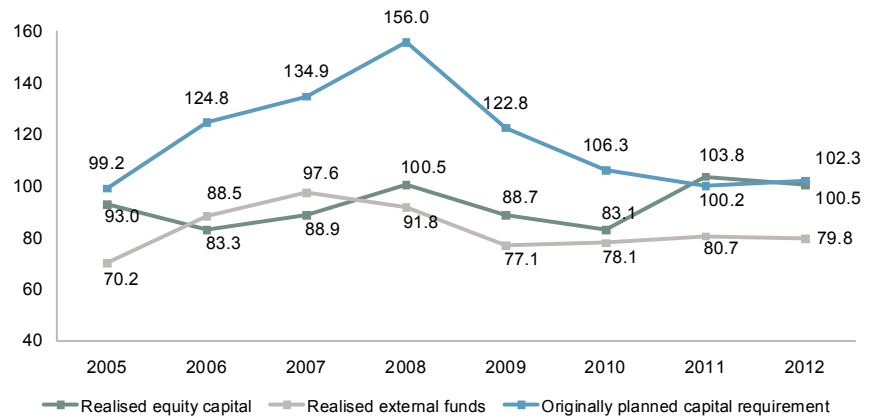
**Demand for loans stable – equity financing capacity still high**

The demand of SMEs for credit stabilised in 2012 – bucking the trend for the economy as a whole (Figure 8). The investment loan market for small and medium-sized enterprises is not contracting any further. The original demand for loans to finance investments amounted to EUR 102 billion in 2012 (after EUR 100 billion in 2011). In the current year, 2013, however, there is no upwards trend (yet) in corporate borrowings.<sup>16</sup>

Own funds remain the most important source of investment financing (Figure 7). 53% of SME investments or EUR 100 billion were financed in 2012 using own funds (2011: 54% or EUR 104 billion). This means SMEs still have a high equity financing capacity. Promotional funding was used to finance 14% of investments. Other sources (such as mezzanine financing or venture capital) account for 5%.

The proportion of bank loans as a percentage of total investments is falling slightly again by annual comparison – to 28% or EUR 54 billion (Figure 7). The larger SMEs reduced their share of bank loans in 2012 (now down by almost 10 percentage points since 2007) and raised their share of financing with own funds. Small SMEs, by contrast, are increasing their proportion of bank loans slightly and cutting back on own funds.

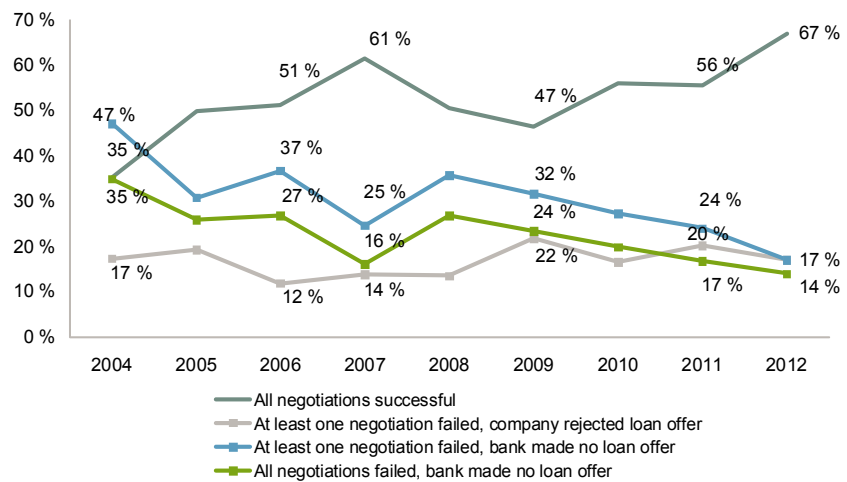
**Figure 8: Realised financing volume and originally planned credit requirements in EUR billion**



Note: Volume extrapolated with the number of employees. Extrapolations include other sectors.

Source: KfW SME Panel 2006-2013

**Figure 9: Outcome of loan negotiations**

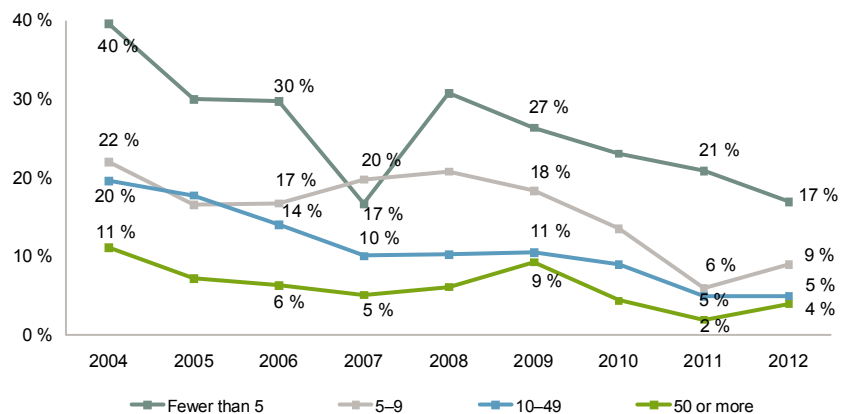


Note: Extrapolated with the number of companies.

Source: KfW SME Panel 2005-2013.

**Figure 10: Failed loan negotiations by size of company**

Size classes by full-time equivalent employees



Note: Extrapolated with the number of companies.

Source: KfW SME Panel 2005-2013.

This supports the above argument of very encouraging funding conditions coupled with falling pressure on equity ratios for small SMEs.

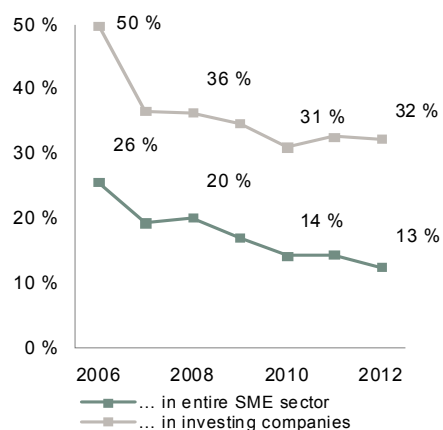
This must not be allowed to gloss over the importance of the traditional bank loan as by far the most significant external source of investment financing. Mention is often made of the growing relevance attributed to capital market financing for small and medium-sized enterprises (for example, SME bonds, bonded loans), but the extensive reporting obligations and high transaction costs (investor protection) only make direct access to the capital market economically viable for larger SMEs.

EUR 19 billion originally planned for investment financing in 2012 was no longer required in 2012. The impacts of altered financing and investment plans on plan revisions are thus at their lowest level since 2006, when the plan revision ratio totalled 18% – in 2012 it was 20% (2011: 28%). This reflects the excellent conditions with regard to accessing loans.

**Access to investment loans is (largely) unrestricted**

Never before have so many loan negotiations been successful – and so few failed at the same time – among small and medium-sized companies (Figure 9). The proportion of SMEs for whom all investment loan negotiations failed due to the lack of a bank loan offer fell once more, to an all-time low of 14% in 2012.

**Figure 12: Companies with loan negotiations**

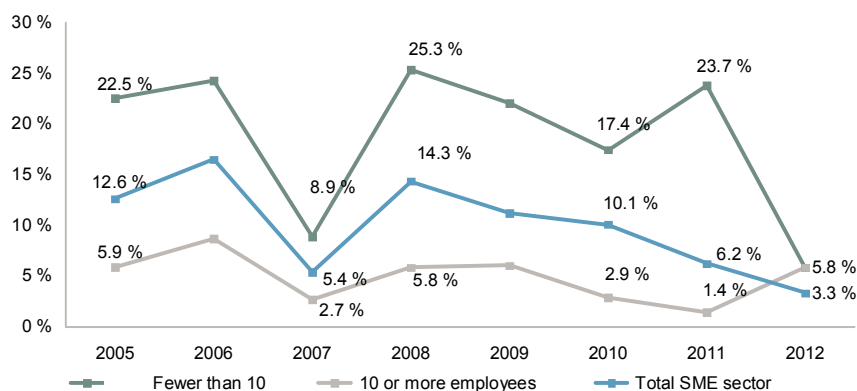


Note: Extrapolated with the number of SMEs.

Source: KfW SME Panel 2007–2013.

**Figure 11: Estimated share of credit demand that was not realised due to lack of a loan offer by the bank (in relation to actual credit demand)**

Size classes by full-time equivalent employees



Note: The shares underlying volumes are extrapolated with the number of employees. The original credit demand is reduced by plan revisions to calculate the shares. The resulting "actual credit demand" is set against the volume of external funds realised. The difference is understood as the "credit supply gap". For details on the calculation, see Reize (2011).

Source: KfW SME Panel 2006–2013.

Two thirds of all loan negotiations are successful (67% or +11 percentage points compared to 2011).

Access to loans is improving noticeably for small SMEs (fewer than five employees) in particular, with the loan rejection rate falling from 21 to 17% (see Figure 10). This may explain the growing proportion of bank loans among investments (for small SMEs – see Figure 7).

Nonetheless, the loan negotiations of these companies still fail around four times as often as for larger SMEs (with 50 or more employees: 4% in 2012).

Particularly with small SMEs it is often not worthwhile for lenders to bear the expense and cost of bridging the information gap given what are generally small loan volumes. Very few SMEs in Germany require loans in excess of EUR 1 million, accounting for just 5% of such companies.

**Credit supply gap at all-time low**

Almost the entire actual credit demand of small and medium-sized companies (original credit demand reduced based on plan revision) was satisfied in 2012 (Figure 11). The actual credit supply gap has fallen for four consecutive years and now stands at 3% or EUR 2.3 billion. Based on this figure, the availability of credit for SMEs has never been this

good. In the previous year the credit supply gap totalled 6% (EUR 4 billion), while in 2010 it was 10% (EUR 7 billion) and in 2009 it amounted to 11% (EUR 8 billion).

**But SMEs reluctant to enter into loan negotiations**

Access to investment financing is unrestricted and has recently been improving steadily. However, only one third of SME investors and approximately 13% of all SMEs apply for investment credits at banks and savings banks – a trend that is also declining (Figure 12). In 2012 almost 450,000 companies took part in loan negotiations.

**Ability to invest excellent – small firms catching up**

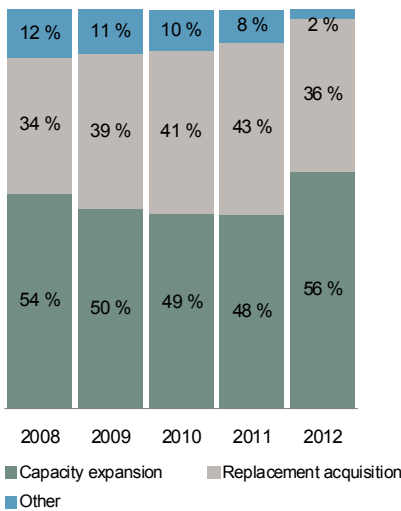
The impact of failed loan negotiations on investment activity is low. Strong performances in the past enabled SMEs to strengthen their equity bases, thereby reducing their dependency. The ability to invest is high, and rose further in 2012.

If loan negotiations fail due to the absence of a bank offer, companies invest 45% of the original investment sum (2011: 44%). Accordingly, "only" 55% of the planned investment volume is not invested because of rejection from the bank (EUR 4.8 billion or 2.5% of the entire SME investment volume in 2012). Small SMEs find it even more difficult to identify alternative financing after loan

negotiations fail. In this case they invest 40 % of the originally planned sum (2011: 33 %). For large SMEs the corresponding figure is 51 % (2011: 71 %).

Almost the entire investment sum is invested if loan negotiations are successful (93 %). What is remarkable is the growth in the share of realised investments by 30 percentage points if companies reject the bank's offer (from 50 % in 2011 to 80 % in 2012). This is largely thanks to smaller companies with fewer than 10 employees, which raised their share in 2012 from 37 to 71 %.

**Figure 14: Types of investment**



Note: Extrapolated with the investment volume in SMEs with the number of employees. Others include innovation, streamlining, renovation, restructuring and repairs.

Source: KfW SME Panel 2009–2013.

**Good access to loans barely stimulates investment activity**

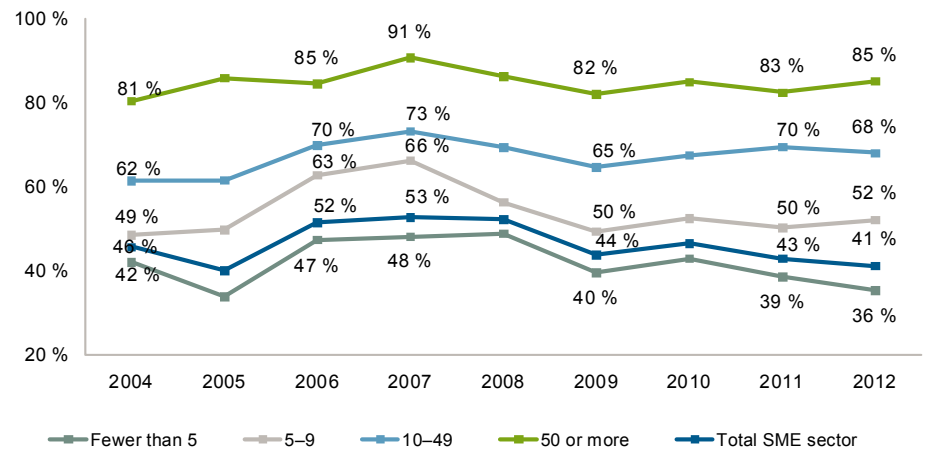
Uncertainty surrounding the future of the euro crisis, the recession in the eurozone and sluggish global growth are having an effect. The mostly problem-free access to loans and looser lending guidelines are barely having an impact. SME investment activity was subdued in 2012.

The short-term recovery in investment activity from the previous year was followed by a modest decline. Investment spending overall dropped to EUR 191 billion, which corresponds to a fall of EUR 4 billion or 2.4 % compared to 2011.

Investment spending in new facilities and buildings (gross fixed capital formation) contracted somewhat faster, falling by

**Figure 13: Share of SMEs investing**

Size classes by full-time equivalent employees



Source: KfW SME Panel 2005–2013.

EUR 11 billion to EUR 145 billion (-7 %). By contrast, large companies were able to expand their investments by 5 % (to EUR 130 billion). According to KfW's Investment Barometer, total corporate investments in 2012 amounted to EUR 275 billion – 53 % of which was attributable to SMEs (-3 percentage points compared to 2011). The contribution of SMEs to gross fixed capital formation throughout the economy was 31 %.<sup>17</sup>

**Expansion investments pick up pace**

Declining investment volumes in new equipment and buildings essentially testify to the uncertain situation SMEs find themselves in. Instead of expanding capacities, companies are increasingly opting for replacement investments. Al-

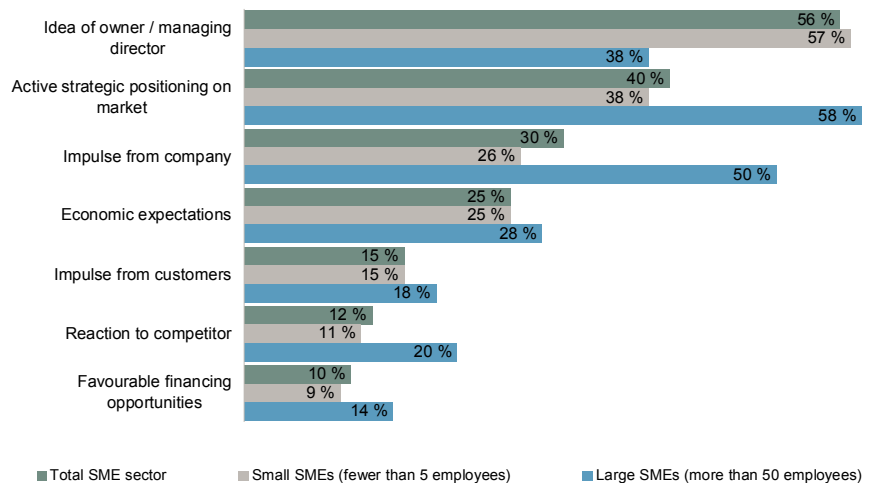
though this results in short-term savings and preserves capital (technology adjustments for instance), it can jeopardise competitiveness in the long run. Risky plans (for example investing in penetrating foreign markets) are rather being put off. This is illustrated by the five-year trend (Figure 14).

That said, there are current signs that SMEs are becoming more active with investments to expand capacities again: 56 % of investments were used for this purpose in 2012 – significantly more than in previous years. It remains to be seen whether this latest development will last.

**Readiness to invest: trend continues to fall**

In 2012 a total of 1.5 million SMEs car-

**Figure 15: Significant influence on investment decisions...**



Note: Extrapolated with the number of companies.

Source: KfW SME Panel 2013.

ried out investment projects. Once more, the number of investors fell (Figure 13). In a year-on-year comparison, the proportion of SME investors fell from 43 to 41% (2010: 47%). Since 2008 this means investment appetite has contracted by 11 percentage points.

An assessment of the segments paints a mixed picture. The strongest growth in investing SMEs can be found in R&D-intensive manufacturing (+3 percentage points to 65%) and with large SMEs that have 50 or more employees (+2 percentage points to 85%). By contrast, particularly younger companies (less than five years old: -5 percentage points to 46%) and small SMEs (fewer than five employees: -3 percentage points to 36%) are tending to invest less.

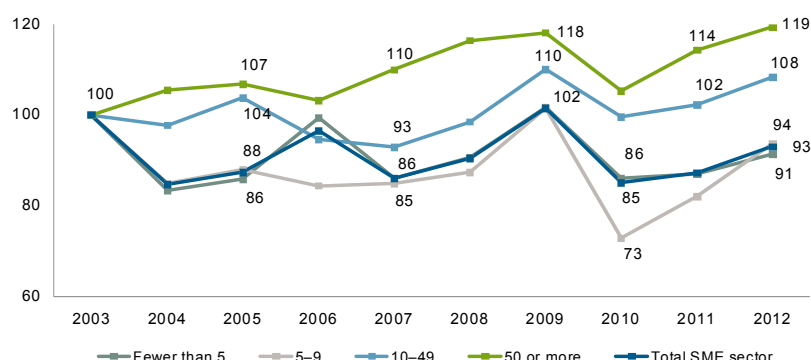
For structural reasons, willingness to invest increases with the size of company – as expected there is a certain difference in investor proportions between small and large SMEs. That said, the *investor gap* has peaked at roughly 49 percentage points (36 vs. 85%). Only in 2005 was the gap wider (52 percentage points; long-term average: 42 percentage points).

SME willingness to invest is generally linked closely to the company owner (or the management) (Figure 15). This applies even more so for smaller companies, where 57% stated this as the main source of investment decisions in 2012. With larger SMEs, incorporating investments within an overall strategic concept is the dominating factor – 58% of SMEs use investments to actively gain strategic market positions. Somewhat surprisingly, economic expectations are considered an investment driver for only one in every four SMEs.<sup>18</sup>

In light of the weak economic climate it is

**Figure 16: SME productivity**

Size classes by full-time equivalent employees



Note: Indexed figures (2003 = 100) of labour productivity (turnover per full-time equivalent employee). Missing turnover and employment data were imputed. Extrapolated with the number of employees.

Source: KfW SME Panel 2004–2013.

extremely unlikely that SMEs will change their current reluctant approach to investing. According to the KfW Investment Barometer, only a change of just below zero is realistic for 2013.<sup>19</sup> It is unlikely there will be any quick return to pre-crisis levels with regard to investment volumes and investors. This requires faster growth in the economy, especially in the eurozone. The shift in energy policy is producing additional incentives to invest.

**Productivity gap between small and large SMEs**

Productivity at SMEs<sup>20</sup> has fallen slightly since 2003. In comparison to the base year (2003 = 100 points), small and medium-sized enterprises totalled 93 index points in 2012. This corresponds to turnover of approximately EUR 121,000 per full-time equivalent employee. Compared to the previous year, SMEs raised their productivity by 6.6%.

This analysis – presented for the first time – clearly reflects a certain size correlation (Figure 16). While SMEs with 50 or more employees generated a figure of 119 in 2012, small SMEs with fewer than

five employees produced a figure of 91. The productivity gap between small and large SMEs<sup>21</sup> in 2012 totalled 37%. By comparison: in 2003, at the start of the observation period, the difference was 18%, only half as big. So from a long-term perspective the gap is growing – small companies are not keeping up the pace or closing the gap.

One strategy to close the productivity gap is the systematic search for and exploitation of ideas from abroad – as demonstrated by a study carried out by KfW in conjunction with the Creditreform.<sup>22</sup> If SMEs adopt an idea from abroad this results in significant gains in productivity in 87% of cases. Productivity at these companies increases by an average of 83%. Small SMEs with comparatively low initial productivity benefit in particular.

Increasing productivity is a key factor of success for SME competitiveness. For small companies especially it is all about finding ways to improve productivity.



The **KfW SME Panel** (KfW-Mittelstandspanel) has been conducted since 2003 as a recurring postal survey of small and medium-sized enterprises in Germany with an annual turnover of up to EUR 500 million.

With data based on up to 15,000 companies a year, the KfW SME Panel is the only representative survey in the German SME sector, making it the most important source of data on issues relevant to the SME sector. Due to the fact that it is representative for SMEs of all sizes and from all branches in Germany, the KfW SME Panel supports **projections for even the smallest companies with fewer than five employees**. 11,404 SMEs took part in the current wave.

Analyses of long-term structural developments in the SME sector are performed on the basis of the KfW SME Panel. The KfW SME Panel gives a **representative picture** of the current situation, and the needs and plans of SMEs in Germany. It focuses on annually recurring information on business performance, investment activity and financing structure. This tool is the only way of determining quantitative key figures for SMEs, such as investment spending, lending demand or equity ratios.

The population used for the KfW SME Panel comprises all SMEs in Germany. These include private-sector companies from all sectors of the economy with annual turnover of no more than EUR 500 million. The population does not include the public sector, banks or non-profit organisations. There are currently no official statistics providing adequate information on the number of SMEs or the number of people they employ. In order to determine the population of SMEs for 2012 and the population of employees in SMEs in 2012, the German Company Register (Unternehmensregister) and the official employment statistics (Erwerbstätigenrechnung) were used for the 2013 survey.

The KfW SME Panel sample is designed in such a way that it can generate representative, reliable data that is as precise as possible. The sample is split into four groups: type of promotion, branches, firm size as measured by the number of employees, region. In order to be able to draw conclusions as to the basic population based on the sample, the results of the survey are weighted/extrapolated. The four main group characteristics are used to determine the extrapolation factors. The extrapolation factors look at the distribution in the net sample (in line with the four group characteristics) in relation to their distribution in the population as a whole. Two extrapolation factors are determined in total: an unlinked factor for the extrapolation of qualitative parameters based on the number of SMEs in Germany, and a linked factor for the extrapolation factors of quantitative parameters based on the number of employees in SMEs in Germany.

The survey is conducted by the market research division of GfK SE on behalf of the KfW Group. Academic advice for the project was provided by the Centre for European Economic Research (ZEW) in Mannheim. The main survey for the 11th wave of the KfW SME Panel was conducted between 18 February 2013 and 21 June 2013.

**Structure of the SME sector in 2012**

The SME sector comprises all companies in Germany whose annual turnover does not exceed EUR 500 million. Based on this definition, there were 3.64 million SMEs in Germany in 2012. This means that the SME segment makes up 99.95% of all companies in Germany.

**SMEs are small ...**

The vast majority of SMEs in Germany are small (Figure 17). 86% of the companies (or just under 3.1 million) have annual turnover of less than EUR 1 million. Fewer than 0.5% (or just shy of 13,000) of SMEs generate annual turnover in excess of EUR 50 million.

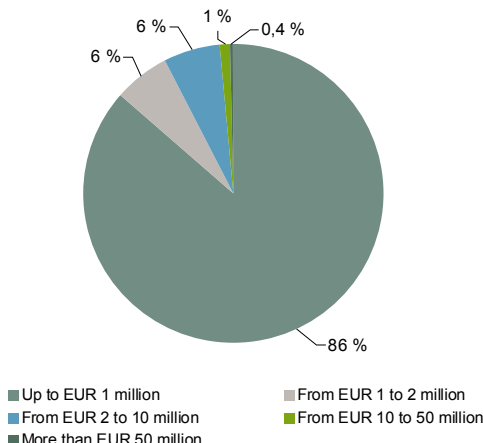
The small-scale structure of the SME segment is also reflected in the number of employees (Figure 18). 83% of SMEs have fewer than 5 employees (3.01 million). 1.8% of SMEs have a workforce of 50 or more. The small-scale structure of the SME segment has become more pronounced in recent years due to increasing tertiarisation and the fact that the number of companies being set up exceeds those going out of business.

**... and service-oriented**

The majority of SMEs are service companies (Figure 19). 2.72 million – or 75% of all SMEs – operate in service industries, 1.24 million of them as knowledge-intensive service providers<sup>23</sup>. 1.4% of all SMEs (around 51,000 companies) belong to the R&D-intensive manufacturing industry.

Roughly 2.97 million SMEs are based in federal states in western Germany (82%). 18% (or 669,000) are based in federal states in eastern Germany.

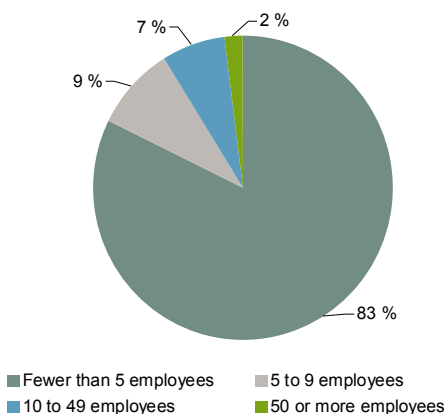
**Figure 17: SMEs according to annual turnover in 2012**



Note: Extrapolated with the number of SMEs.

Source: KfW SME Panel 2013.

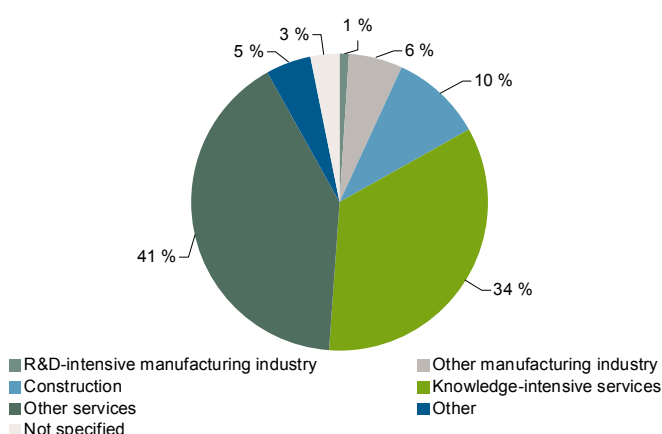
**Figure 18: SMEs according to number of employees in 2012**



Note: Extrapolated with the number of SMEs.

Source: KfW SME Panel 2013.

**Figure 19: Sector distribution among SMEs in 2012**



Note: Extrapolated with the number of SMEs.

Source: KfW SME Panel 2013.

- <sup>1</sup> Cf. Schwartz, M. (2013), Tough climate for German SMEs: competition increases, the three 'I's promise success, Focus on Economics No. 27, KfW Economic Research, Frankfurt am Main.
- <sup>2</sup> The tables for the KfW SME Panel can be downloaded here: <https://www.kfw.de/KfW-Konzern/KfW-Research/Economic-Research/Publikationen/KfW-Mittelstandspanel/Aktueller-Ergebnisbericht/>.
- <sup>3</sup> R&D-intensive manufacturing is classified as the sectors of manufacturing with an average research and development intensity (R&D intensity: ratio of R&D expenditure to turnover) of over 3.5%.
- <sup>4</sup> For more details on this: Tchouvakhina, M. and M. Schwartz (2013), Diversity is crucial: how the SME sector in Germany compares with others in Europe, Focus on Economics No. 24, KfW Economic Research, Frankfurt am Main.
- <sup>5</sup> The growth rate for the number of people in employment is calculated on the basis of *full-time equivalents* (FTE). In contrast to an approach that simply counts the number of people engaged in economic activity, this reflects the actual demand for labour. The number of FTEs is calculated by taking the number of full-time employees (including proprietors) and adding the number of part-time employees multiplied by a factor of 0.5. Trainees are not taken into account.
- <sup>6</sup> Following a revision in the calculation of the basic population of those employed at SMEs, the total number of those economically active in 2011 was subsequently changed to roughly 28.1 million people. Consequently, the originally assessed increase in those employed from 2010 to 2011 turned out to be lower.
- <sup>7</sup> Data on the number of people in work in the economy as a whole are taken from the employment accounts of the Federal Statistical Office (Erwerbstätigenrechnung).
- <sup>8</sup> For example, a study by Creditreform confirms that SMEs account for a rising share of full-time positions among total new jobs, while part-time employment is losing importance. Just like the KfW SME Panel 2013, the study also reveals that SMEs are increasingly reluctant to create new jobs. Cf. Creditreform (2013), SME Economic Position and Financing (available in German only), Spring 2013, Neuss.
- <sup>9</sup> Cf. Tchouvakhina, M. and M. Schwartz (2013), Diversity is crucial: how the SME sector in Germany compares with others in Europe, Focus on Economics No. 24, KfW Economic Research, Frankfurt am Main.
- <sup>10</sup> For more details on this cf. Reize, F. (2011): KfW SME Panel 2011. SMEs well-equipped against growing financing risks and weak economy (available in German only). KfW Group, Frankfurt am Main.
- <sup>11</sup> The return on sales is defined as the ratio of pre-tax profit to sales revenue. The average returns on sales weighted by turnover are reported in each case.
- <sup>12</sup> The equity ratio is defined as the ratio of equity to total assets. The average equity ratios weighted by total assets are reported in each case. For the purpose of the calculations, only companies required by law to submit financial statements have been included.
- <sup>13</sup> For more on identifying, preventing and overcoming crises, cf. Tchouvakhina, M. and P. Stöver (2013), How companies recognise, exploit and overcome crises, Focus on Economics No. 29, KfW Economic Research, Frankfurt am Main.
- <sup>14</sup> The data include all companies on which the required data were available in each year of the analysis period. Outliers were removed separately in each wave. The results are not representative because of the long analysis periods used when calculating the crisis indicators, i.e. including several waves of the KfW SME Panel. Longitudinal extrapolation factors would be necessary here, which are not available.
- <sup>15</sup> Cf. Tchouvakhina, M. and P. Stöver (2013), How companies recognise, exploit and overcome crises, Focus on Economics No. 29, KfW Economic Research, Frankfurt am Main.
- <sup>16</sup> Cf. Hornberg, C. (2013), KfW Credit Market Outlook June 2013. New lending business: new lending contracts again (available in German only), KfW Economic Research, Frankfurt am Main.
- <sup>17</sup> Corporate sector gross fixed capital formation comprises equipment investments plus construction investments (housing construction excluded) of the private sector. Corporate investments are measured by means of the KfW Investment Barometer. See Hornberg, C. (2013): KfW Investment Barometer Germany, February 2013. Corporate investments: Gradual recovery. KfW Economic Research, Frankfurt am Main.
- <sup>18</sup> It can be assumed that companies differ in their financing conduct and in their interaction with banks depending on which investment driver dominates. This is the subject of an ongoing detailed analysis by the KfW Group, and the results will be available in spring 2014.
- <sup>19</sup> Cf. Hornberg, C. (2013), KfW Investment Barometer Germany, February 2013. Corporate investment: Gradual recovery. KfW Economic Research, Frankfurt am Main.
- <sup>20</sup> Measured as indexed figures (2003 = 100) of labour productivity (turnover per full-time equivalent employee). Missing turnover and employment data were imputed. Adjusted and extrapolated data.
- <sup>21</sup> Measured as the difference relative to the figure for larger SMEs.
- <sup>22</sup> Cf. Brutscher, P. and M. Schwartz (2013), Learning to succeed: how SMEs benefit from the international exchange of ideas, Focus on Economics No. 20, KfW Economic Research, Frankfurt am Main.
- <sup>23</sup> Knowledge-intensive services comprise service industries with an above-average share of university graduates or with a strong focus on technology. These include, for example, architecture and engineering offices, law, tax and management consultancies, or real estate and housing services.

**Table: The SME sector at a glance – key figures**

	2006	2007	2008	2009	2010	2011	2012
<b>Investments</b>							
Investor share - total	52	53	52	44	47	43	41
Investor share < five FTE employees	47	48	49	40	43	39	36
Investor share ≥ 50 FTE employees	85	91	86	82	85	83	85
Investment volume - total (EUR billion)	193	204	210	176	177	195	191
Investment volume < five FTE employees (EUR billion)	63	59	57	43	55	48	50
Investment volume ≥ 50 FTE employees (EUR billion)	65	75	78	72	67	80	75
Volume of investment in new facilities and buildings (EUR billion)	134	147	165	139	143	156	145
<b>Investment financing</b>							
Originally planned credit requirements (EUR billion)	120	128	151	118	106	100	102
Realised borrowing volume - total (EUR billion)	88	98	92	77	78	81	80
Credit supply gap (EUR billion)	15	5	13	8	7	4	2
<b>Return on sales</b>							
Average return on sales	4.4	5.6	5.6	5.1	5.6	5.7	6.0
Average return on sales < 10 FTE employees	6.8	9.7	9.4	9.8	10.6	11.4	10.3
Average return on sales ≥ 50 FTE employees	3.6	3.9	4.1	3.1	4.0	3.7	4.4
Share of loss-making SMEs	22	18	15	16	13	12	11
<b>Equity capital base</b>							
Average equity ratio	23.9	24.6	25.4	26.3	26.6	26.9	27.4
Average equity ratio < 10 FTE employees	18.2	17.9	19.8	20.6	21.6	23.5	18.5
Average equity ratio ≥ 50 FTE employees	27.5	28.1	29.0	29.4	28.6	28.1	30.4
Share of SMEs with negative equity ratios	10	10	10	9	6	6	12
<b>Employment trend</b>							
Employment growth rate - total	-0.9	1.7	2.1	1.5	2.5	2.6	2.1
FTE growth rate < five FTE employees	4.4	5.0	3.1	2.5	2.5	3.2	1.2
<b>Turnover trend</b>							
Turnover growth rate - total	10.0	9.4	7.6	-6.2	6.7	8.1	2.4
Turnover growth rate < five FTE employees	9.2	11.7	10.0	-4.5	6.0	7.0	2.0