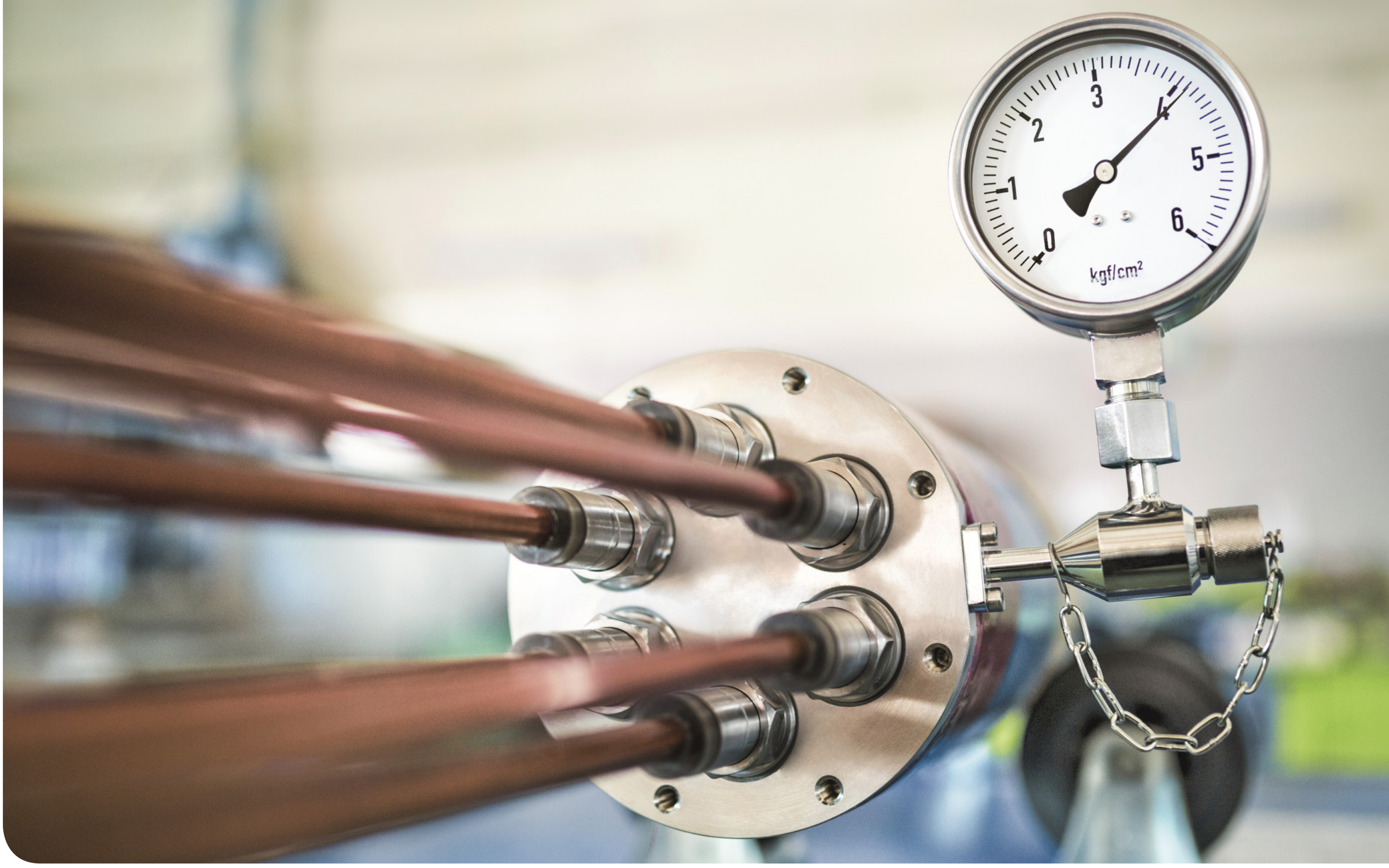

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KfW SME Panel 2020

Corona pandemic has dampened expectations for 2020 – SMEs entered the crisis from a strong position

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Coronavirus pandemic has dampened expectations for 2020 – SMEs entered the crisis from a strong position

Brief overview of the current coronavirus situation:
The COVID-19 pandemic reached Germany at the beginning of March, leading to a historic collapse in economic output that was unprecedented in the speed of its spread, its depth and global proportions. The subsequent gradual easing of restrictions paved the way for a vigorous recovery. But small and medium-sized enterprises (SMEs) in Germany remain deeply affected and the further course of the crisis is uncertain.

SMEs therefore have subdued expectations for the year 2020. This is one of the findings of the third representative supplementary survey conducted by KfW Research in early September 2020. More than one in two SMEs – some 2 million enterprises – thus expect turnovers to be down this financial year. The expected declines add up to around 12% of the previous year's turnovers, or roughly EUR 545 billion.

The high losses in turnover also weigh on companies' liquidity, even if the situation has eased since spring. Nonetheless, many enterprises are likely to be under high pressure to reduce costs. This also has consequences for employment, with 16% of SMEs planning to reduce their workforce in 2020. Overall, the workforce in the SME sector might fall by around 3.3%. That would result in a loss of nearly 1.1 million jobs.

Many small and medium-sized enterprises have responded to the coronavirus crisis by stepping up innovation. Nevertheless, high uncertainty has dampened sentiment in the SME sector. More SMEs have abandoned, deferred or reduced planned investment projects this financial year than ever before.

The positive trend in equity ratios of the past years is also not likely to continue in 2020, given businesses' losses and increased borrowing. Still, the risk of overindebtedness across the overall SME sector is manageable because SMEs were in a healthy position before the crisis struck.

Brief overview of the development in 2019:
The high growth rates of the past years have enabled SMEs to become much more resilient to crises. Employment, turnovers and capital expenditure rose again in 2019 as well. But the momentum has already slowed compared with previous years. The reason is that Germany's aggregate economic growth lost much of its drive already before the coronavirus crisis.

The KfW SME Panel 2020 has revealed specifically that employment in the SME sector continued to increase in 2019 – if at slower rates than in previous years. Yet in spite of this, SMEs were able to continue growing in importance as employers. Strong domestic demand also enabled SME turnovers to grow. But languishing foreign trade has hit manufacturing particularly hard. Turnovers in this segment have not grown at such a slow rate since the financial crisis.

Nevertheless, SMEs were able to increase their profitability and build up their financial buffers once again in 2019 as well, with equity ratios growing to a new record level. SMEs were therefore broadly in a comfortable financial position before the outbreak of the coronavirus crisis.

The investment upturn also continued. New investment grew for the sixth consecutive year but the number of SMEs undertaking investments dropped nevertheless. This shows that those that invested employed significantly higher volumes. Once again, the services sector was the main driver. Manufacturing, on the other hand, showed much greater restraint.

SMEs borrowed more to finance their investments in 2019 than in the previous year. Borrowing volumes were higher than ever before. Short-term loans were particularly sought-after. But the higher volume was spread out across significantly fewer borrowers. The ticket size increased accordingly. SMEs benefited from mostly easy access to credit. They also used more resources of their own again. At the same time, fewer promotional funds were used than ever before.

Part 1: Coronavirus update – despite the summer recovery, expectations for 2020 as a whole remain subdued

COVID-19 pandemic sent the economy into a state of shock

After what was largely a brilliant decade for German SMEs, during which businesses achieved strong employment and turnover growth (see Part 2), the shock came in the spring of 2020. At the beginning of March, the COVID-19 pandemic reached Germany, leading to a historic collapse in economic output that was unprecedented in its speed, depth and breadth.

In order to minimise the further spread of the virus and prevent it from overwhelming the healthcare systems, containment measures were implemented in the course of the month. These brought public life as well as many business activities to a standstill. It is estimated that Germany's economic output was roughly 20% below the pre-crisis level during the lockdown that was in place from 23 March to 19 April.[1]

Business closures primarily affected stationary retailers, the hospitality and the catering industry but also numerous personal services. Part of the manufacturing sector stood still as a result of supply chain disruptions. The consequence was a historic drop in gross domestic product (GDP) by 9.7% in the second quarter, the low point of the crisis.[2]

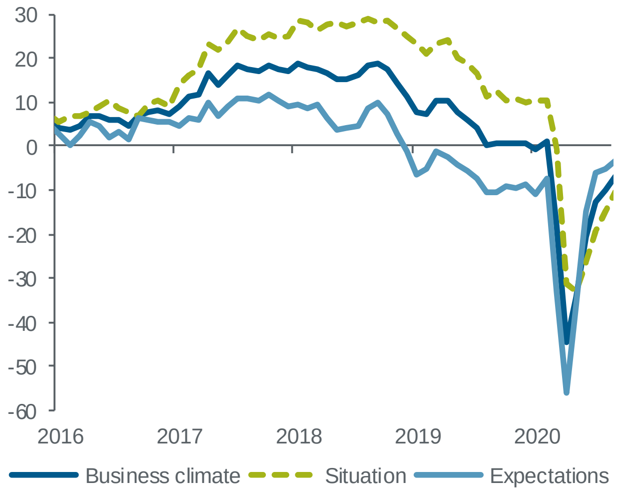
Things have started to improve since then. After the sharp downturn in the spring, a vigorous recovery began that lasted throughout the summer as restrictions were gradually eased. The fiscal-policy stabilisation measures supported this trend. A sharp rise in GDP is expected again for the third quarter. But the momentum of the recovery has slowed and the return to the pre-crisis level is likely to be a rather laborious process. Moreover, the further progression of the crisis in autumn and winter remains uncertain. Overall, KfW Research expects average annual GDP to contract by around 6% in 2020.[3]

Sentiment among SMEs is brightening but uncertainty remains high

The coronavirus crisis has also hit SMEs hard. SME business confidence sustained a historic slump across all industries in March and April (Figure 1)[4] At -45.4 balance points, the mood was even more depressed than at the low point during the financial crisis in 2009.[5] During spring, business expectations in particular were more pessimistic than ever before (-57.6 balance points). But as quickly as it dropped, sentiment among SMEs shot upward again as restrictions began to ease. Already in May, sentiment recovered a good one fifth of the declines suffered in March and April.[6] SME business confidence brightened further over the summer, reaching -6.8 balance points in September, but the momentum has weakened considerably. It is still quite a way off the pre-crisis level of February (0.9 balance points).[7]

Figure 1: SME business climate

In balance points



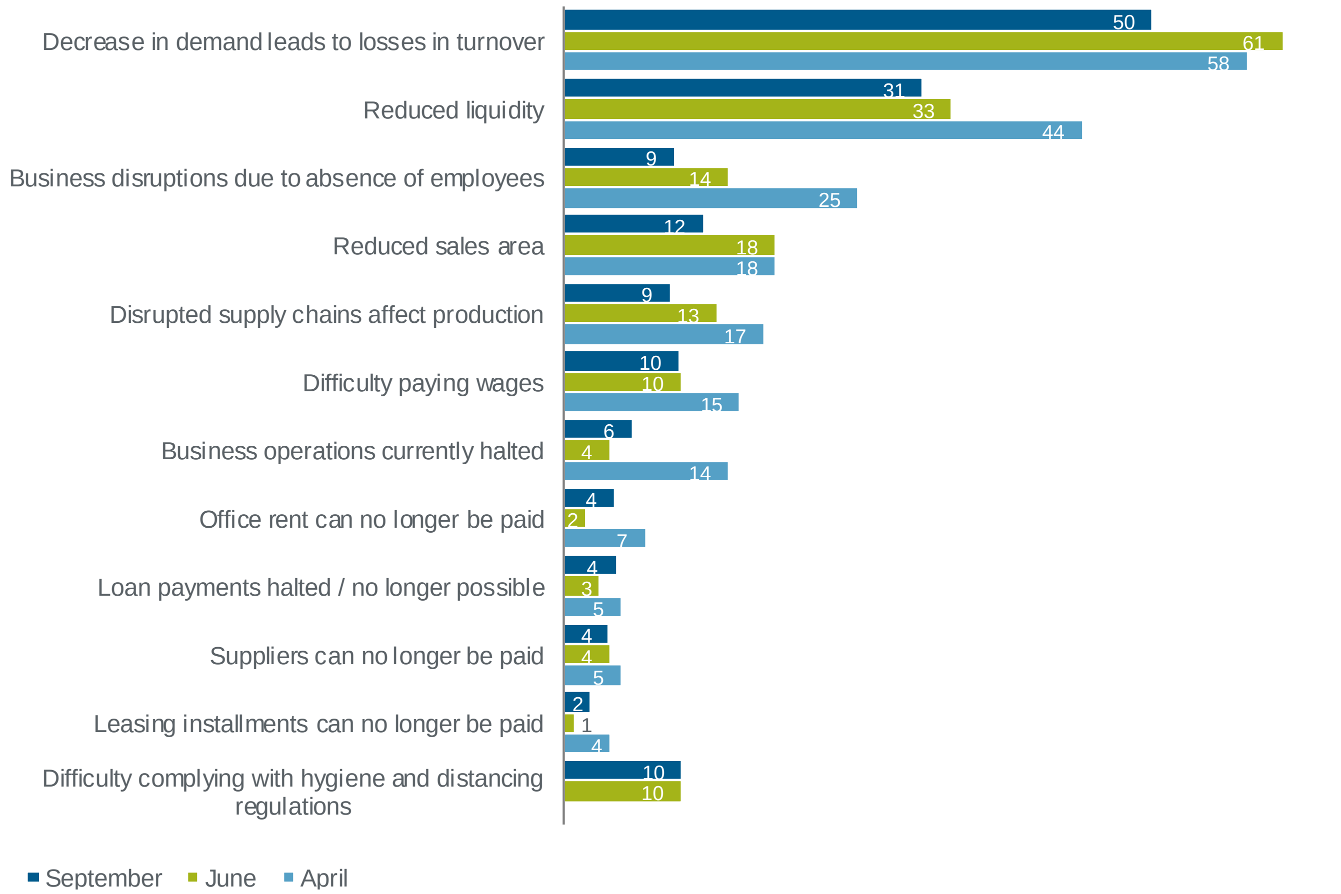
Sources: KfW-ifo SME Barometer, KfW Research, ifo Institute

Impact of the coronavirus is slowly weakening

The substantial economic catching-up process is also reflected in a weakening effect of the coronavirus on small and medium-sized enterprises (Figure 2). This was revealed by the third supplementary survey conducted as part of the KfW SME Panel in early September 2020. In April, the low point of the crisis thus far, some 80% of SMEs were struggling with one or more effects of the pandemic.[8] That share dropped to 72% by June,[9] and in early September it was down to 63%. But despite the noticeable decline, a large proportion of SMEs in Germany – some 2.4 million companies – remain affected by the coronavirus crisis.

Figure 2: Current impact of the coronavirus crisis on SMEs (as at 14 September 2020)

Percentage of enterprises



Sources: First supplementary coronavirus survey to the KfW SME Panel 2020 (2–14 April 2020) second supplementary coronavirus survey to the KfW SME Panel 2020 (2–12 June 2020) and third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020)

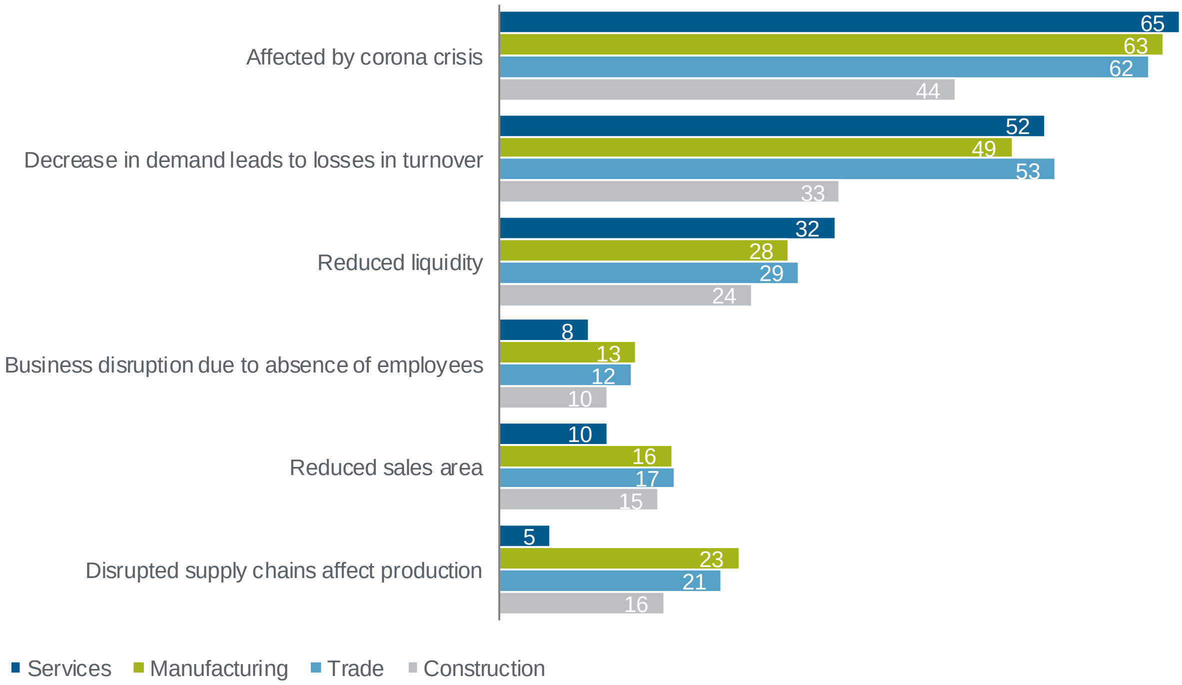
Of all the possible effects, depressed demand is the main problem businesses face, as was already the case in April and June. At the beginning of September, some 1.9 million SMEs were still grappling with losses in turnover from the coronavirus crisis. In any case, that was 400,000 fewer SMEs since June. A large number of SMEs also deplore not just losses in turnover but a depletion of liquidity in particular. Still, the share of affected SMEs has fallen since spring and is now 31%, less than in June (33%) and clearly below the level of April (44%).

Another positive is that disruptions to business operations as a result of employee absences are now occurring significantly less often than in spring (-5 percentage points to 9%). The return of Germany's child daycare centres and schools to normal operation is likely to have played a crucial role in enabling this. Problems in sales and procurement are also on the decline. Only 12% of SMEs have now reported a reduced sales region (-6 percentage points compared with June). Production problems as a result of disrupted supply chains have been reported by a mere 9% of SMEs (-4 percentage points).

However, roughly one in ten businesses are still facing challenges in implementing the hygiene directives and distancing regulations that are in place. Around 6% of SMEs had to close down completely – slightly more than in June (+2 PP) but still far fewer than during the lockdown in April (-9 PP). Possible difficulties in paying leasing instalments (+1 PP to 2%), suppliers (+/-0 PP to 4%), loan instalments (+1 PP to 4%) office rents (+2 PP to 4%) and salaries (+/-0 PP to 10%) still continue to play a rather less significant role within the range of coronavirus impacts but the share of businesses thus affected has risen in some respects since June. The declines in turnover of the past months appear to be putting growing pressure on some SMEs' solvency.

Figure 3: Coronavirus impact by sector

Percentage of enterprises



Source: Third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020)

The coronavirus crisis has had very different impacts on the sectors

One of the things that sets the coronavirus crisis apart from many past crises is the breadth of its impact. No sector has remained unaffected (Figure 3). Only construction firms reported marginally fewer problems from the pandemic compared with the remaining SMEs (44 vs. 63% across the SME sector as a whole). At segment level, however, it is also evident that each sector has different problems.

Manufacturing SMEs reported disruptions to the supply chain significantly more often than service providers (23 vs. 5%). The reason for this is that manufacturing is much more closely intertwined with international supply chains. The free movement of goods in the EU has now been largely restored again. But outside Europe, restrictive measures such as border closures remain in place in some places because of continuing high infection rates. This could be one reason that more manufacturing SMEs have reported a reduction in their sales region than other sectors (16 vs. 12% for the entire SME sector). Retail businesses and construction firms have also reported more problems with their sales (17 and 15 vs. 9%) and procurement (21 and 16 vs. 9%).

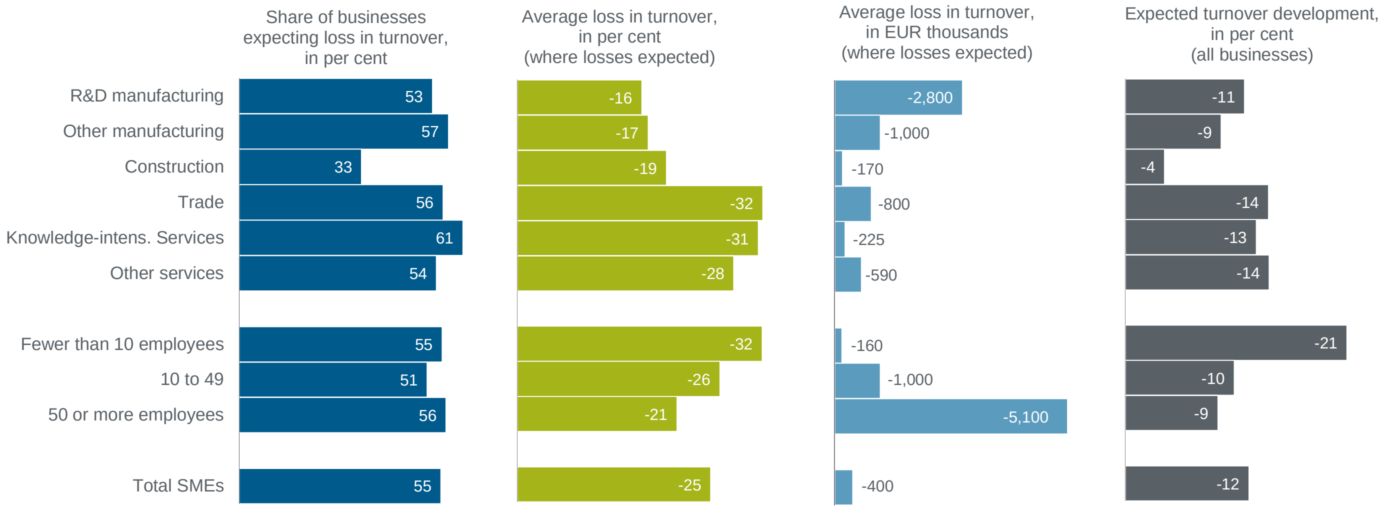
The loss of employees also appears to be more problematic for manufacturers than for the remaining SMEs (13 vs. 9%). This is likely because the production of goods offers fewer opportunities to work from home. The same also applies to retail businesses (12 vs. 9%).

By contrast, only one in three construction firms reported losses in turnover compared with half of all SMEs overall. This has been deplored by more than half the retail businesses and service providers (53 and 52%).

Significant losses in turnover expected in 2020

Despite the race to catch up during the summer months, small and medium-sized enterprises cannot easily recuperate the high losses in turnover resulting from the lockdown in the months of March to May. In addition, the continuing hygiene requirements still prevent many enterprises from resuming normal operation, thus dampening the development of turnover. This is compounded by high uncertainty over the further progression of the pandemic in autumn and winter. The turnover expectations expressed by SMEs in September for 2020 as a whole are therefore rather pessimistic – also compared with forecasts for the economy as a whole.

Figure 4: Turnover expectations for the year 2020 by segment



Note: The figure illustrates the expected decline in turnover in 2020 as a whole compared with turnover in 2019.

Source: KfW SME Panel 2020 in conjunction with the third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020).

More than one in two small and medium-sized enterprises expect their turnovers this financial year to be below the previous year' level. On average, these enterprises expect a decline in turnover by around one quarter, which amounts to roughly EUR 400,000 on average (Figure 4). By contrast, one in four SMEs expect their turnovers to remain steady in 2020. Only 6% expect an increase. All in all, total turnovers of the German SME sector this financial year may potentially drop by around 12%, around twice as much as during the financial crisis (-6.2%). That would represent a decline of around EUR 545 billion.

Service providers – representing the majority of SMEs with a share of 76% – are likely to account for a large portion of this decline . In the segment of knowledge-intensive service providers, around six in ten SMEs assume that their turnover in 2020 as a whole will decline. The affected businesses anticipate losses of nearly one third of their previous year's turnover (-31%). This represents around EUR 225,000 on average. Overall turnover in this segment may potentially contract by around 13% in 2020. Other service providers and retail businesses hold similarly pessimistic expectations.

In both sub-sectors of the manufacturing industry (R&D-intensive manufacturing, other manufacturing), the majority of SMEs reported negative turnover expectations as well (53 and 57%). On average, however, the affected enterprises expect their turnover to decline by a lower percentage than is the case in other sectors (-16 and -17%). Nevertheless, the absolute values are significantly above those of the other SME segments.

Average declines in turnover per enterprise could amount to around EUR 2.8 million and EUR 1.0 million. In the aggregate, turnovers in these SME segments are likely to drop by just over one tenth compared with the previous year (-11 and -9 %).

Although construction firms are generally less affected, they will presumably suffer losses in turnover for the year as well. The turnover expectations reported in September point to a drop of around 4% overall. Although noticeably fewer construction SMEs have expressed negative expectations by comparison (33 vs. 55%), the percentage declines they expect still remain on a comparatively high level of around 19%.

Turnover expected to remain weak in the medium term as well

The coronavirus crisis will weigh on SMEs' turnover in the medium term as well (Figure 5). Around one in four SMEs (26%) expect their turnover to be lower than in 2019 over the next three years (2020–2022). Only 27% expect a growth in turnover. That is the finding of the primary KfW SME Panel survey conducted in the spring of 2020.

Never before have so many businesses expressed negative (medium-term) turnover expectations in the KfW SME Panel as in the current survey year. The share of SMEs with pessimistic expectations averaged 17% over the past ten years. The balance of positive minus negative turnover expectations has also been smaller than ever before, at 1 point (average of the past ten years: 19 balance points).

Figure 5: SMEs' medium-term turnover expectations up to 2022

In per cent

Sources: KfW SME Panel 2010–2020.

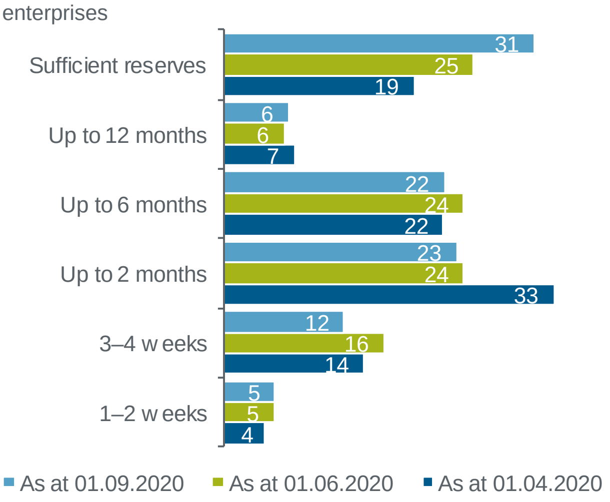
The estimates made by SMEs vary significantly depending on the time of the survey. Of the businesses surveyed in February, only around 21% expected their turnover to drop in the medium term. In April, at the height of the crisis, that share was a significantly higher 32%.

Liquidity stress is easing

The high losses in turnover have put particular pressure on companies' liquidity. Many SMEs can no longer sufficiently replenish their liquidity reserves because of the loss or reduction of proceeds from sales revenue. When businesses no longer have sufficient liquidity such as cash, bank balances, cheques, etc. to meet ongoing payment obligations, they are at risk of defaulting on their payments and, ultimately, insolvency.

Figure 6: Liquidity remaining until closure of business

Calculated from the first day of the survey month, percentage of enterprises



Sources: First supplementary coronavirus survey to the KfW SME Panel 2020 (2–14 April 2020), second supplementary coronavirus survey to the KfW SME Panel 2020 (2–12 June 2020) and third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020).

Compared with the surveys in early April and early June, the share of SMEs with short-term liquidity problems has now fallen noticeably (Figure 6). The September survey showed that if a renewed lockdown were imposed with similar restrictions to the previous one, only around 5% of all SMEs would have liquidity reserves for one or two weeks before they would be forced to suspend or give up their business activity. Twelve per cent would have liquidity for up to four weeks and a further 23% for up to two months.

The liquidity situation in the SME sector has thus eased slightly in the past months. Among the factors that contributed to this was the rebound in turnover following the relaxation of coronavirus restrictions. The numerous measures adopted at federal and state level to support enterprises in Germany have also proved to be effective. These include, for example, expanded short-time allowance and the options to defer the payment of commercial rents, social security contributions and taxes. The KfW special programme and grants for self-employed persons and small businesses have also helped to bridge the liquidity bottlenecks.[10]

In the meantime, around one in three SMEs have declared generally having sufficient liquidity reserves, which represents an increase of six percentage points on the previous survey and 12 percentage points compared with the beginning of April. A further 22% of enterprises at least have enough liquidity for up to six months (-2 PP compared with June) and around 6% have liquidity reserves for up to a year before facing the prospect of having to stop trading (+/-0 PP compared with June).

But losses in turnover mean higher cost pressure

The expected high losses in turnover in 2020 are likely to significantly reduce companies' profits. Many SMEs could even be at risk of slipping into the red. To what extent the losses in turnover will weigh on SMEs' profits ultimately depends heavily on how successful businesses are in adapting their cost structure to the low turnovers.

SMEs already demonstrated in the last crisis that they can continue to operate profitably and generate profits despite high losses in turnover. Thus, turnovers of small and medium-sized enterprises contracted by 6.2% in 2009 but their profit margin fell only minimally

from 5.6 to 5.1% and the share of SMEs that incurred losses actually dropped (2008: 15%, 2009: 13%). At the time, the services sector in particular proved to be an important stabilising factor for SMEs' earnings situation.

However, the current crisis is more serious with regard to the extent of expected losses in turnover and the breadth of affected sectors. Overall, SMEs' profitability was extremely robust before the crisis, with their profit margin averaging 7.5% (see Part 2), and the government's stabilisation measures also continue to help many businesses offset losses in turnover. Nevertheless, SMEs that had a low profit margin before the crisis, in particular, are likely to be under increased pressure to lower costs if they still intend to post a profit at the end of the year. That can also have an adverse impact on employment in the SME sector.

1.1 million SME jobs are at risk

The employment expectations expressed by SMEs at the beginning of September clearly point to job cuts for the year 2020. Thus, 16% of SMEs expect to reduce their workforce compared with the year 2019 (Figure 7). On average, these enterprises may shed around one in five jobs (-21%). Around two thirds of SMEs are planning to keep their employee headcount unchanged. A mere 5% of SMEs want to hire more workers in the current financial year.

SMEs with negative turnover expectations for 2020, in particular, reported plans to reduce their workforce. In this group, around one in four businesses intend to cut jobs in the current financial year (23%). Among those who anticipate rising turnovers, that share is less than half as many (10%). A look at the profit margins also shows that redundancies primarily affect companies that are under increased pressure to cut costs as a result of the crisis. Before the crisis, SMEs with workforce reduction plans had a significantly lower profit margin (5.3%) than those that want to maintain their workforce (7.5%) or increase it (10%) in 2020.

Based on the expectations reported by small and medium-sized enterprises, employment in the SME sector may potentially decline by around 3.3% in 2020. That would mean a loss of nearly 1.1 million jobs, roughly the number added by SMEs over the past three years. It would put an end to the nearly uninterrupted growth of employment in SMEs since 2006.

One reason the coronavirus crisis is having a much more negative effect on employment across the SME sector than during the financial crisis is the severe impact it has on the services sector. In 2009 it was mostly manufacturing SMEs that reduced their workforce. At the time, knowledge-intensive service providers hired more employees, thereby creating new employment on balance across the SME sector. A total of 400,000 new jobs (including business owners) were created by SMEs in 2009.

Workforce reduction may be particularly high in the services sector

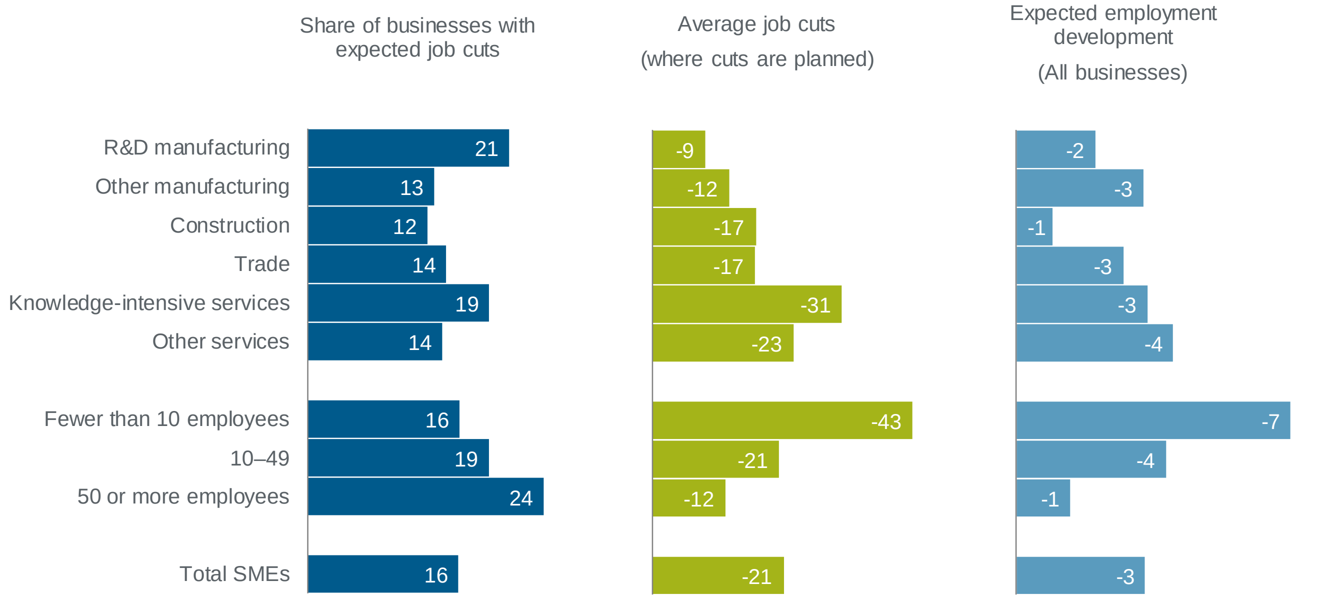
In the current crisis, however, it is precisely the knowledge-intensive services sector that is planning above-average job cuts. Around one in five SMEs in this sector are planning to shed workers (vs. 16% of all SMEs), even more substantially than in other SME segments (-31 vs. -21%). In the R&D-intensive manufacturing sector alone, an even greater share of 21% of SMEs are planning to reduce their workforce in the current financial year. However, the cuts they plan are not as deep (-9%).

If the predictions made by SMEs in September materialise, around 150,000 jobs might be lost in the entire manufacturing sector in the financial year 2020, and nearly 750,000 in the services sector. A further 125,000 jobs hang in the balance in the retail sector. By contrast, the possible reduction of around 28,000 jobs in the construction sector appears almost moderate.

The employment expectations expressed by SMEs appear to be very pessimistic given current aggregate employment across the economy (August: -670,000 since the start of the year). But according to estimates, more than 4 million employees are still in short-time work. This high number shows that companies are generally keen to keep workers on their payroll. Nevertheless, it is anything but certain that all workers affected by short-time work will actually be able to subsequently return to their regular places of work.

Figure 7: Expected employment development in 2020 by segment

In per cent



Note: The figure illustrates the expected decline in employment in 2020 as a whole compared with employment in 2019.

Source: KfW SME Panel 2020 in conjunction with the third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 Sept. 2020).

E-commerce as a lifesaver?

The crisis is also driving businesses to become inventive. A supplementary survey conducted at the beginning of April showed that overall, 43% of SMEs have made adjustments to their product/service offering, business model and, in particular, sales methods in response to the coronavirus crisis.[11] Many SMEs shifted their sales to the telephone or online. Extrapolated to all SMEs, 13% of companies migrated most of their sales, a further 20% switched at least in part and 9% were still planning to adapt their sales accordingly at the time of the survey (Figure 8).

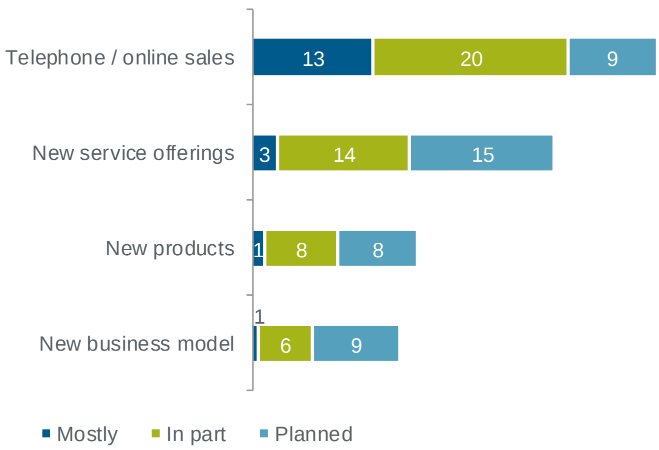
With the restrictions still in place, e-commerce activities[12] could help many SMEs generate turnovers that would not eventuate through conventional sales channels such as stationary trading, sales forces and trade shows. This also applies to service providers, who have thus far used online sales channels relatively rarely (see Part 2).

Equity ratios of SMEs – the chase for records is over

The coronavirus crisis has put an end not just to years of strong employment growth. The positive trend in equity ratios, which has gone nearly uninterrupted since the turn of the millennium, is also unlikely to continue in the current financial year. The reason is that the expected losses are eating into businesses' equity buffers. Furthermore, a considerable number of SMEs had to take up loans in the course of the crisis in order to bridge liquidity shortfalls. The subsequent rise in the ratio of debt to equity has put further pressure on companies' equity ratio. In the long run, this increases the risk of overindebtedness and insolvency.

Figure 8: Type and extent of adjustments made in response to the coronavirus crisis

In per cent



Source: First supplementary coronavirus survey to the KfW SME Panel 2020 (2–14 April 2020).

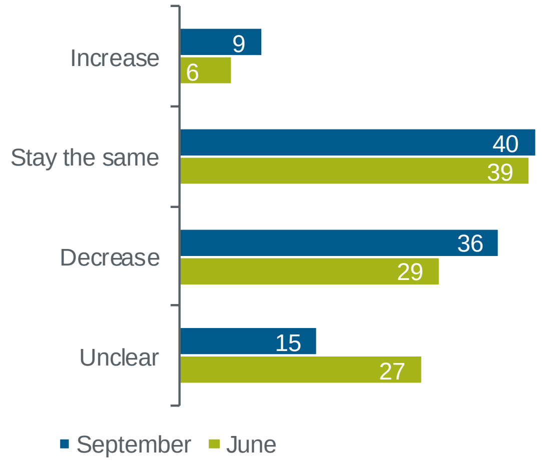
However, the high equity levels which SMEs have built up since the turn of the millennium, bringing the average equity ratio to a new record of 31.8% in 2019 (see Part 2), have made them much more resilient to crises and could help them absorb losses in their balance sheets for a longer period of time in the current situation. Inversely, their lower debt levels also preserve their liquidity by reducing the additional pressure of

repayments of interest and principal. At the same time, high equity ratios and the resulting improved credit rating could also help SMEs access debt capital more easily in the current situation in order to bridge liquidity shortfalls.

Even if the risk of overindebtedness is manageable across the SME sector as a whole, it remains likely that debt levels will rise and equity ratios will fall. SMEs' expectations also go in this direction.

Figure 9: Expected development of equity ratio in 2020

In per cent



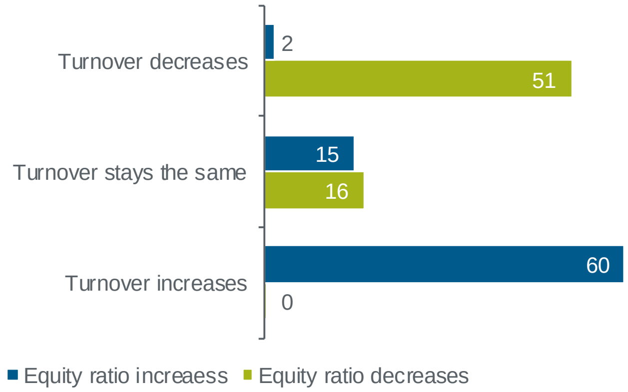
Sources: Second supplementary coronavirus survey to the KfW SME Panel 2020 (2–12 June 2020) and third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020).

Around 36% of SMEs expect their equity ratio to fall in the current financial year (Figure 9). Compared with the survey in early June, when the share of SMEs with negative expectations was still 29%, businesses now even appear to be more pessimistic about their equity base. However, 40% of SMEs still expect their equity ratio to remain steady (+1 PP compared with June) and 9% of SMEs even expect their equity ratio for 2020 to increase (+3 PP). So the rise in the proportion of businesses with negative expectations is mostly explained by a drop in the share of businesses whose expectations are as yet unclear. Whereas 27% of SMEs were still unable to predict in June how their equity ratio would develop in the course of the year, that share dropped to just 15% in September.

Figure 10 illustrates the strong correlation between expectations for turnover and expectations about changes in the equity ratio. More than half the SMEs with pessimistic expectations about turnover for 2020 expect their equity ratio to decrease. By contrast, most of the businesses that expect higher turnovers this year believe that their equity ratio will increase (60%). So it is not surprising that it is primarily businesses in other manufacturing and knowledge-intensive services that have a more pessimistic than average forecast of how their equity ratios will develop this year. However, the former in particular have built up an extremely comfortable equity buffer in the past. Most recently, their equity ratio was 41.1%.

Figure 10: Equity ratio expectations for expected turnover

In per cent



Source: Third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020).

Coronavirus crisis has shattered investment plans and may also be a long-term obstacle

Many SMEs appear to be deferring their investment projects this year because of the crisis. Up to September, much fewer investment projects were implemented as planned than in previous years. This was not just due to high uncertainty about the further economic development.[13] Many businesses used funds they had actually earmarked for capital expenditure to bridge their liquidity gap, especially in spring.

Of the 56% of SMEs that had planned to invest in their business in 2020, only 47% carried out these investments as planned (Figure 11). For comparison: that share was 75% between 2012 and 2019. Roughly three times as many SMEs as usual in previous years completely abandoned at least one investment project (18 vs. 6% in 2019). Thirty per cent of SMEs with investment plans deferred at least one investment project to a later date. Around 6% implemented at least one investment project in a lesser scope.

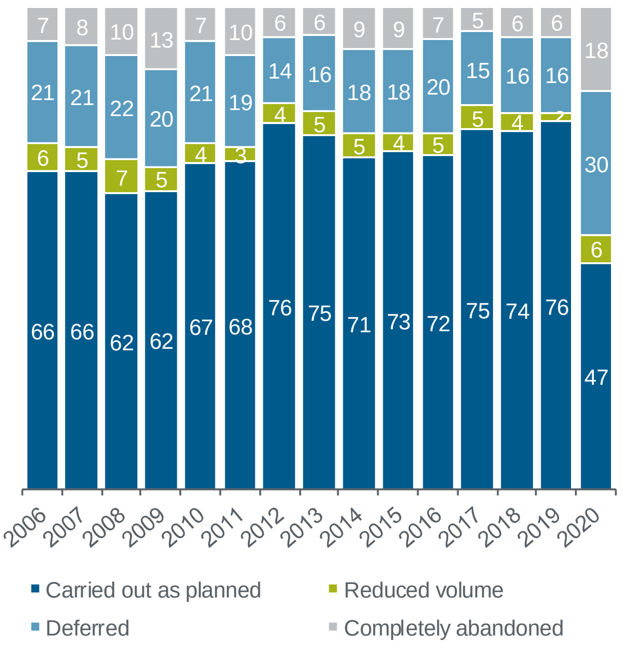
A noticeable decline in capital expenditure in the SME sector and across the aggregate economy must therefore be expected for 2020. Whether the impact of the coronavirus crisis will be as severe as that of the financial crisis of 2009 remains unclear. At the time, capital expenditure in the SME sector fell by 16.1% on the previous year (EUR 34 billion). If the percentage drop in 2020 were to be the same, the decrease in SMEs'

investment expenditure would amount to around EUR 36 billion.

After the financial crisis, it took small and medium-sized enterprises roughly two years to close the gap and invest roughly the same volume as they did before the crisis – even if investment activity after 2011 has continued to grow only sluggishly. Whether SMEs will catch up as quickly after the coronavirus crisis is doubtful.

Figure 11: Realisation of planned investment projects in 2020

Percentage of enterprises



Sources: Third supplementary coronavirus survey to the KfW SME Panel 2020 (1–14 September 2020), KfW SME Panel 2007–2020

There is also the risk that its impact may prove to be a hindrance to investment and innovation for even longer. That is because after the coronavirus crisis, many enterprises will be stuck between the conflicting goals of strengthening their financial resilience by replenishing reserves (liquidity) and their equity base, as well as paying down debt and enhancing their productivity and competitiveness by investing, innovating and digitalising. Their crisis experience might prompt them to initially prefer the former in the short to medium term and to (temporarily) put off investment.

The response: reduce uncertainty and provide incentives

Although most small and medium-sized enterprises in Germany were in a comfortable starting position before the coronavirus crisis hit, it will leave a deep imprint. The effects will linger not just on SMEs' balance sheets but also in the minds of entrepreneurs. The actions of many might be guided by caution and restraint in the period ahead, given that the COVID-19 pandemic is not over yet and the risk of renewed restrictions remains.

It is important to respond to this. What is needed are targeted economic-policy measures that not only reduce uncertainty but provide incentives to harness the opportunities presented by the crisis. After all, the coronavirus crisis has (unavoidably) aroused the inventive spirit of many enterprises, leading them to adapt and transition their business models to digital solutions. This immediate push towards digitalisation resulting from the crisis must also be translated into long-term, deeper change and, thus, greater productivity and competitiveness.

Part 2: 2019 – thanks to a good performance, SMEs were in a solid starting position before the coronavirus crisis

Jobs in the SME sector in 2019: new pre-coronavirus record

The nearly uninterrupted employment growth in small and medium-sized enterprises (SMEs) in Germany since 2006 continued last year as well. Before the coronavirus crisis, 32.3 million people were employed in the SME sector. That was an increase of 541,000 workers or 1.71% on the previous year (Figure 12). The increase in SMEs in 2019, however, contrasted with job cuts – for the first time since 2016 – in large enterprises and the public sector (reduction by 159,000 workers). In 2019, a total of 45.2 million were gainfully employed in Germany.[14] That was 382,000 gainfully employed persons more than in the previous year, a 0.85% increase.

Despite the slowing growth rate in 2019, the employment trend of the past 15 years was more than impressive. At aggregate economic level, around 5.9 million additional jobs were created since 2005, an increase of 15%. Small and medium-sized enterprises accounted for around 98% of this growth, adding 5.8 million employees. This shows that SMEs have continuously gained in importance as employers. The share of SMEs in aggregate economic employment even reached a new high of 71.2% in 2019. In 2006 that share was just 66%.

Subdued development particularly in manufacturing

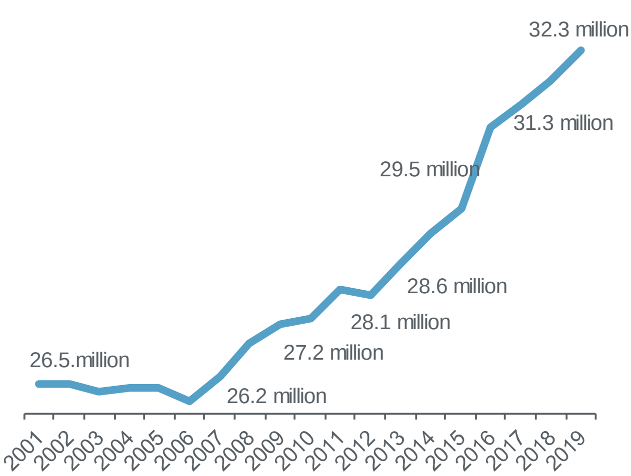
Before the coronavirus crisis, both employment and full-time equivalent (FTE)[15] growth developed positively in the SME sector. Although that was also the case in 2019, the strong momentum of the previous years did not continue. The rate of FTE employment growth fell noticeably to 1.9% (2018: 3.3%). That was the lowest rate since the financial crisis and well below the 2.6% average of the past 15 years (Figure 14). Momentum weakened across all industries but especially in manufacturing enterprises (+0.4%) and R&D-intensive manufacturing[16] (+1.8%) (Figure 13).

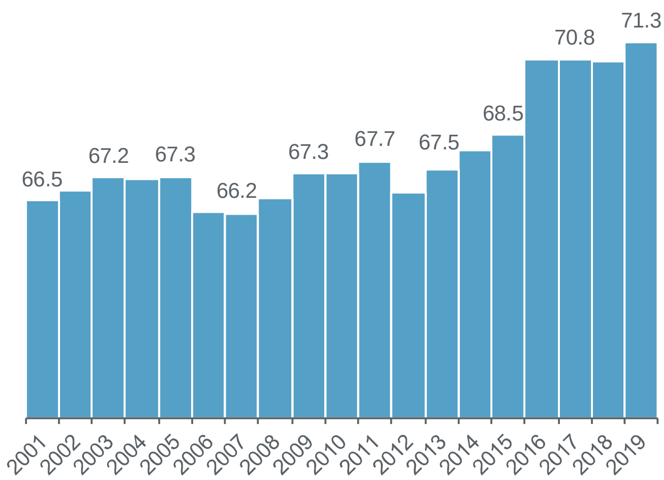
The services industries, which were still a supporting pillar of employment growth in SMEs in 2018, were also on a path of growth in 2019 but grew at a somewhat more moderate pace than in the previous years. Other services industries,[17] in particular, expanded their workforce only very slowly (+1.5%). The only sector to record above-average employment growth compared with the past 15 years was construction, where 1.9% more workers were hired than in 2019.[18]

After falling in 2018, the number of part-time employees rose again last year. It grew by 1.5% year-on-year. Full-time jobs in SMEs increased at an even faster rate of 2.6%. In a long-term perspective, part-time employment grew in importance nevertheless. This development reflects a general trend in Germany. Even as employment has grown, the number of hours worked has been falling in the long term. This is mainly due to the growing significance of flexible working time models, which SMEs are embracing as well.

Figure 12: Employment in SMEs

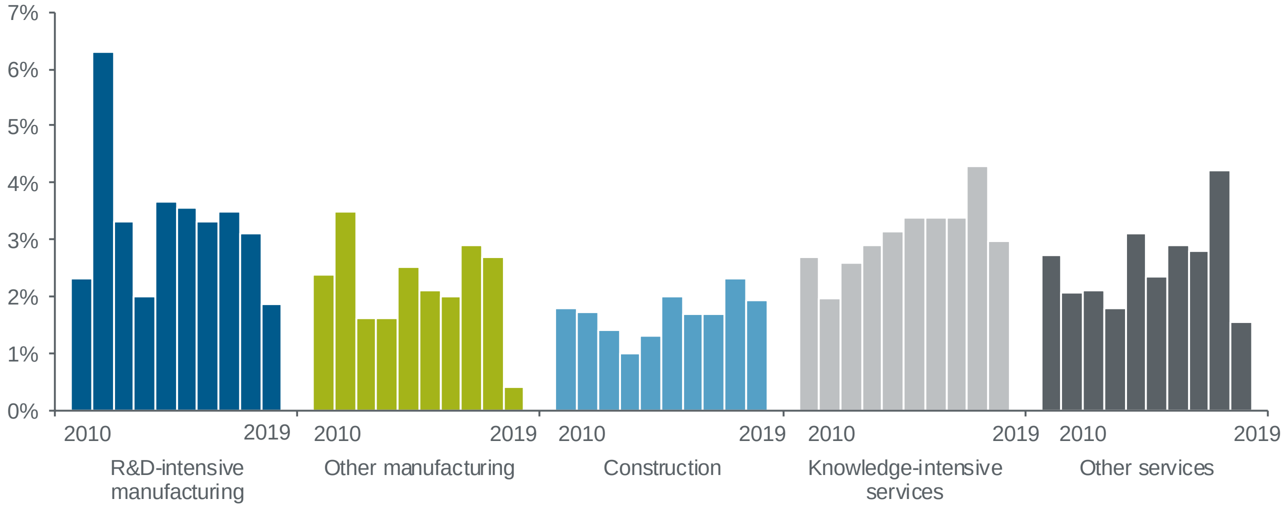
Persons employed in the SME sector (left) / share of SME sector in aggregate employment in Germany in per cent (right)





Sources: KfW SME Panel 2002–2020.

Figure 13: Annual employment growth in SMEs by sector since 2010



Sources: KfW SME Panel 2011–2020.

SME turnovers were also up in 2019 but not nearly as much as before

Record high employment numbers in 2019 and noticeable real wage growth led to another vigorous increase in consumption last year. Construction investment remained on a high level as well. Robust domestic demand thus proved to be a solid mainstay of growth for yet another year. This also benefited SMEs, which tend to be oriented towards the domestic market. However, brisk domestic demand contrasted with a difficult external environment that was shaped by global economic uncertainty, trade conflicts and Brexit worries. That weighed particularly heavily on the export-dependent manufacturing sector.

The generally rather weak overall economic development in the year 2019, when nominal GDP growth was +0.6%, also reflects the development in the SME sector. Although the turnovers of SMEs increased again year-on-year, the 3.5% rise was significantly lower than in previous years (Figure 14). A slowing growth rate could be observed in all segments of the SME sector. Aggregate turnover of all SMEs in 2019 was around EUR 4,600 billion.

Manufacturing SMEs and large SMEs already experienced growth weakness in 2019

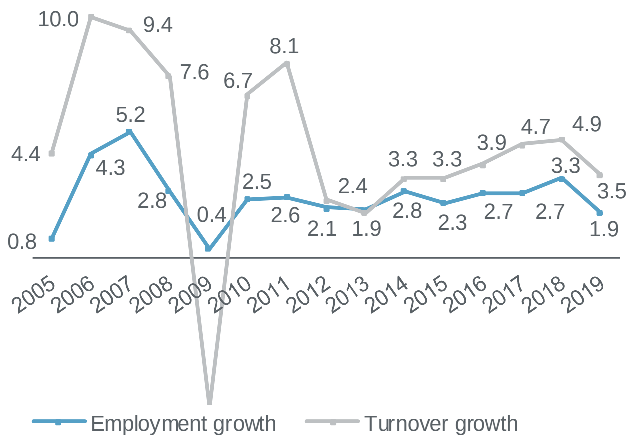
Weakening foreign trade was a problem above all for manufacturers in 2019. This is clearly reflected in the growth rates of manufacturing SMEs and large SMEs (for details see the related Volume of Tables[19] – for an overview see Figure 15). With turnover just 0.7% higher, other manufacturing enterprises posted the lowest increase of all sectors.

Although R&D-intensive manufacturers achieved turnover growth of 2.6%, that rate was significantly below the long-term average of 5.6%. Turnover growth has not been this low in either of the two manufacturing subsectors since the financial crisis (Figure 16). Large SMEs with 50 and more employees also recorded below-average turnover growth of 2.9%.[20]

Construction SMEs were unable to continue their strong performance of the past years but they nevertheless achieved strong turnover growth of 4.2% on the back of the ongoing residential construction boom. The development of turnover in the services sector also remained relatively stable in 2019.

Figure 14: Annual employment growth and turnover growth rate

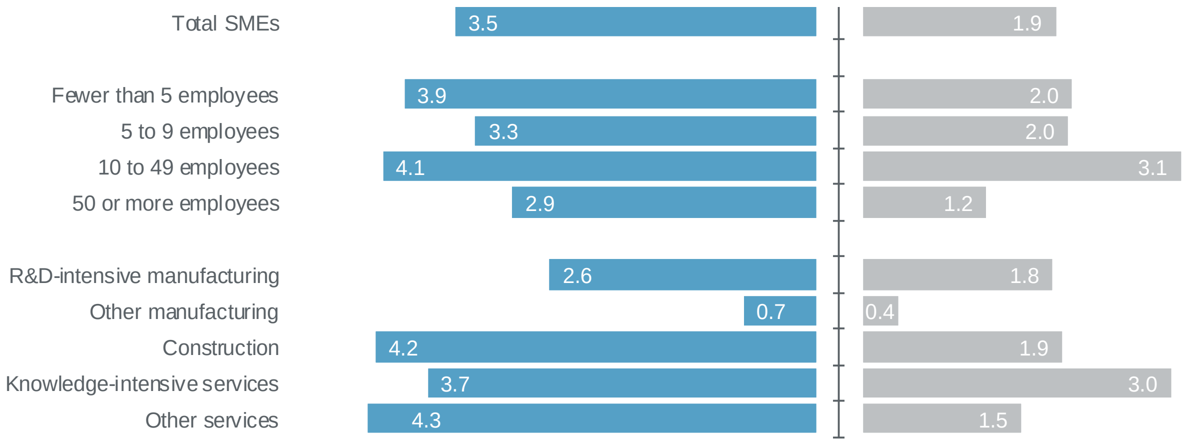
In per cent



Sources: KfW SME Panel 2006–2020.

Figure 15: SME turnover (left) and employment growth (right) by segment

Growth rates in per cent



Source: KfW SME Panel 2020.

E-commerce – untapped potential remains

Small and medium-sized enterprises have also been increasingly moving the sale of products and services online for some time now. In 2019, some 650,000 SMEs achieved turnover via e-commerce. That was around 17% of all small and medium-sized enterprises, generating around EUR 243 billion using online sales channels. The contribution of e-commerce to an enterprise's total turnover has recently grown continuously. It increased from a share of 20% in 2015 to 26% in 2018, reaching 27% last year – for enterprises that generated any online turnover. Just over one quarter of SMEs that are active online even generated more than half their turnover using online sales channels.

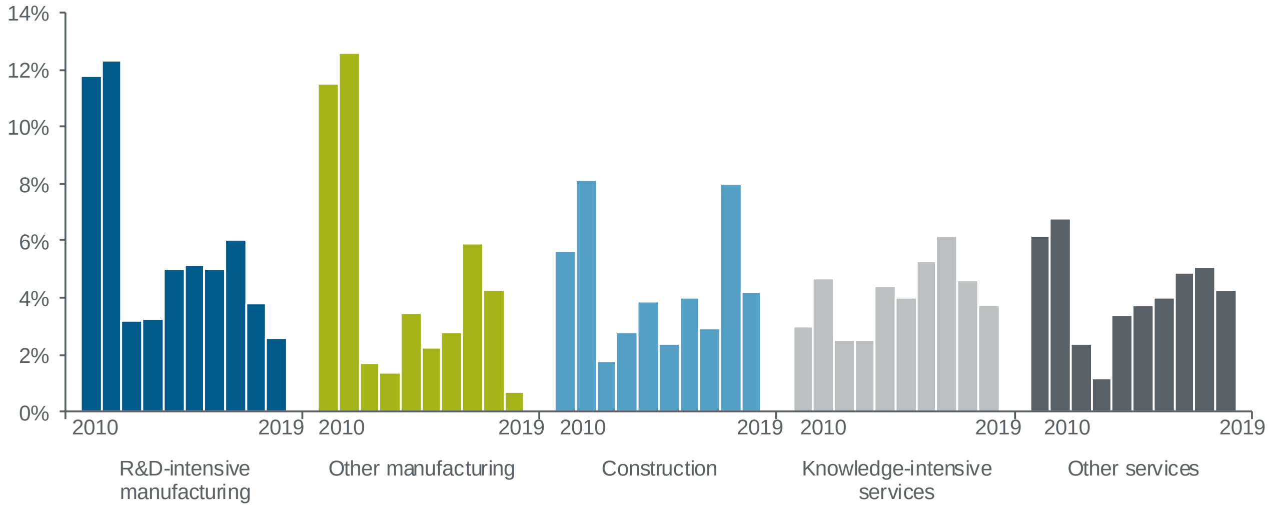
Even if e-commerce is not equally suitable for every business, it offers great potential for many SMEs, from opening up new groups of customers through expanding market reach to the manifold ways of keeping pace with evolving customer needs.

Particularly in the current crisis, many enterprises were able to harness this potential to mitigate losses in turnover. New technologies also provide further coping opportunities particularly for SMEs that are not very advanced in their digitalisation roadmaps.

Profitability remains high

Although growth rates slowed, SMEs were able to improve their profitability once again in 2019. Their average return on sales[21] grew marginally by 0.1 percentage points to 7.5% (Figure 17). SMEs' profitability has thus remained virtually unchanged since 2015. However, the long-term trend remains positive. In 2006, the mean profit margin was a mere 4.4%. That means it has since then increased by two thirds, or more than three percentage points.

Figure 16: Annual turnover growth in SMEs by sector since 2010



Sources: KfW SME Panel 2011–2020.

The considerable improvements of the past years are visible not just in the average but also in the overall distribution. Significantly more SMEs had a high profit margin and notably fewer SMEs had a low one in 2019. This trend is mainly the result of robust turnovers and turnover gains achieved by SMEs in the past years:

– In 2019, around 60% of enterprises had a high profit margin in excess of 10%, whereas that share was a mere 43% in 2006.

– At the same time, the proportion of SMEs with a negative profit margin dropped to 9%, down from a much higher 21% in 2006.

In the current crisis, the high profit margin gives businesses a buffer that enables them to cushion losses in turnover without slipping into the red.

Construction and large SMEs with higher profit margins

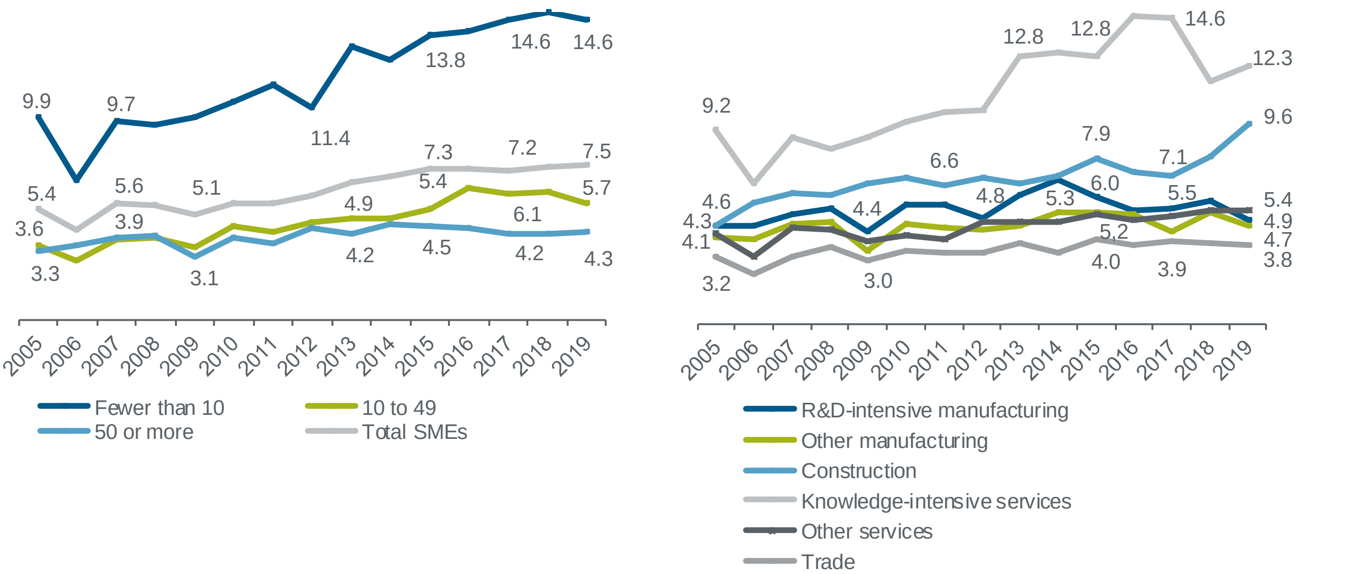
The high turnover growth achieved by SMEs in the construction sector saw these companies' profits rise again in 2019 as well (Figure 17, right). Their profitability reached a new high of 9.6% on average (+1.6 percentage points on the previous year). Knowledge-intensive service providers[22] also benefited from strong turnovers and succeeded in reversing some of the losses in profit incurred in the previous year. The average profit margin of SMEs in this segment was 12.3% in 2019. The manufacturing sector, by contrast, did not succeed in offsetting the weak turnover by boosting profitability. The profit margins in both manufacturing subsectors decreased.

In a comparison of size classes, micro-businesses again achieved the highest profitability by far last year (Figure 17, left), although a slight decrease was observable (-0.4 percentage points to 14.6%). Large SMEs, however, were able to slightly improve their profit margin for the first time in five years – to around 4.3% (+0.1 percentage points on the previous year). In a long-term perspective, businesses in this size class have nevertheless exhibited the lowest profitability growth rates since 2005. They have moved sideways almost continuously since 2012.

The gap between small and large SMEs thus remains. Small SMEs were around 3.4 times more profitable than large SMEs in 2019. But this is also a matter of commercial necessity because smaller businesses cannot benefit from economies of scale, or very little, because of smaller batch sizes. In addition, large SMEs in particular have hired a disproportionately high number of workers in the past years (see Volume of Tables). This workforce growth may have involved disproportionately higher human resources expenditure.

Figure 17: SME profit margins by size class (left) and industry (right)

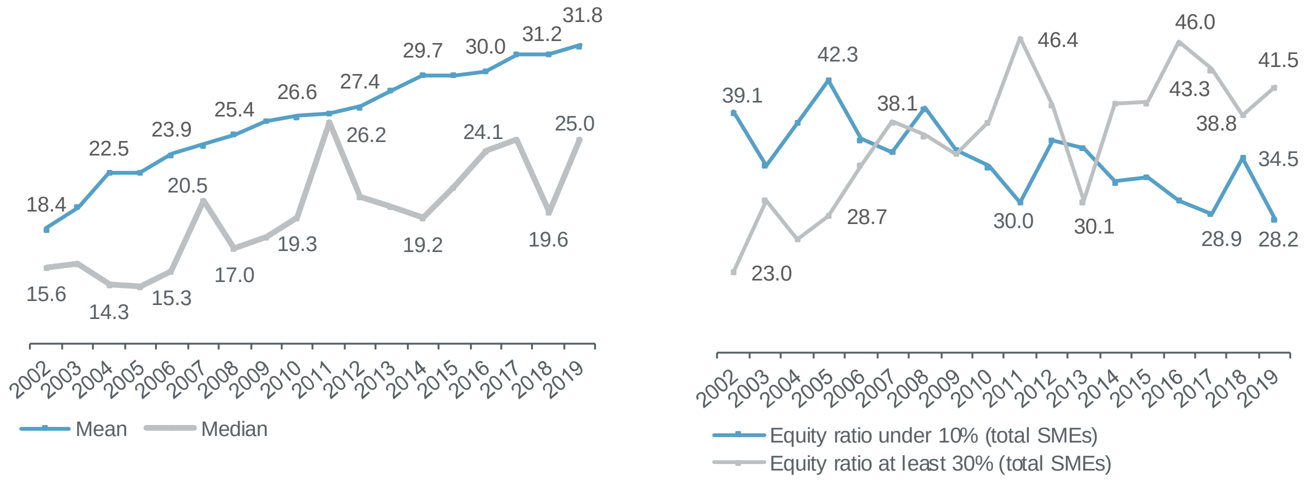
Size classes by number of full-time equivalent employees, figures in per cent



Sources: KfW SME Panel 2006–2020.

Figure 18: Basic equity ratio indicators in the SME sector

In per cent



Sources: KfW SME Panel 2003–2020.

Positive trend in equity ratios continued in 2019

Steady profit margins helped SMEs to further increase their equity base in 2019 as well, continuing the positive trend that has been observable since the 2000s. The average equity ratio[23] increased again moderately to 31.8% (Figure 18, left). At the same time, the share of SMEs with low equity ratios (less than 10%) also fell to 28.2% (Figure 18, right). Just as encouraging was the fact that the share of very well capitalised SMEs (with equity ratios of 30% and more) also rose again, to 42%, after dipping in 2018.

Small and medium-sized enterprises in Germany thus had an exceptionally comfortable equity base before the outbreak of the coronavirus crisis. Since the year 2002, the average equity ratio of SMEs gained 13 percentage points. SMEs became more aware of the importance of having adequate equity as a result of changes to banking regulation (Basel II) at the beginning of the 2000s. These changes forced SMEs to take a closer look at their own risks and credit rating in order not to jeopardise their access to credit. Besides strategic considerations on how to improve their credit ratings, important motives for SMEs to raise their equity levels also included the wish to remain independent, the drive to become more resilient in times of crisis and the desire to remain flexible. Many enterprises still had enduring memories of credit restrictions during the financial crisis.[24]

The efforts of the past years will probably pay off in the coronavirus crisis. High equity levels provide businesses with a buffer that leaves their balance sheets better equipped to absorb losses longer.

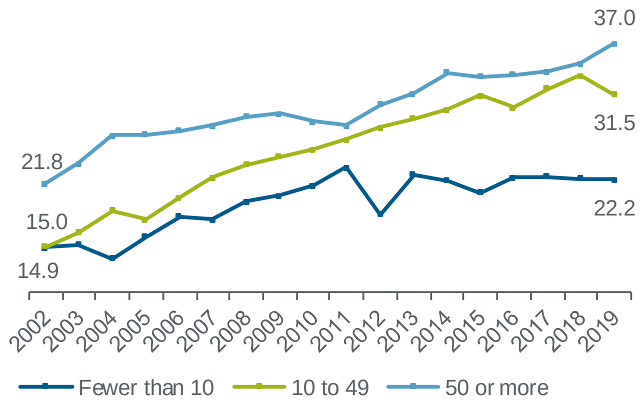
The divide between small and large SMEs widened again

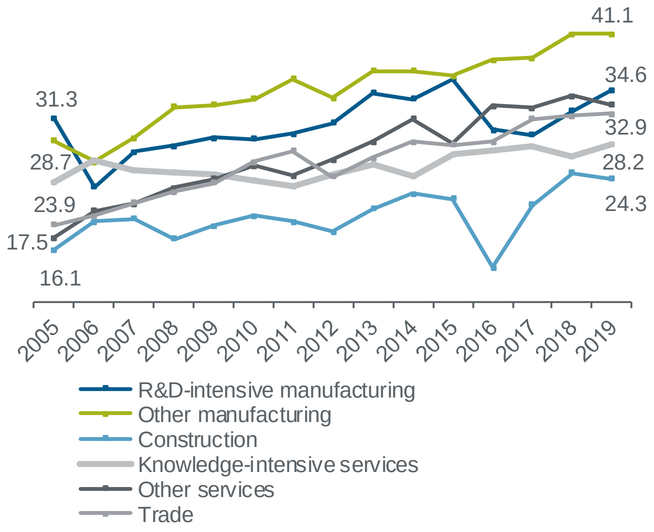
The renewed positive development of equity ratios was driven primarily by large SMEs last year (Figure 19, left). The average equity ratio in this segment climbed to a record level of 37% – a rise of 15 percentage points since 2002. Small SMEs, in turn, continued moving sideways, as they have since 2013 (22%). Thus, the divide between equity ratios of small and large SMEs widened once again in 2019. Last year, SMEs with 10 to 49 employees had to deal with a decline in their equity ratio. At 31.5%, however, it was still on a very high level.

A look at the segments also shows that the growth weakness of manufacturing enterprises did not adversely impact on their equity base last year (Figure 19, right). The average equity ratio of other manufacturing SMEs remained on a very high level (41%). R&D-intensive manufacturers even managed to marginally increase their equity ratio (+2.4 percentage points to 34.6%). Construction firms and other service providers, on the other hand, recorded minor decreases in their average equity ratios.

Figure 19: SMEs' equity ratios by size class (left) and sector (right)

Shares of enterprises in per cent; size class by number of full-time equivalent employees





Sources: KfW SME Panel 2003–2020.

Structural productivity gap widened again slightly

A factor that is of considerable importance for a company's profitability is its productivity. SMEs therefore also need to increase their productivity in order to sustainably grow their profit margins. But this appears to be a long way off because after increasing in 2018, SMEs' labour productivity actually stagnated last year:[25] Average turnover per full-time equivalent employee increased only minimally by 0.1% to around EUR 127,000.

Productivity reached 97 index points on average in 2019 (2018: 97; base year 2003=100 index points) (Figure 20, left). Only construction firms and large SMEs achieved meaningful productivity gains (Figure 20, right). The structural productivity gap[26] between large and small SMEs thus widened for the third year in a row, to 36% in 2019. In other words, micro-businesses achieve only around 64% of the labour productivity of large SMEs.[27] That rate has been nearly unchanged since 2003. Micro-businesses therefore have had roughly the same structural productivity gap to large SMEs for the past 16 years.

Productivity has stagnated for years

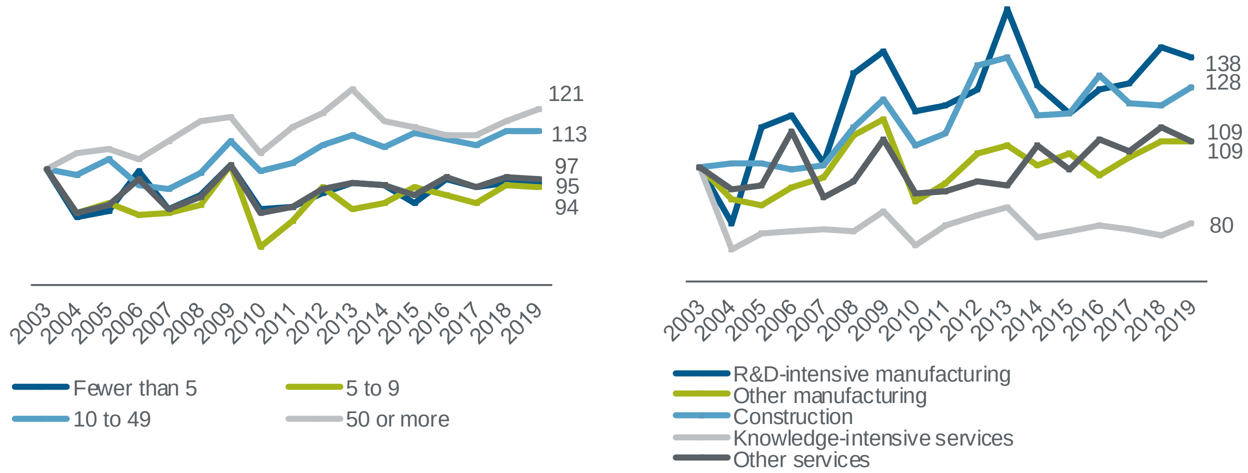
Labour productivity across the SME sector has been moving sideways for more than ten years with only minor variations. However, the continuing productivity weakness does not affect all SME segments in equal measure. It manifests itself primarily in the segment of small businesses and among knowledge-intensive service providers. These segments have achieved no or low productivity growth since 2003 (Figure 9).

Because of the high number of businesses in these two segments, they are crucial to the development of the entire SME sector. A total of 1.51 million SMEs alone are classified as knowledge-intensive service providers and 90% of all SMEs are micro-businesses or small SMEs. The more the sectoral transformation shifts in favour of the services sector, the more closely aggregate productivity is coupled with the growth of small service providers. In the aggregate analysis, the much more productive segments (e.g. R&D-intensive manufacturing or SMEs with 50 and more employees) hardly make a difference.

Declining productivity growth is a problem because it adversely affects economic growth, competitiveness and prosperity. The weak productivity growth of the past years, however, is not specific to the German SME sector. It is a problem that can be observed in numerous industrialised countries – and not just since the financial crisis. There is a high risk that the weakness in productivity growth may continue or even worsen as a consequence of the coronavirus crisis.

Figure 20: SME productivity by size class (left) and sector (right)

Size classes by number of full-time equivalent employees



Notes: The figure shows indexed values (2003=100) of labour productivity (turnover per full-time equivalent employee), missing data on turnover and employees were imputed.

Sources: KfW SME Panel 2004–2020.

Investment upswing continued

Investing in modern capital stock is one of the important mechanisms for overcoming persistent productivity weakness. So it is encouraging that 2019 was the sixth consecutive year of the continued positive trend in investment, after SME investment activity merely stagnated for several years after the financial crisis (Figure 21). SMEs again invested more in 2019 than in the previous year, even if the increase was more moderate. SMEs' investments in **new** plant and buildings (gross fixed capital formation, or new investment) were up by approx. EUR 3 billion or 1.4% compared with 2018. New investment by SMEs thus totalled some EUR 187 billion in 2019.

SMEs' investment in **second-hand** goods remained on the previous year's level, at around EUR 36 billion. In the aggregate, the volume of total investment in the SME sector thus increased by EUR 3 billion (1.1%) to a nominal EUR 222 billion. That is the highest level recorded in the KfW SME Panel since 2003. As in previous years, expansion investment accounted for the highest share by far (57%). Replacement acquisitions remained unchanged at 36% (Figure 22).

Capital expenditure in manufacturing already decreased in 2019

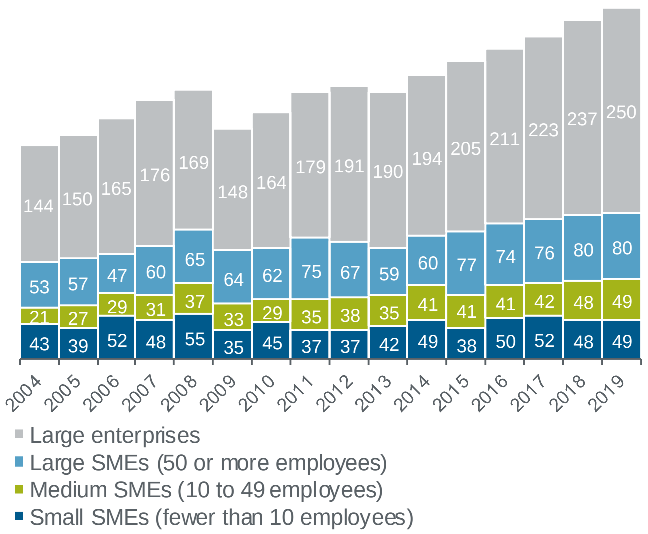
As in 2018, services continued to drive the positive development of capital expenditure last year as well. Investment by SMEs from the services sectors reached a new all-time high. Companies offering knowledge-intensive services, in particular, invested EUR 69 billion, more than ever before. Their investment volume has even more than doubled since the year 2004. The relative importance of service enterprises for aggregate small and medium-sized investment activity has also grown as a result. Last year, service industries took a share of 55% of new investment (EUR 102 billion) and 56% of aggregate investment (EUR 125 billion). For comparison, the long-term average of both rates is approx. 48% (2004–2018).

SMEs of the services industries generally invest significantly more per full-time equivalent employee than any other segment. In 2019, this measure (also known as investment intensity) even increased again – to EUR 11,700 on average (2018: EUR 10,600). Construction firms, on the other hand, invested only EUR 5,800 per FTE employee.

Manufacturing SMEs were much more reluctant to invest in 2019. The aggregate volume of investment undertaken by these companies decreased for the second year in a row. More than anything, this reflects the difficult economic environment in which this sector operates. What is particularly striking is the decline in investment intensity. It fell to EUR 7,400 per FTE employee in R&D-intensive manufacturing (2018: EUR 9,600) and to around EUR 8,400 in other manufacturing (2018: EUR 9,200). The relative importance of manufacturing for aggregate investment activity in the SME sector thus fell to a new low. The share of manufacturing in aggregate investment was only 16% in 2019 (EUR 35 billion).

Figure 21: New investment in the corporate sector in Germany

EUR in billions; SME size class by number of full-time equivalent employees

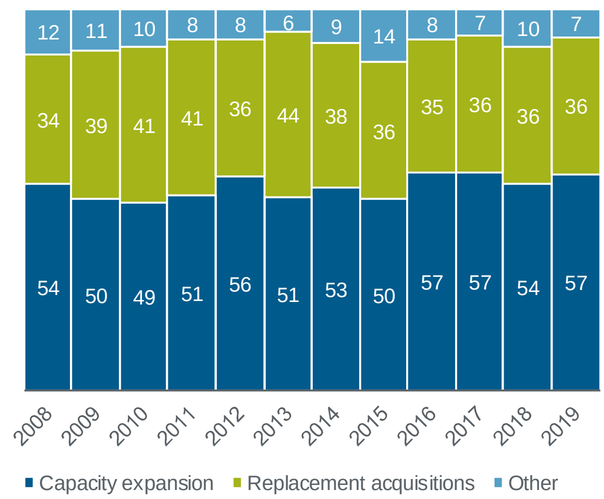


Note: The extrapolation by employment size class of SMEs does not include companies of the remaining sectors. Consequently, the individual data on new investment undertaken by the SME size classes do not add up to the total sum of new investment (gross fixed capital formation) shown in the text.

Sources: KfW SME Panel 2005–2020; national accounts as at August 2020.

Figure 22: Types of investment in the SME sector

Percentage of investment volume



Note: The category 'Other' comprises, inter alia, innovation, rationalisation, renovation, restructuring and repairs.

Sources: KfW SME Panel 2009–2020.

Growing investment volume was spread across fewer investors, with more large-scale projects

Although capital expenditure increased last year, the number of enterprises investing decreased (Figure 23). This affected all SME segments equally. In total, just under 1.5 million SMEs invested in 2019 – around 80,000 fewer than in the previous year. The share of investing SMEs – i.e. the proportion of SMEs with investment projects – dropped to 39% (2018: 42%), the second lowest level recorded in the KfW SME Panel since 2004. Only in 2016 was the share even lower, at 38%.

The subdued investment appetite of SMEs thus continued its long-term trend in 2019 as well. In the years 2006 to 2008, more than one in every two enterprises invested – a rate unmatched since then. It is not least the sharp decline in the investment propensity of micro-businesses (firms with fewer than five employees) compared with other segments that is keeping the aggregate share of investors in the SME sector low. After a moderate revival in the previous year, the share of investors in this size class fell again in 2019 as well – even more sharply than in other SME segments – to just 34%. However, this was offset by a noticeably higher investment intensity of EUR 8,700 per FTE employee (2018: EUR 7,500), so that micro-businesses actually invested more in the aggregate in 2019 than in the previous year (EUR 49 billion, 2018: EUR 42 billion).

Despite the decline in investing enterprises, the volume of SME investment increased overall. This is explained by the fact that the remaining investors used higher volumes of funds. The average amount invested by SMEs grew substantially in 2019. Those with completed investment projects invested approx. EUR 158,000 on average. That was 6% or EUR 9,000 more than in the previous year.

The mean also edged upward, as half the investment projects had a volume of less than EUR 25,000 (2018: EUR 22,000). Thus, although SMEs recently started more large investment projects than average, the amounts they invest continue to be rather moderate.

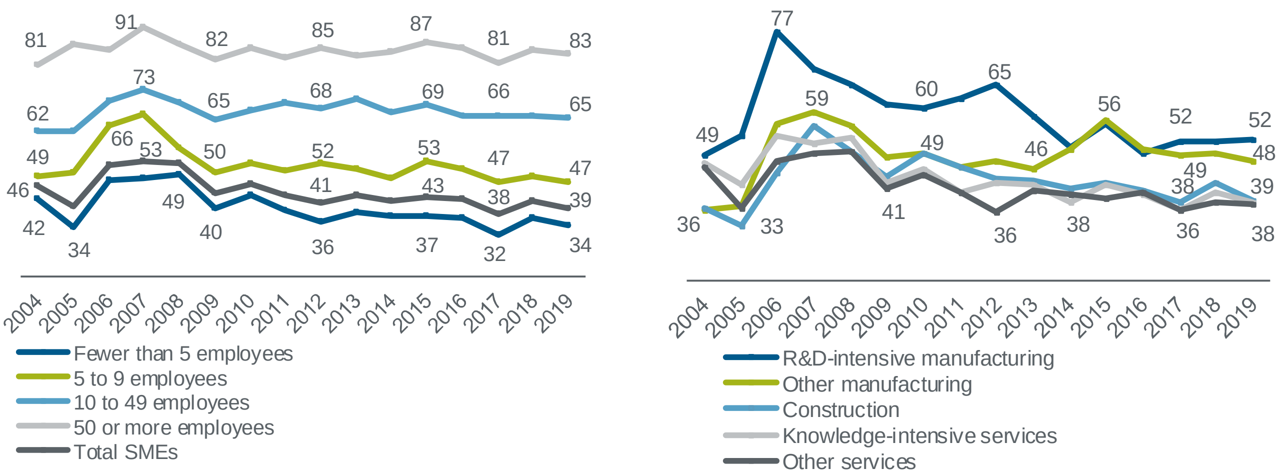
Net investment by SMEs remained positive in 2019

The slightly higher new investment volume of EUR 187 billion contrasted with a declining depreciation of capital stock in 2019 (depreciation volume EUR 132 billion). As a consequence, net investment[28] by SMEs also spiked – from EUR 42 billion in 2018 to EUR 55 billion last year. The ratio of new investment volume to depreciation remains on a very good level of 142%.

Large enterprises with an annual turnover in excess of EUR 500 million also stepped up their investment activity once again last year. Their new investment volume increased by EUR 13 billion or 5.5% to EUR 250 billion.

Figure 23: Share of investing SMEs by size class (left) and sector (right)

Size classes by number of full-time equivalent employees



Sources: KfW SME Panel 2005–2020.

Despite this strong growth, however, large enterprises were unable to offset the depreciation of their capital stock. Their net investment was minus EUR 13 billion.

Overall, aggregate gross fixed capital formation[29] by enterprises in Germany increased from EUR 420 billion to EUR 436 billion in 2019. The share of SMEs in new investment in the corporate sector dropped marginally to 43%.[30]

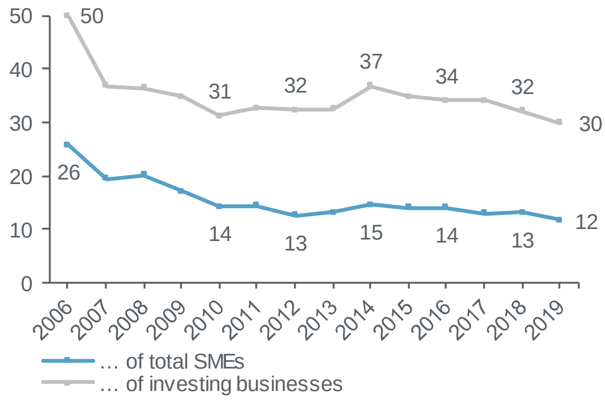
Fewer enterprises were in loan negotiations

Last year, bank loans again played an important role in financing SMEs' investment projects. However, SMEs' interest in conducting loan negotiations dropped for the fifth consecutive year (Figure 24). Only around 446,000 SMEs held negotiations on investment loans with banks and savings banks, representing roughly 30% of all investing enterprises. The levels of pre-crisis years – around 50% in the year 2006, for example – will probably not be achieved again any time soon. From the viewpoint of SMEs, arguments against borrowing from banks to finance investment projects include, in particular, the desire to be financially independent, concerns about excessively high effort and disclosure and documentation requirements.

Nevertheless, the volume of loans actually used to finance capital expenditure was higher than ever before in 2019. SMEs borrowed a total of EUR 81 billion from banks and savings banks to finance their capital expenditure – around EUR 6 billion or 8.5% more than in the previous year. The share of loans in the financing mix for capital expenditure projects thus rose to 36% (Figure 29), the highest share since 2007. Short-term loans saw a particularly strong increase compared with the year 2018, rising to EUR 35 billion – up EUR 5 billion or 15% (Figure 25). The share of short-term bank loans in the overall investment volume thus grew to 16%. Unlike in the previous year, the volume of long-term loans did not increase, although it remained on a very high level of EUR 45 billion.

Figure 24: Enterprises negotiating investment loans

Share in per cent



Sources: KfW SME Panel 2007–2020.

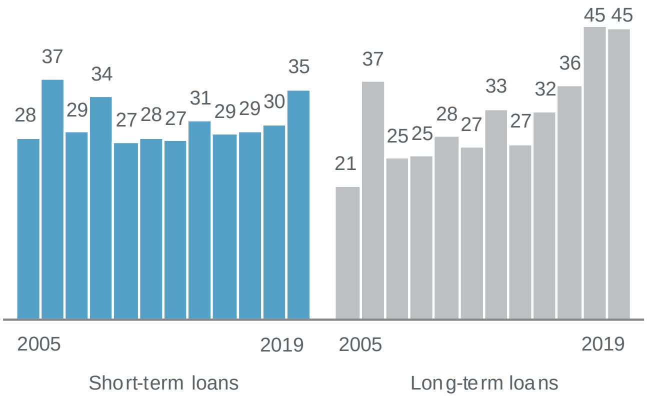
The number of borrowers decreased but the ticket size rose again noticeably

Despite the strong growth in credit volume, the number of borrowers fell sharply. Last year only around 485,000 SMEs used bank loans to finance their capital expenditure. That was 15.4% less than in 2018, or 88,000 fewer enterprises. The decrease can be explained almost entirely by the drop in the number of borrowers in the smaller SME segments. Around 85,000 fewer small businesses (with up to nine employees) used loans to finance capital expenditure last

year.

Figure 25: Credit financing for investment

EUR in billions



Sources: KfW SME Panel 2006–2020.

A large portion of enterprises concentrated on short-term loans again in 2019. Approx. 240,000 SMEs took up a short-term bank loan or used overdraft facilities (-11% compared with 2018). Some 116,000 SMEs took up a long-term bank loan (+2%) and around 129,000 SMEs obtained loans with various maturities (-32%).

A renewed increase in ticket size explains why the total borrowing volume increased even though the number of borrowing SMEs fell. The average amount of money borrowed from banks to finance capital expenditure increased for the fourth consecutive year and was around 28% above the previous year's level. The ticket size thus amounted to EUR 167,000 in 2019. For comparison, in 2010 it was around EUR 82,000.

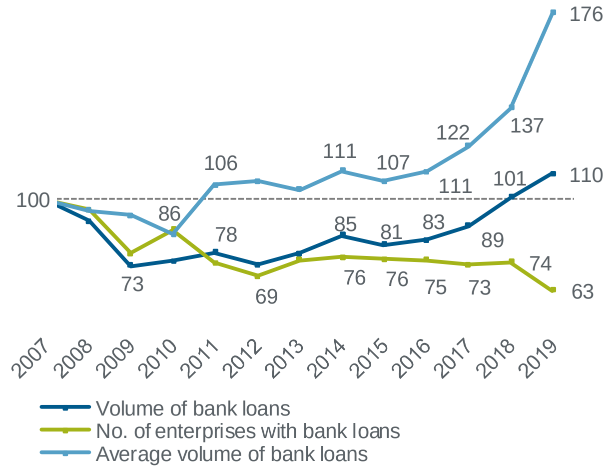
It is true that SMEs generally had a moderate borrowing appetite, as 60% of all investment loans they applied for were below EUR 50,000. However, the share of large-volume loans above EUR 250,000 increased noticeably last year – from 9% in 2018 to 12% in 2019 (Figure 27).

Small businesses drove the trend

Unlike in the year 2018, the loan financing dynamic of 2019 was driven primarily by smaller enterprises. The prevalence of large SMEs in overall SME borrowing, which grew steadily since 2007, thus received a dampener in 2019 (Figure 28). SMEs with fewer than five employees increased their borrowing for investment purposes to EUR 20 billion (+EUR 7 billion). That was primarily due to a spike in average volume, which rose to EUR 62,400 (2018: EUR 33,000). The share of loans in overall financing volume increased from 31 to 40% in this size class.

Figure 26: Indexed development of relevant SME borrowing indicators

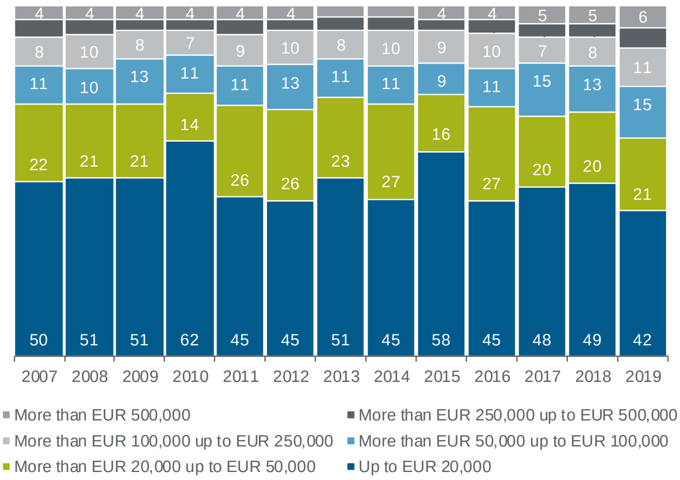
2007=100 index points



Sources: KfW SME Panel 2008–2020.

Figure 27: Bank loan amounts applied for by SMEs

Share of enterprises with bank loans exceeding a specified volume in per cent



Notes: Only SMEs with loan negotiations that actually used bank loans to finance investment.

Sources: KfW SME Panel 2008–2020.

Demand for promotional funds was down – use of internal funds was up

The strong rise in the volume of loans to finance capital expenditure in 2019 was associated with a sharp drop in the use of official promotional funds. The volume of promotional funds fell by EUR 15 billion to EUR 18 billion (2018: EUR 33 billion). The proportion of promotional funds in the financing mix for capital expenditure dropped to 8%, a historic low. That share averaged 12% over the past 15 years. The decline was particularly pronounced in micro-businesses with fewer than five employees and small firms with 5 to 9 employees. In these segments the share of promo-

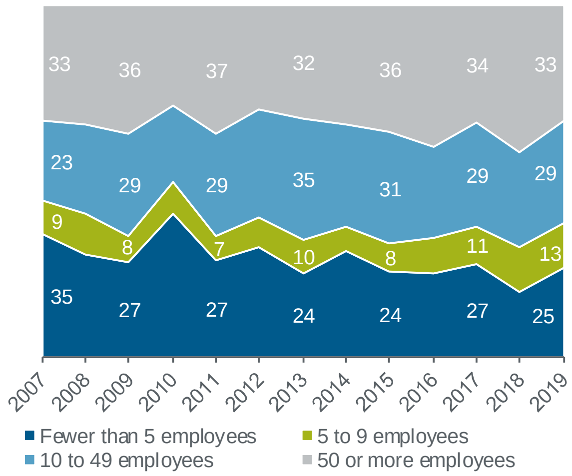
tional funds decreased to 4 and 6%, respectively.

Just as in the previous year, other sources (e.g. private equity or mezzanine capital) were used in a volume of EUR 13 billion, which represented a share of 6% of total financing volume.

After SMEs used significantly fewer internal resources to finance capital expenditure in 2018 than in the previous year, the volume increased again sharply in 2019 to EUR 110 billion (+EUR 11 billion or 11%). As a result, the share of own funds in the volume of capital expenditure increased by five percentage points to 50%. This is mainly the result of micro-businesses and large SMEs using more of their own funds (+EUR 5 billion each).

Figure 28: Shares of SME size classes in total SME borrowing

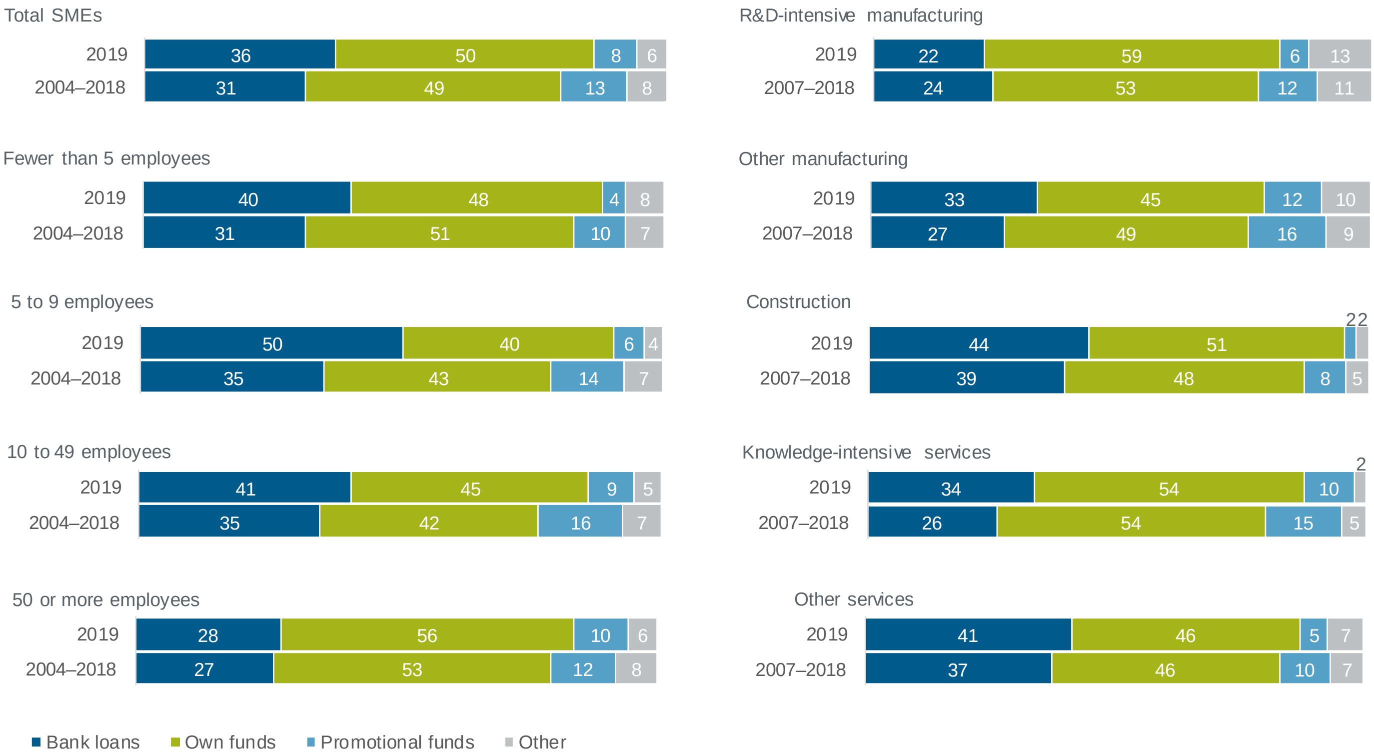
Size class by number of full-time equivalent employees; figures in per cent



Sources: KfW SME Panel 2008–2020.

Figure 29: SME investment finance by segment

Size classes by number of full-time equivalent employees, percentage of investment volume



Notes: The category 'Other' comprises, among others, mezzanine capital and private equity.

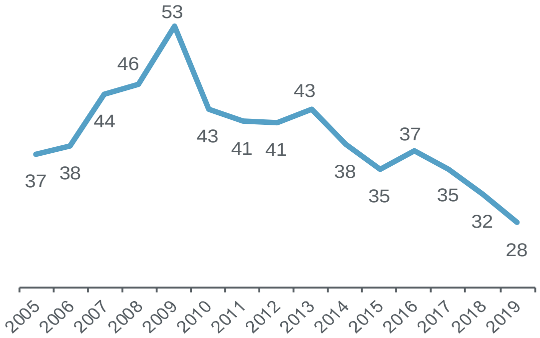
Sources: KfW SME Panel 2005–2020.

Low interest rates and easy access to credit boosted borrowing

SMEs' increased use of bank loans can probably be explained for the most part by the fact that financing conditions continue to be favourable. This includes, in particular, the relatively low interest rate level: SMEs' cumulative interest expenditure in 2019 fell once again to around EUR 28 billion, the lowest level ever (Figure 30).

Figure 30: Interest expenditures of SMEs

EUR in billions



Sources: KfW SME Panel 2006–2020.

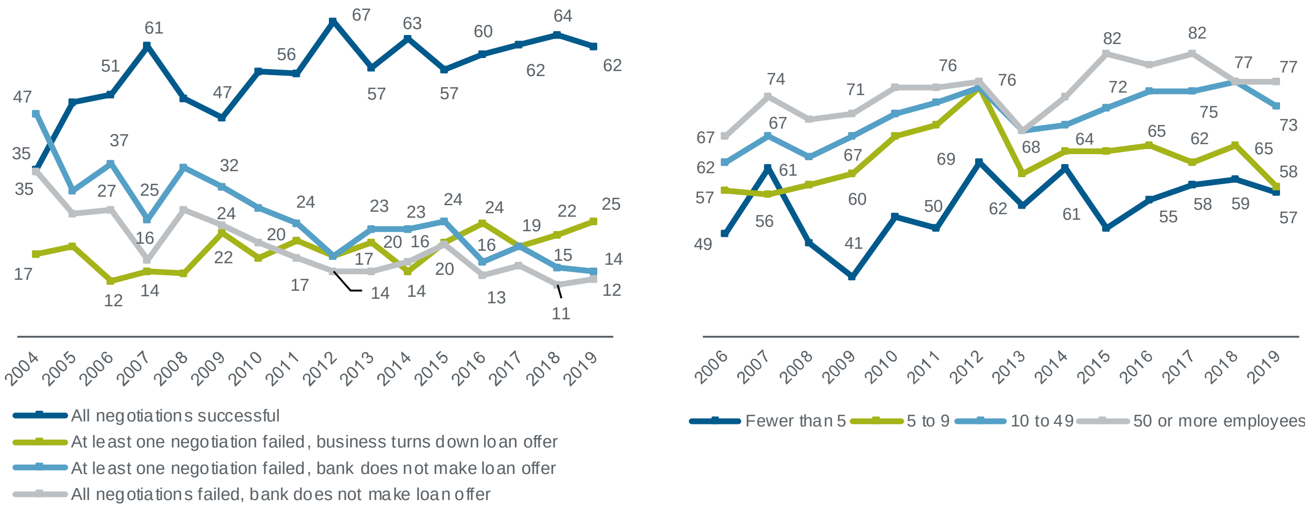
Furthermore, access to loans was largely easy up to the end of 2019, although slightly more restricted than in the previous year (Figure 31, left). The rate of loan denials (proportion of enterprises whose negotiations on investment loans all failed) was 12%. That was a moderate increase on the year 2018 (11%). Also lower was the share of enterprises for which all negotiations on investment loans ended in success, dropping from 64 to 62%. The share of bank denials, however, fell to an all-time low. Thus, loan negotiations in the SME sector failing due to credit institutions not making an offer was at the lowest rate ever (-1 percentage point to 14%). This is a strong indication that credit institutions took a less restrictive approach in their negotiations last year as well. The share of enterprises' own denials of loans offered by banks rose for the second consecutive year (+3 percentage points to 25%), a possible indication that SMEs were less willing to accept terms that were unattractive to them. The availability of sufficient alternatives or options to obtain funding from other sources appears to have enhanced enterprises' bargaining power.

The minor deterioration in the financing environment affected almost all SME segments except large SMEs with 50 or more employees. Small firms with 5 to 9 employees in particular faced a drop in their success rate (Figure 31, right). In this segment, the share of enterprises for which all negotiations on investment loans were successful decreased by 7 percentage points to 58%, slipping to a rate last seen in the year 2008. This was mainly due to a noticeable increase in own denials (+10 percentage points).

With respect to the probability of loan negotiations ending successfully, the gap between large and small SMEs widened again slightly, after a positive trend in the previous year. The reasons for this are usually structural. The asymmetrical distribution of information means that lenders often have great difficulty or incur very high expenses in assessing the overall credit worthiness or the chances of success of projects presented for financing by micro-businesses. Small and young enterprises often do not have a credit history or established relationship with the lender. That gives them fewer options of providing credible assurances that they represent a low risk. As these enterprises usually apply for small loan amounts, the transaction costs involved in overcoming these information deficits are very high for lenders. As a result, they may add risk premiums to the interest rate and require more collateral or documentation, or they generally offer lower amounts or charge higher costs.

Figure 31: Outcome of loan negotiations and successful loan negotiations by size class

Right: All negotiations successful (in per cent); size classes by full-time equivalent employees



Sources: KfW SME Panel 2005–2020.

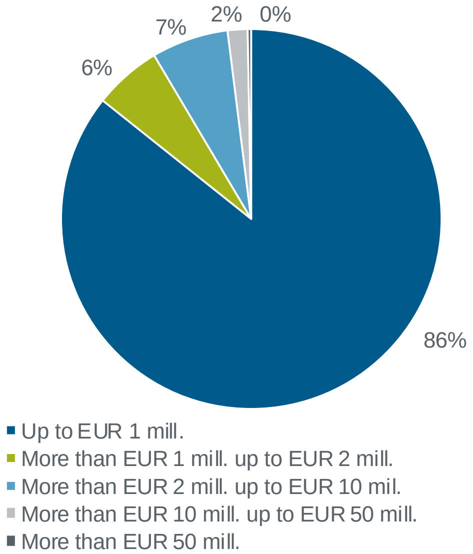
The structure of SMEs in 2019

The SME sector covers all enterprises in Germany with an annual turnover of no more than EUR 500 million. By this definition, there were around 3.79 million SMEs in Germany in the year 2019. The SME sector thus accounts for 99.95% of all enterprises in Germany. Around 3.1 million SMEs are domiciled in the western German states (82%), while 694,000 (18%) are domiciled in eastern Germany.

SMEs are very small on average

The vast majority of SMEs in Germany is small (Figure 32). A share of 86% (3.25 million) generate annual sales turnover of less than EUR 1 million. Fewer than 0.3% (or approx. 12,000) SMEs generate annual sales turnover of more than EUR 50 million.

Figure 32: SMEs by annual turnover in 2019

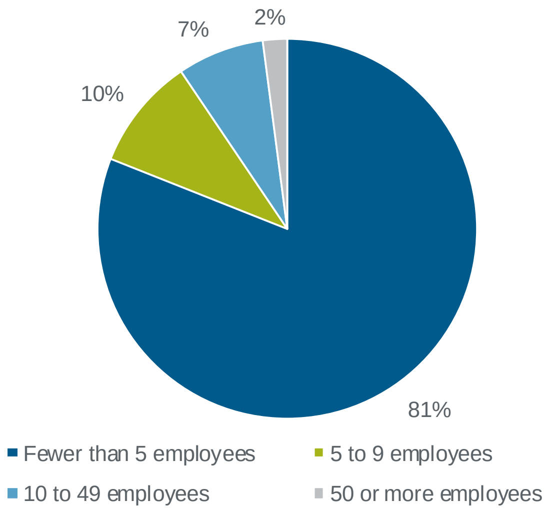


Source: KfW SME Panel 2020.

The fragmented nature of the SME sector is also reflected in the employee numbers (Figure 33). Eighty-one per cent of SMEs (micro-businesses, 3.1 million) have fewer than five employees. That share has grown by around four percentage points since the turn of the millennium. Ten per cent of SMEs have five to nine employees (small firms), 7% have ten to 49 employees and 2.1% have a workforce of 50 or more.

The average SME size in Germany in 2019 was 7.5 full-time equivalent employees (median is 2), or roughly 9.0 workers. The SME sector has become more fragmented in the past years, mostly as a result of increasing tertiarisation.

Figure 33: SMEs by number of employees in 2019

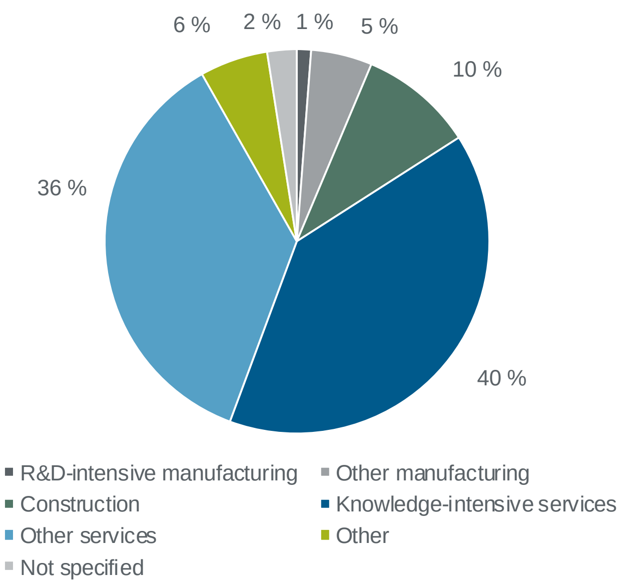


Source: KfW SME Panel 2020.

Increasing focus on services

Service industries are increasingly dominating economic activity. The majority of German SMEs are service providers (Figure 34), with 2.88 million – or 76% of all SMEs – operating in service industries, with 1.51 million of them providing knowledge-intensive services, a trend that is increasing.

Figure 34: SMEs by industry in 2018



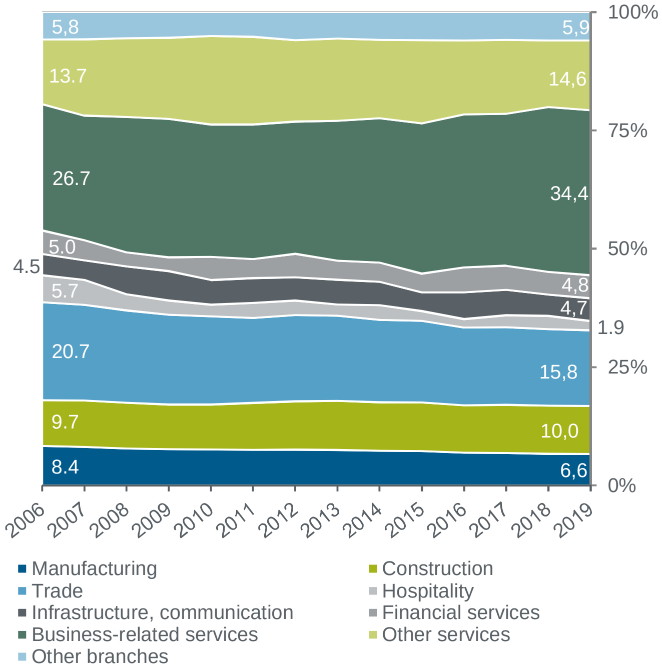
Source: KfW SME Panel 2020.

There are many different causes for the shift towards services. One of them is businesses' outsourcing or contracting of what were previously in-company services to third-party companies (for example, IT maintenance, data storage, personnel recruitment, legal affairs and tax matters). These decisions are based on considerations relating to costs, specialisation and division of tasks. Another factor is that structural develop-

ments have created an increased demand for services for some time now (driven by demographic change and the growing proportion of small households, for example).

Figure 35: Shifts in sectoral structure of SMEs from 2006 to 2019

Sectoral shares in per cent each year



Sources: KfW SME Panel 2007–2019.

Among the knowledge-intensive services, the sub-segment of business-related services accounts for the largest and growing share (Figure 35). Since 2008, their number has increased by more than 300,000. By contrast, the number of small and medium-sized enterprises in hospitality and retail has fallen by some 110,000 each over the same period.

In 2019, around 1.2% of all SMEs were R&D-intensive manufacturers (some 45,000 enterprises). Manufacturing generally accounts for a relatively low share of approx. 6.4% of all small and medium-sized enterprises but employs 16.3% of the entire workforce.

SMEs at a glance

In per cent, unless otherwise specified

	2013	2014	2015	2016	2017	2018	2019
Investments							
Total share of investors	43	42	43	42	38	42	39
Share of investors <5 full-time equivalent employees	39	37	37	37	32	37	34
Share of investors ≥50 full-time-equivalent employees	83	84	87	85	81	85	83
Total investment volume (EUR in billions)	190	202	199	204	211	220	222
Investment volume <5 FTE employees (EUR in billions)	44	53	45	46	51	42	49
Investment volume ≥50 FTE employees (EUR in billions)	69	71	84	83	86	94	91
Volume of investment in new machinery, equipment and buildings (EUR in billions)	144	158	161	169	176	184	187
Investment finance							
Initially planned credit requirements (EUR in billions)	119	128	132	134	124	141	116
Total debt capital realised (EUR in billions)	80	92	82	88	90	108	98
Net profit ratio[b]							
Average return on sales	6.7	7.0	7.3	7.3	7.2	7.4	7.5
Average return on sales <10 FTE employees	13.3	12.6	13.8	14.0	14.6	15.0	14.6
Average return on sales ≥50 FTE employees	4.2	4.6	4.5	4.4	4.2	4.2	4.3
Proportion of SMEs with losses	11	12	8	10	9	9	9
Equity base[c]							
Average equity ratio	28.6	29.7	29.7	30.0	31.2	31.2	31.8
Average equity ratio <10 FTE employees	22.8	22.1	20.9	22.5	22.6	22.4	22.2
Average equity ratio ≥50 FTE employees	31.6	33.8	33.4	33.6	33.9	34.8	37.0
Proportion of SMEs with negative equity ratio	10	10	11	10	8	8	4
Employment trends[d]							
Total employment growth rate	2.0	2.8	2.3	2.7	2.7	3.3	1.9
FTE growth rate <5 FTE employees	2.1	2.6	1.7	2.1	1.6	2.1	2.0
Development of turnover[d]							
Total turnover growth rate	1.9	3.3	3.3	3.9	4.7	4.9	3.5
Turnover growth rate <5 FTE employees	2.3	2.3	2.9	3.6	2.8	6.1	3.9

* Note: [a] Total debt capital realised means the volume of bank loans and promotional funds actually used for investment finance. [b] Mean values weighted with turnover. [c] Mean values weighted with total assets, projections only for enterprises with accounting obligations and excluding individual enterprises / sole traders. [d] Missing information on FTE employees and turnover was not imputed, calculations not including growth rates below the 1% and above the 99% quantile.

KfW SME Panel

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 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 of the German SME sector, making it the most important source of data on issues relevant to the SME sector. As it is representative of all SMEs of all sizes and across all industries in Germany, the KfW SME Panel offers the possibility to conduct projections for micro-businesses with fewer than five employees as well. A total of 9,889 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. It gives a representative picture of the current situation and the needs and plans of SMEs in Germany. It focuses on annually recurring information on companies' performance, investment activity and financing structure. This tool is the only way of determining quantitative key figures for SMEs such as investment spending, loan demand and equity ratios.

The basic 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 not more than EUR 500 million. The population does not include the public sector, banks or non-profit organisations. Currently there are 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 2019 and the population of employees at SMEs in 2019, the German Company Register (Unternehmensregister) and the official employment statistics (Erwerbstätigenrechnung) were used as a starting point for the 2020 survey.

The KfW SME Panel sample is designed in such a way that it can generate representative and reliable data. The sample is split into four groups: type of promotion, branches, firm size as measured by the number of employees, and region. In order to draw conclusions on 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. These factors set the distribution of the net sample (in accordance with the four group characteristics) in relation to their distribution in the parent population. Two extrapolation factors are determined in total: an unlinked factor for 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 Financial Services Division of GfK SE on behalf of KfW Group. The project received expert advice from the Centre for European Economic Research (ZEW) in Mannheim. The main survey of the 18th wave was conducted in the period from 10 February 2020 to 19 June 2020.

Supplementary coronavirus surveys to the KfW SME Panel

The analyses undertaken to determine the effect of the coronavirus crisis on SMEs are based on three supplementary surveys conducted as part of the KfW SME Panel. To this end, the Financial Services Division of GfK SE conducted a representative online survey of small and medium-sized enterprises on the current impacts of the coronavirus crisis on behalf of KfW Group (2–14 April, 2–12 June and 1–14 September 2020). All enterprises that had already participated in an earlier wave of the KfW SME Panel and had provided a valid email address were surveyed. Responses from a total of 3,400 enterprises were evaluated in the first survey, around 3,000 enterprises in the second survey and approx. 2,800 enterprises in the third survey. As the supplementary survey was linked to the main database of the KfW SME Panel, its results provide a representative picture of the current coronavirus impact.

Further information can be obtained at **www.kfw-mittelstandspanel.de**.

[1] Scheuermeyer, P. (2020), KfW Business Cycle Compass Germany/Eurozone May 2020, The long path out of the coronavirus slump, KfW Research.

[2] Destatis (2019), press release No. 323 dated 25 August 2020. https://www.destatis.de/DE/Presse/Pressemitteilungen/2020/08/PD20_323_811.html

[3] Scheuermeyer, P. (2020), KfW Business Cycle Compass Germany/Eurozone August 2020, A strong recovery so far but headwinds are increasing, KfW Research.

[4] The KfW-ifo SME Barometer indicator family is based on a scale-of-enterprise evaluation of the ifo economic surveys which are used to calculate, among other things, the well-known ifo Business Climate Index. Each month about 9,500 enterprises from trade and industry, construction, wholesale,
retail and services (without the banking and insurance sectors or the state) are polled on their business situation, among them some 8,000 SMEs. In deviation from the definition used in the KfW SME Panel, enterprises are generally classified here as small to medium-sized if they employ no more than 500 workers and generate an annual turnover not exceeding EUR 50 million. The KfW-ifo SME Barometer reports the balance of current business assessments (percentage of positive answers less percentage of negative answers), the balance of business expectations for the next six months, ascertained in a similar way, and the inferred mean average value for the business climate. All time series are seasonally and mean adjusted. The zero line therefore marks the long-term 'cycle-neutral' average since January 2005. Indicators above (or below) zero point to an above average or favourable (below average or negative) business situation.

[5] Borger, K. (2020), KfW-ifo SME Barometer April 2020: SMEs are now clearly in the throes of the coronavirus slump, KfW Research.

[6] Borger, K. (2020), KfW-ifo SME Barometer May 2020, A sigh of relief!, KfW Research.

[7] Borger, K. (2020), KfW-ifo SME Barometer September 2020, SME business confidence has risen again, KfW Research.

[8] Schwartz, M. and Gerstenberger, J., (2020), SMEs are firmly in the grip of the coronavirus crisis but (still) holding on strong, Focus on Economics No. 286, KfW Research.

[9] Schwartz, M., and Gerstenberger, J., (2020), Coronavirus crisis in Germany's SMEs: Return to full economic activity still far off but gradual opening has eased pressure on liquidity, Focus on Economics No. 294, KfW Research.

[10] Economic surveys by the ifo Institute have revealed that around one quarter of enterprises applied for liquidity assistance in April and May. Service providers and wholesale and retail companies accounted for the highest shares, at 30% each. For details see: https://www.ifo.de/node/55914

[11] Destatis (2020), Data on persons in employment in Germany – as at 5 October 2020.

[12] According to the definition of the German Federal Statistical Office, e-commerce is the buying and selling of products and services through electronic networks, especially via the internet or an EDI (electronic data interchange between computer systems of different enterprises). In order to count as e-commerce, the activity must involve ordering products or services using these electronic networks. Payment and delivery can be made using conventional means. A large portion of e-commerce consists of automated transmission and further handling of recurring and easily predictable orders as part of business processes between enterprises.

[13] For details on the impact of uncertainty on economic activity see: Orthey, M. (2020), Uncertainty and economic activity in Germany**,** Focus on Economics No. 300, KfW Research,

[14]Data on persons in employment in Germany from the employment accounts of the Federal Statistical Office.

[15] The employment growth rate described here was determined on the basis of full-time equivalents (FTEs). As opposed to showing the number of persons in gainful employment, this concept maps actual labour demand. FTE employees are calculated from the number of full-time employees (including business owners) plus the number of part-time employees multiplied by the factor 0.5. Apprentices are not included.

[16] Research- and development-intensive (R&D intensive) manufacturing is defined as those manufacturing sub-sectors whose average research and development intensity (R&D intensity: ratio of R&D expenses to turnover) is higher than 3.5%. The definition is based on what is known as the NIW/ISI list of research-intensive industries and services, which in turn follows the Federal Statistical Office's 'Classification of Economic Activities (WZ 2008)'. Engineering, medical technology, instrumentation and control technology, vehicles, pharmaceuticals and office equipment are of particular quantitative importance.

[17] Other services includes many SME retailers or wholesalers. Among them are also businesses operating in the areas of nursing, training, culture and sport.

[18] Multi-year average employment growth in the construction sector is 1.4%.

[19] The Volume of Tables relating to the KfW SME Panel is available at: www.kfw-mittelstandspanel.de (in German only).

[20] The long-term average turnover growth rate of large SMEs (companies with 50 or more FTE employees) is 4.2%.

[21] Profit margin is defined as the ratio of pre-tax profit to turnover. The figure shows the mean values of profit margin weighted against turnover.

[22] Knowledge-intensive services comprise service sub-sectors with an above-average share of university graduates in total employment, or services with a strong focus on technology. These include, for example, architecture and engineering firms, law firms, tax and management consultancies, data processing and telecommunication services. The definition is based on what is known as the NIW/ISI list of research-intensive industries and services, which in turn follows the Federal Statistical Office's 'Classification of Economic Activities (WZ 2008)'.

[23] The equity ratio is defined as the quotient of equity and balance sheet total. The figure shows the mean values of the equity ratio weighted against the balance sheet total. The calculations apply only to enterprises required to draw up balance sheets.

[24] Gerstenberger, J. (2018), Hohe Eigenkapitalquoten im Mittelstand: KMU schätzen ihre Unabhängigkeit (*High equity ratios: SMEs value their independence* – in German only)**,** Focus on Economics No. 206, KfW Research.

[25] In general, analyses at enterprise level very often operationalise or approximate labour productivity as turnover in relation to an employment indicator (number of employees, full-time equivalents, working hours, etc.). One reason is that the available microdata usually do not contain any robust information on enterprises' gross value added. However, data from the German Federal Statistical Office suggest that the turnover-based labour productivity measure used here empirically closely approximates the variant with gross value added – which is more convincing from a theoretical perspective. Labour productivity is measured here as indexed values (2003 = 100) of turnover per full-time equivalent employee. Missing data on turnover and employees were imputed. Adjusted and extrapolated values. For details on productivity growth in SMEs see Gerstenberger, J. (2017), Produktivität des deutschen Mittelstands tritt auf der Stelle – Zeit zu handeln (*Productivity of German SMEs has flatlined* – time to act – in German only) Focus on Economics No. 172, KfW Research – Schwartz, M. (2016), KfW SME Panel 2016: SMEs are using their financial buffers – but not boosting investment, KfW Research.

[26] Measured as the difference of absolute labour productivity between large SMEs and small SMEs in relation to the value of large SMEs.

[27] Micro-businesses (companies with fewer than five FTE employees) achieve approx. EUR 120,000 on average, large SMEs with 50 and more employees, on the other hand, average EUR 186,000 per FTE employee.

[28] In order to determine the absolute volumes of net investment overall in both the SME and the corporate sector in Germany, KfW SME Panel data were coupled with investment data provided by the Federal Statistical Office on the entire corporate sector. The investment and depreciation volume in the SME sector is surveyed in the context of the KfW SME Panel.
Total corporate investment is calculated by adjusting gross fixed capital formation for investment by the state and in residential construction. Depreciation in the corporate sector is calculated in the same way. The underlying data were obtained from Fachserie 18, Reihe 1.4 of the Federal Statistical Office. The investment volume as well as the depreciation volume of large enterprises (with an annual turnover of more than EUR 500 million) are determined by subtracting the volumes calculated for SMEs from the corresponding values for the entire corporate sector.

[29] Gross fixed capital formation in the corporate sector comprises private sector investment in machinery and equipment plus construction (without residential construction).

[30] The major revision of national accounts and the associated modification to the concept of investment has been applied since the 2015 reporting period of the KfW SME Panel. Of particular relevance for enterprises is expenditure on research and development, which is now reclassified as gross fixed capital formation since implementation in 2014 of the European System of National and Regional Accounts of 2010 (ESA 2010). All time series of national accounts that have been revised for conceptual reasons for the period from 1991 are available. This has led to an increase in the volumes of gross fixed capital formation and depreciation across the entire economy in comparison with previously reported figures. For reasons of data collection, the revision cannot be applied to the investment and depreciation volumes of SMEs. The reported volumes thus do not change in comparison with earlier years. Instead the volumes have been modified for the entire corporate sector, the overall economy and, consequently, also for large enterprises. Due to the limitations on the collection of data pertaining to the changed investment concept, the volumes relating to SMEs tend to be underestimated and, accordingly, those of large enterprises overestimated.