

SME DIAGNOSIS 2019

Expansion of the digital infrastructure
key to success for SMEs





Three out of four enterprises in Germany are customers of the Sparkassen-Finanzgruppe (Savings Banks Finance Group). Giving advice to and providing financing for small and medium-sized enterprises is part of the core business of Savings Banks and Landesbanken in Germany. To this end, they use their strengths: understanding their customers and their specific circumstances and full coverage of all of Germany's regions.

SME Diagnosis 2019 is the nineteenth annual analysis conducted by Deutscher Sparkassen- und Giroverband and provides representative data on the current status and future prospects of small and medium-sized enterprises in Germany.

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HELMUT SCHLEWEIS
President of the German Savings Banks Association



“SMEs will remain a vital part of Germany. They are reliable employers and an anchor of stability for our economy.”

Berlin, November 2019

Ladies and Gentlemen,

One of the German economy's great strengths is its decentralised structure with small and medium-sized enterprises. SMEs have successfully made use of the recent strong years. With an equity base of nearly 40 percent, the enterprises are prepared for a possible economic slowdown.

The challenge will now be to structurally maintain this strength, as strong small and medium-sized enterprises make a significant contribution to equal living conditions, a fair distribution of opportunities and economic stability in the country.

Under the conditions of the digital economy, much of what has been taken for granted in the past will be called into question in the future. This also applies to Germany's digital infrastructure. Today, Internet access is a crucial factor for the development of business sites, personal life choices – and the financial success of small and medium-sized enterprises.

Innovative enterprises are transferring their current business models to the digital economic world – and are doing so successfully. Due to technological advances, assets can be used more and more efficiently. As demonstrated by the Savings Banks Finance Group's S-SME Fitness Index 2019, one euro in fixed assets generated approx. EUR 1.70 in sales revenues in 2004. In 2018, the amount had increased to EUR 2.20. Germany will need to continue with such productivity gains as these in the future.

Germany's patchy broadband coverage has therefore become the Achilles heel of economic growth. This affects not only SME employers, but also savings banks and Landesbanken. They want to help their customers save time and travel – and for this purpose, they need a state-of-the-art network infrastructure. They can only

be present locally with bricks-and-mortar branches in communities with a sufficient level of economic activity.

“Enterprises depend on access to high-speed Internet. Only then will it be possible to make rural regions more attractive again and to safeguard jobs.”

For this reason, savings banks and Landesbanken are committed to financing the expansion of digital infrastructure within their business territories – in some cases also as data network operators. In this way, they make a sustainable contribution to the development of future prospects in communities.

The latest “SME Diagnosis 2019” describes and assesses the challenges for small and medium-sized enterprises in an increasingly digital business world. The trend analysis is based on a survey conducted among savings banks’ SME experts. The statistical analyses are based on the internal balance sheet and P&L data of approx. 300,000 small and medium-sized enterprises – the largest pool of anonymised financial statements data in Germany.

With the “SME Diagnosis”, savings banks and Landesbanken – the most important financial partners of SMEs – make their compiled information available to the public.



59%

of small and medium-sized enterprises are not satisfied with the digital infrastructure in their region



40

thousand euros gross profit per employee in 2018



52%

of the SMEs plan to invest in the digitalisation of their enterprise in the next 3 years



Return on sales improved in 2018 (as a percentage)

6.1



6.2



39%

equity ratio in 2018

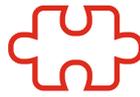


2 S-SME FITNESS INDEX 2019

Six quick facts



S-SME Fitness Index reaches new high.
S-SME Fitness Index has increased to 102.1 points. Starting from this high level, the index is expected to decline only slightly in 2019 and 2020.



Strong investments in fixed assets.
The steady growth of revenues in the past few years has led to high capacity utilisation. The response to this development has been high investment in fixed assets, which increased once again in 2018.



Revenue growth rates only slightly weaker.
Revenue growth in 2018: 5.1 percent. Growth rates in 2019 and 2020 will be only slightly lower: approx. 4 percent.



High equity ratios, robust financing structure.
Small and medium-sized enterprises believe in the future and continue to invest heavily in 2019: In the first half of 2019, savings banks committed a total of EUR 31 billion in investment loans. High equity ratios provide for a robust financing structure.



Domestic economy continues to be an engine of growth.
Robust private consumer spending, sustained strong growth in the construction sector, and continuing willingness to invest ensure stable economic development.



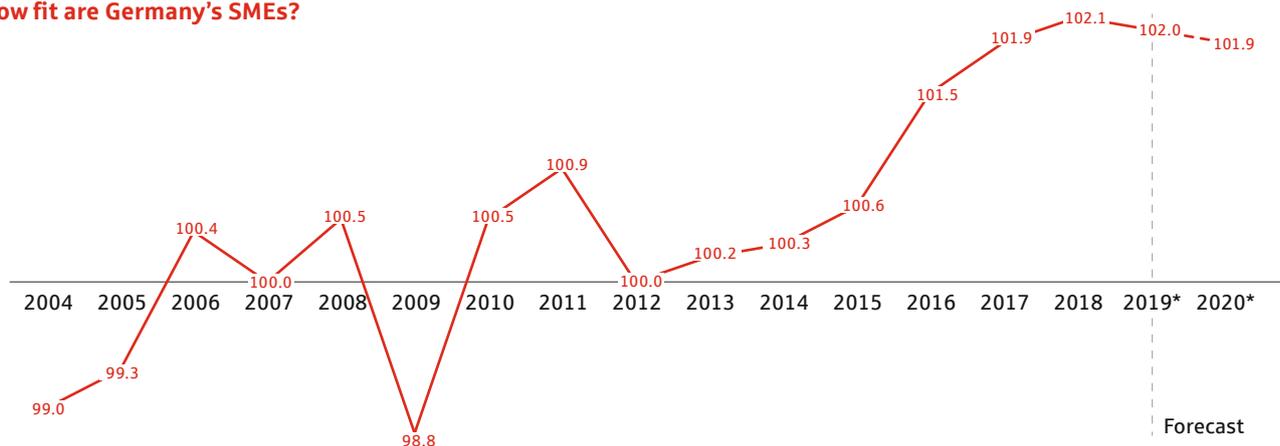
No bubble in SME financing.
“Zombie enterprises” are not a phenomenon in Germany’s SME sector. High lending standards have prevented the development of a dangerous bubble in SME financing despite steadily decreasing financing costs. Enterprises are not kept afloat artificially by offering an excessive supply of low-cost loans.

Powerhouse or couch potato?

“**Zukunft Mittelstand**” (“The Future of SMEs”) is a survey based on an analysis of the key performance indicators of business clients and of the savings banks’ loans to enterprises, as well as the DSGV’s sector forecast. The study examines the business performance and the future of Germany’s small and medium-sized enterprises. The S-SME Fitness Index is a key component that measures the long-term performance, productivity, innovativeness and financial robustness of SMEs.

Powerhouse or couch potato? The **S-SME Fitness Index** gauges the level of fitness of Germany’s SMEs. What are the enterprises capable of achieving? How productive are the enterprises and their employees? And how well prepared are they for the future? Answers to these and other questions are provided by analysing selected KPIs that the DSGV’s Branchendienst derives from approx. 300,000 anonymised balance sheets per year. The S-SME Fitness Index, which is compiled on the basis of these data, provides information on the current condition and sustainability of Germany’s SMEs.

How fit are Germany’s SMEs?



Average fitness 2004 to 2014 = 100; enterprises with an annual turnover of up to €250 million

* Forecast values for 2019 and 2020.

Source: DSGV-Branchendienst

S-SME Fitness Index 2019 in detail



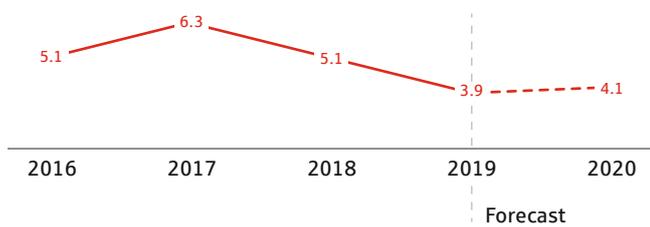
Performance:

Business and profits

How attractive are markets, and how successfully do enterprises operate in the markets?

How fast are enterprises growing?

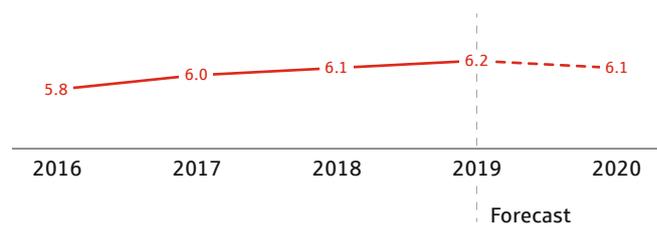
Turnover growth as a percentage*



* Change in turnover vs. previous year

How profitable are enterprises?

Return on sales as a percentage*



* Operating result relative to turnover



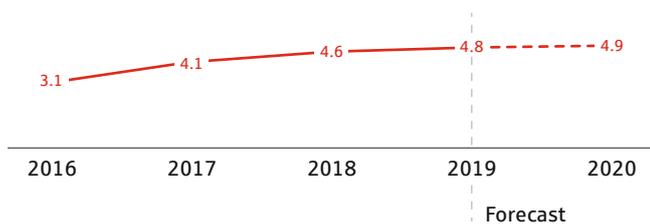
Strength:

Investment and innovation

How much do enterprises invest, and how innovative are they?

How much do enterprises invest?

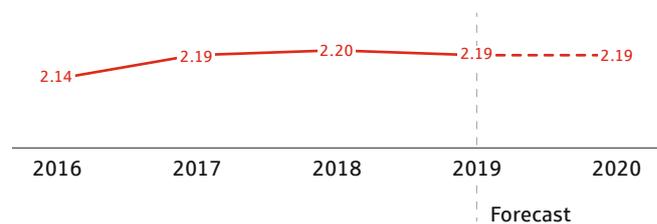
Investment growth as a percentage*



* Fixed asset growth vs. previous year.

How many euros in turnover are generated with one euro of fixed assets?

Asset efficiency in euros*



* Turnover relative to fixed assets

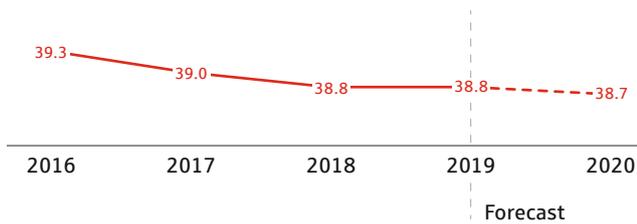


**Resilience:
Stability and sustainability**

How robust is the financing of enterprises, and how attractive are they for their owners?

How strong is the financial stability of enterprises?

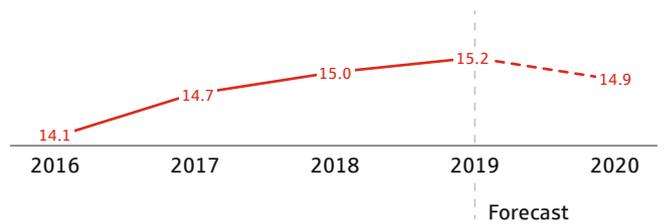
Equity ratio as a percentage*



*Equity relative to the balance sheet total. Calculation based on mean values since winter 2018 (previously: median values).

How good is the return on capital?

Return on equity as a percentage*



* Operating result relative to equity

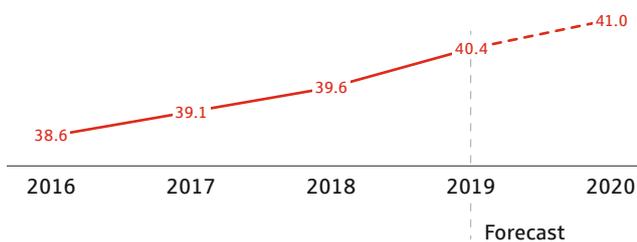


**Team spirit:
Employees and their contribution**

How productive are employees, and what is their contribution to the enterprises' success?

What is an individual employee's contribution to the enterprise's success?

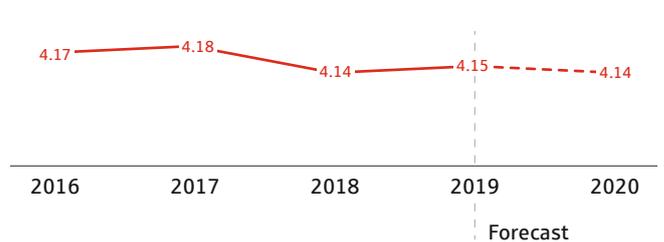
Gross profit per employee in thousand euros*



*Turnover less cost of materials and personnel expenses relative to the number of employees.

How many euros in turnover are generated with one euro of personnel expenses?

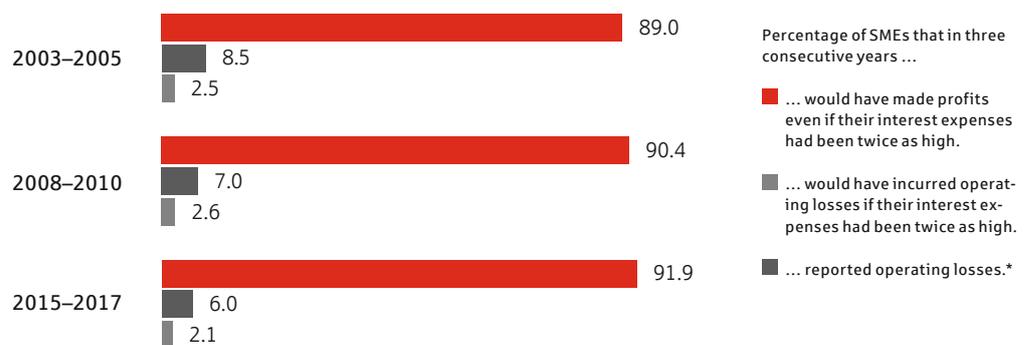
Employee productivity in euros*



*Turnover relative to personnel expenses

Focus: No bubble in SME financing

Figures as percentages



Enterprises with an annual turnover of up to EUR 250 million.

* Earnings before taxes, excluding subsidies or other loss compensation; including public enterprises (e.g. local public passenger transport), farmers, enterprises with project business (e.g. property developers) and holding companies.

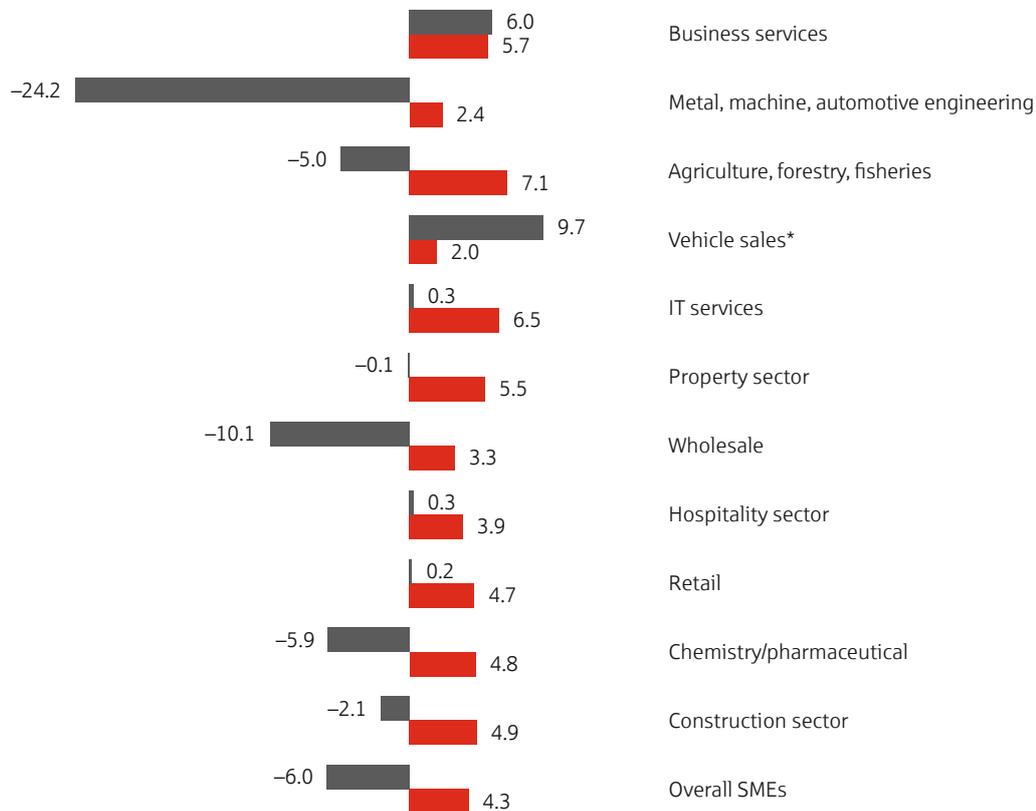
Source: DSGV-Branchendienst

The zero-interest-rate policy that has been pursued by the ECB for many years has not created a dangerous bubble in SME financing. Non-competitive enterprises that are kept afloat artificially by supplying them with low-interest loans (referred to as “zombie enterprises”) are not a phenomenon in Germany’s SME sector. In the business world, it is not unusual for enterprises to incur short-term operating losses; in many cases, such losses have nothing to do with failed business models. Examples include public enterprises that receive subsidies and enterprises operating in the project business during the start-up phase. The percentage of enterprises with operating losses has decreased from 8.5 to 6 percent since 2003. Contrary to fears, the percentage of borderline cases – i.e. enterprises that are just barely profitable owing to the low interest rates and that could not cope with a higher interest level (referred to as “zombie enterprises”) – has also decreased.

In other words: savings banks have a high level of risk awareness and do not grant loans imprudently to finance risky business models. The volume of loans granted by savings banks to enterprises is growing steadily. In this context, high lending standards have prevented the development of a dangerous bubble in SME financing despite steadily decreasing financing costs.

Resilient SMEs: Sales performance and return on sales during the 2009 crisis

Figures as percentages



■ Sales performance 2008–2009
 ■ * Return on sales in 2009

* One-off effect: car scrapping bonus
 Enterprises with an annual turnover of up to EUR 250 million.

Source: DSGV-Branchendienst

The small percentage of vulnerable enterprises is evidence of the strong resilience of Germany's SMEs. The risk of an economic downturn remains high. It is useful to look back at the year 2009 to assess the effects of a possible new crisis.

At that time, significant slumps in revenues were observed in many sectors (see chart). As export-intensive sectors, mechanical engineering and automotive engineering were hit hardest. Nevertheless, it is worth noting that no sector fell into the red overall. The sectors' return on sales remained positive across the board. This was attributable to the SME's high degree of flexibility and substantial reserves. Today – ten years after the big crisis – SMEs are more robust than ever before. The high profits earned by SMEs in the past few years have been consistently reinvested in their own businesses. This has resulted in high equity ratios that serve as a safety buffer which cushions losses.

The latest key figures of savings banks 2019

German SMEs show no signs of reluctance to invest and no fear of the future. Over EUR 44 billion in new loan commitments made to business enterprises in the first half of 2019 – of which EUR 31 billion for investments – demonstrate that SMEs continue to view the future with confidence. This means that loan growth was once again slightly higher than in the same period of the previous year. The total portfolio of loans for home purchases increased by EUR 4.6 billion, while the portfolio of investment loans grew by EUR 8.5 billion. This suggests that SMEs expect only a short economic slowdown. The above-average growth of commercial housing loans shows that the construction sector has not lost any of its momentum. However, the rest of the economy is also on a path of expansion when measured in terms of the growth of loan portfolios (see chart, p. 13).

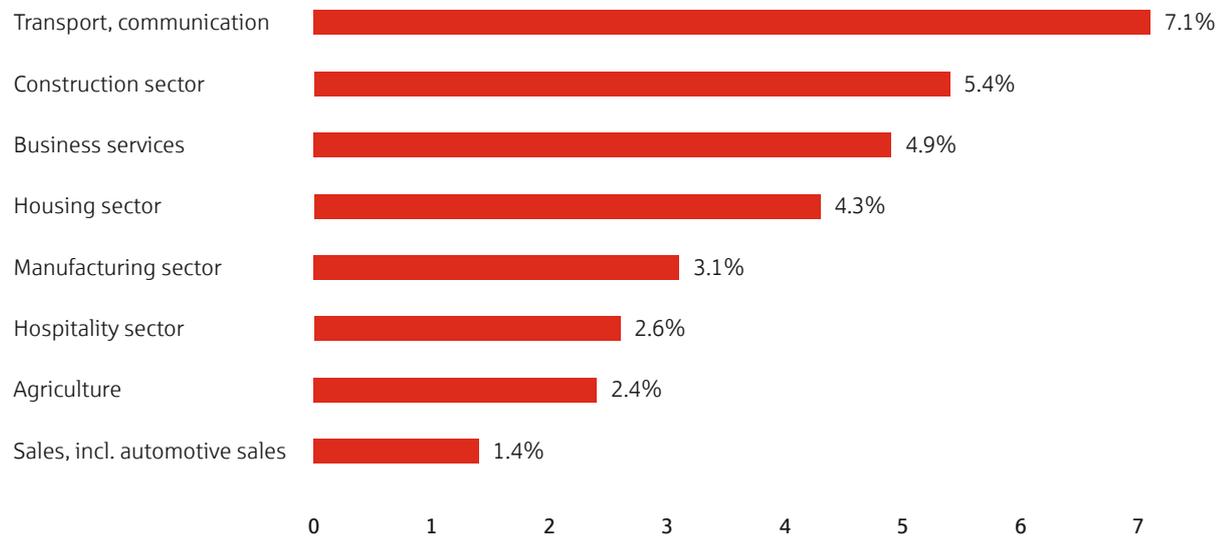
Growth of loans to enterprises*



*Loan portfolios of savings banks in Germany

Source: DSGV-Branchendienst

Lending to selected sectors*



*Year-to-date portfolio changes at the end of June 2019, business of savings banks

Source: DSGV



S-SME Fitness Survey 2019

What are the concerns of Germany's SMEs? What are the current trends in terms of investment and financing? These and other topics are discussed by the savings banks' customer relationship managers in thousands of interviews every year with Germany's small and medium-sized enterprises. Three-quarters of all enterprises in Germany have business relationships with the Savings Banks Finance Group. The S-SME Fitness Survey summarises the findings of SME experts in all German savings banks. Insights from the market leader: succinct, up-to-date, to-the-point.

Topical issue: Response to economic slowdown

After years of economic growth, Germany's economy has begun to slow down. How are Germany's SMEs responding to this new situation? Are the enterprises actively preparing for a downturn? Are they already adopting specific measures? Our survey explores this topic in more depth.



1. Risk of crises by sector

The question

How great is the risk of a downturn in the various sectors?
Where do the opportunities outweigh the risks?
Where do the risks outweigh the opportunities?



The experts' answers

The majority of the savings banks' financing experts interviewed stated that the risks currently outweigh the opportunities in the industrial sectors. On the other hand, the opportunities outweigh the risks in consumer-related sectors, the construction sector and in the services sector.



2. Crisis management measures

The question

Are business enterprises already developing specific measures to prepare for a potential downturn (e.g. workforce reduction, cutting expenditure, increasing flexibility, outsourcing)?



The experts' answers

50 percent of the respondents state that enterprises are already developing specific measures to manage a potential downturn (e.g. workforce reduction, cutting expenditure, increasing flexibility, outsourcing).



3. Competitive position

The question

How well are business clients positioned in their respective markets/ segments vis-à-vis their competitors in terms of their technology, product and service portfolios, and their international presence?



The experts' answers

34 percent state that their enterprises rank among the top third of their sector. **57 percent** of the respondents state that their enterprises hold mid-field positions. Only **9 percent** state that their enterprises range in the lower third of their sector.



4. Investment patterns

The question

On the 2018 balance sheets of our business clients, we noted a steep rise in investments and a significant increase in fixed assets. In your view, how have investment patterns developed in 2019?



The experts' answers

According to **75 percent** of the respondents, the amount invested by enterprises in 2019 will be similar to 2018. **Eight percent** expect investments to be even higher in 2019 than in 2018. **Only 17 percent** of the respondents expect investments to be lower in 2019 than in the previous year.

3 FOCUS TOPIC

Broadband expansion in rural areas – foundation for the digitalisation of SMEs

3.1 Preface

State-of-the-art and efficient infrastructure is the backbone of any successful national economy. The word “infrastructure” is of military origin, and refers primarily to immovable buildings and facilities used to mobilise and keep armies ready. Today, the concept is much wider. It covers not only a country’s road and energy networks (technical infrastructure) but also its educational and health systems (social infrastructure) and its well trained skilled workforce (human resources).

In the past, road and railway networks played a vital role in the development of many national economies. The development of the west coast of the United States in the 19th century, for instance, was possible only with the construction of railway lines and transcontinental routes. Today, not only the transport infrastructure but also the expansion of the digital infrastructure play an important role.

Broadband networks, consisting of fibre-optic cables and radio stations, provide coverage throughout the country and form the basis for the implementation of digital applications such as autonomous driving, Industry 4.0 and telemedicine. These new technologies promise significant revenue and efficiency potential. For this reason, the availability of broadband connections has become an important location criterion for enterprises and subsequently influences the economic development of entire regions. This affects not only local businesses but also the living conditions of the people living in the community.

Therefore, the focus topic of this year’s SME Diagnosis is Germany’s progress in its nationwide coverage of high-speed internet connections (broadband networks) and the effects it has on the development of rural regions in general and SME business clients of savings banks in particular. At the same time, the focus topic will also shed light on the ways in which the various institutions of the Savings Banks Finance Group are engaged in the expansion of the network and what can be done to improve the political environment in order to make Germany’s digital infrastructure more sustainable.





3.2 Summary

Germany draws its economic power, as well as its social stability, from its balanced, decentralised structure. Small and medium-sized enterprises account for the largest share of the total economic value added in Germany. 50 percent of Germany's economic output is generated in rural regions.

Nevertheless, the gap in living conditions between metropolitan regions and rural communities is growing. Aside from the lack of income opportunities and lower tax revenues, the much poorer coverage of rural regions with high-speed Internet also plays a role.

The infrastructure currently available in rural communities no longer meets the requirements of small and medium-sized businesses. 65 percent of the savings banks' SME clients in rural areas are not satisfied with the current coverage of high-speed Internet in their regions. In nearly one-third of the savings banks' business territories, business clients have therefore considered or already implemented a relocation of their registered office. This was a finding of a recent nationwide survey conducted among the savings banks' SME experts.

This major discrepancy between urban and rural regions has particular implications for enterprises in rural areas. They cannot benefit from opportunities provided by digitalisation for more innovation, growth and employment to the same extent as competitors in German metropolitan regions or abroad. In an age of globally networked economic structures, the availability of broadband connections has become an important location criterion for enterprises.

The institutions of the Savings Banks Finance Group – including the large number of regionally operating savings banks and Landesbanken as well as their subsidiaries – support the broadband rollout in many ways. Hence, they make important contributions to the sustainability of rural regions and the small and medium-sized enterprises based there. At the same time, the savings banks themselves – as medium-sized credit institutions – are also dependent on high-speed Internet as these Internet connections form the basis for many digital applications, such as state-of-the-art payment methods and video-based online authorisation services.

The analysis of this year's SME diagnosis shows that joint efforts involving all the relevant stakeholders will be necessary to ensure the competitiveness of the digital infrastructure and, hence, of enterprises, in particular in rural regions. In this context, policymakers have an important role to play: they need to reduce or completely eliminate the obstacles that hinder broadband rollout measures in rural regions.

65 percent of the savings banks' SME clients in rural areas are not satisfied with the current high-speed Internet coverage in their regions.

In an age of globally networked economic structures, the availability of broadband connections has become an important location criterion for enterprises.

3.3 Lack of broadband in rural areas – effects on SMEs and savings banks

A recent study has shown that there are still significant discrepancies in living conditions between urban and rural areas in Germany.

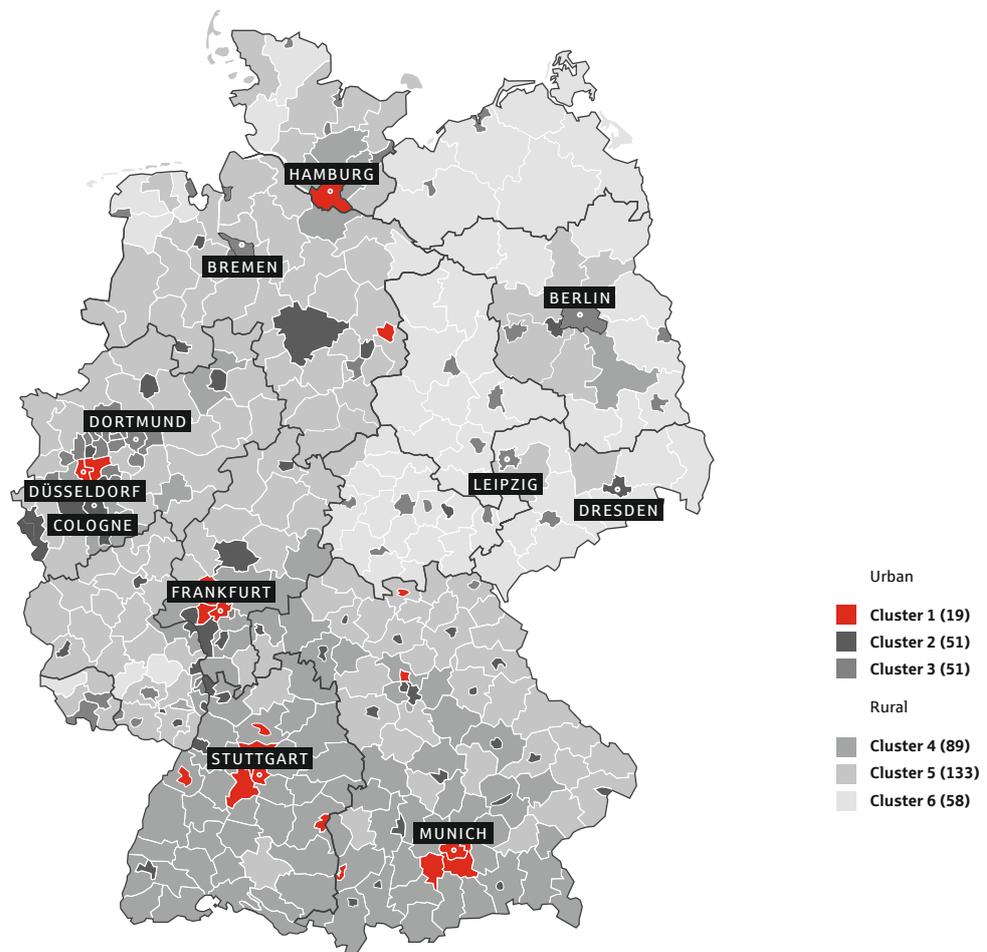
In this context, the development of public infrastructure plays an important role.

A recent study¹ has shown that there are still very significant discrepancies between the living conditions in Germany's 401 independent cities and counties. The criteria taken into consideration included the disposable income of households, the financial scope of municipalities, and the accessibility of public institutions. Another important criterion was high-speed Internet coverage. In the final analysis, the regions were subdivided into various clusters. As a result, roughly three urban clusters (clusters 1 to 3) and three rural clusters (clusters 4 to 6) have emerged. The assignment to a specific cluster was based on the average of all the criteria included in the analysis.

The result shows that there is still a clear disparity in the living conditions of metropolitan regions and rural communities (see chart G01). While shops, educational institutions and hospitals are usually easily accessible in big cities – also by using public transport – people living in rural areas often have to travel longer distances and are more dependent on private means of transport.

Disparate living conditions in Germany – urban vs. rural areas

G01



Source: Study "Teilhabatlas Deutschland" of the Berlin Institute for Population and Development/Wüsterrot Foundation 2019

However, there are also disparities – which in some cases are significant – between the cities in clusters 1 to 3. In cities with the worst living conditions (cluster 3), for instance, the percentage of welfare recipients is more than twice as high (16.1 percent) as in the cities in cluster 1. Disposable income and tax revenues in cluster 3 are only 71 percent and 48 percent, respectively, of comparable figures in cluster 1.

There are also discrepancies in living conditions between various cities.

There are discrepancies in living conditions – which are in some cases significant – not only between urban and rural areas, but also between various metropolitan regions.

The cities grouped in cluster 3 are scattered throughout the country, except for southern Germany, where only the city of Hof in the region of Upper Franconia falls within this cluster. Many of the big cities in this cluster have undergone a difficult process of structural change or are regularly in the limelight due to their socio-economic problems. Most of these cities are located in regions like the Ruhr area, the federal states in the eastern part of Germany, but also in northern Germany, in the Palatinate and in the Saarland regions, according to the study's findings.

Cities that have been subject to a hard process of structural change are particularly striking.

In the study, particular attention is drawn to the poor access to high-speed Internet in rural areas. Some municipalities and counties have launched initiatives of their own to address this problem and have assumed responsibility for the broadband roll-out in their administrative regions on their own.

Rural regions have major shortcomings, in particular regarding broadband coverage.



Broadband is a term that covers various kinds of technology.

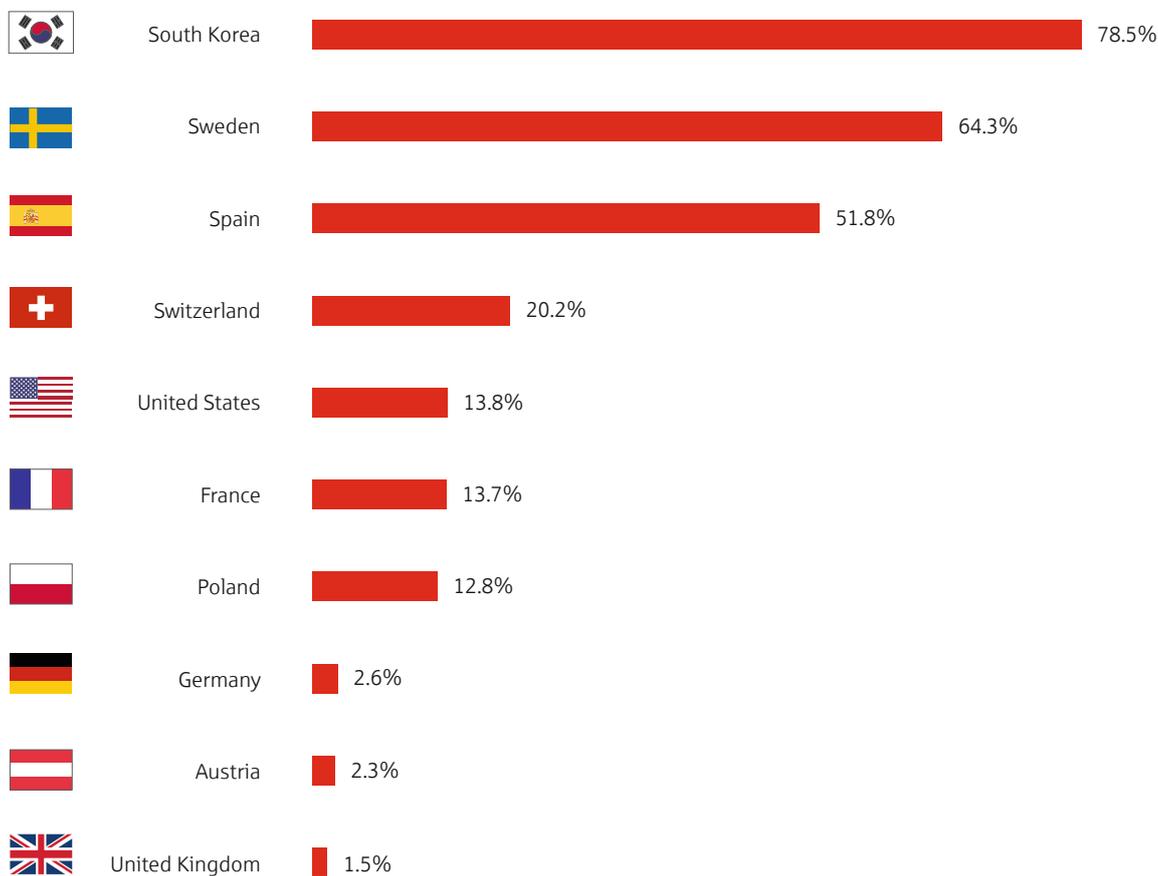
The term “broadband” refers to a digital communication network – irrespective of the technology used – that guarantees a minimum transmission rate of 1 Mbit/s (1 million bits per second). However, the latest technological applications require many times this rate, which is why the development of a high-performance network in the gigabit range (> 1,000 Mbit/s) will be crucial in the long term.

Germany lags behind other countries with regard to broadband roll-out.

Germany lags behind many other industrialised nations in terms of its broadband roll-out. According to the OECD, the share of FTTH fibre-optic networks in Germany amounted to no more than 2.6 percent in 2018. In countries like Spain, Sweden and South Korea, the share of these networks is more than 50 percent (see chart G02). For a country that owes a large part of its economic success to competitive exports and innovations, this is not good news.

International comparison of the share of optical fibres in all fixed-line broadband connections*

G02



* Selected OECD countries; as of June 2018.
Source: OECD

<https://de.statista.com/infografik/3553/anteil-von-glasfaseranschluesen-in-ausgewaehlten-laendern/>

One principal reason for this plight is the current slow pace of the roll-out of fibre-optic networks to the home (FTTH – Fibre to the Home). Fibre-optic networks permit transmission rates in the gigabit range and therefore form the core of the rollout of digital infrastructure in many countries.

The main reason is the low share of fibre-optic cables in fibre-to-the-home (FTTH) connections.

Broadband availability in Germany – Urban vs. rural areas

T01

Type of community	≥ 1 Mbit/s	≥ 2 Mbit/s	≥ 6 Mbit/s	≥ 16 Mbit/s	≥ 30 Mbit/s	≥ 50 Mbit/s	≥ 100 Mbit/s
Large major city	100.0	100.0	100.0	99.1	97.0	94.5	88.6
Smaller major city	100.0	100.0	100.0	98.4	95.4	93.5	83.6
Larger medium-sized city	100.0	100.0	99.9	97.2	94.8	92.9	80.1
Smaller medium-sized city	99.9	99.9	99.7	94.5	90.6	87.0	70.1
Larger town	99.9	99.8	99.4	90.2	84.2	78.1	57.9
Smaller town	99.6	99.5	98.5	83.0	76.0	66.1	39.9
Rural community	99.4	99.3	98.1	77.7	70.3	56.4	23.4

Source: TÜV Rheinland, Bericht zum Breitbandatlas 2018

In the past few years, efforts in Germany have been primarily focused on optimising existing copper lines – some of them over 100 years old – which were originally installed for analogue telephony. Vectoring and super-vectoring technology enables network operators, above all Deutsche Telekom, to reach transmission rates of up to 250 Mbit/s. However, the performance of this technology very much depends on the distance over which the data needs to be transmitted. Since the distance between the distributor station and the end-user is often longer in rural regions than in cities, the increased use of vectoring in Germany has put rural regions at a disadvantage in terms of high-speed Internet coverage.

In the past, Germany has mainly relied on optimising its copper wire connections.

The low share of fibre-optic connections is the cause...

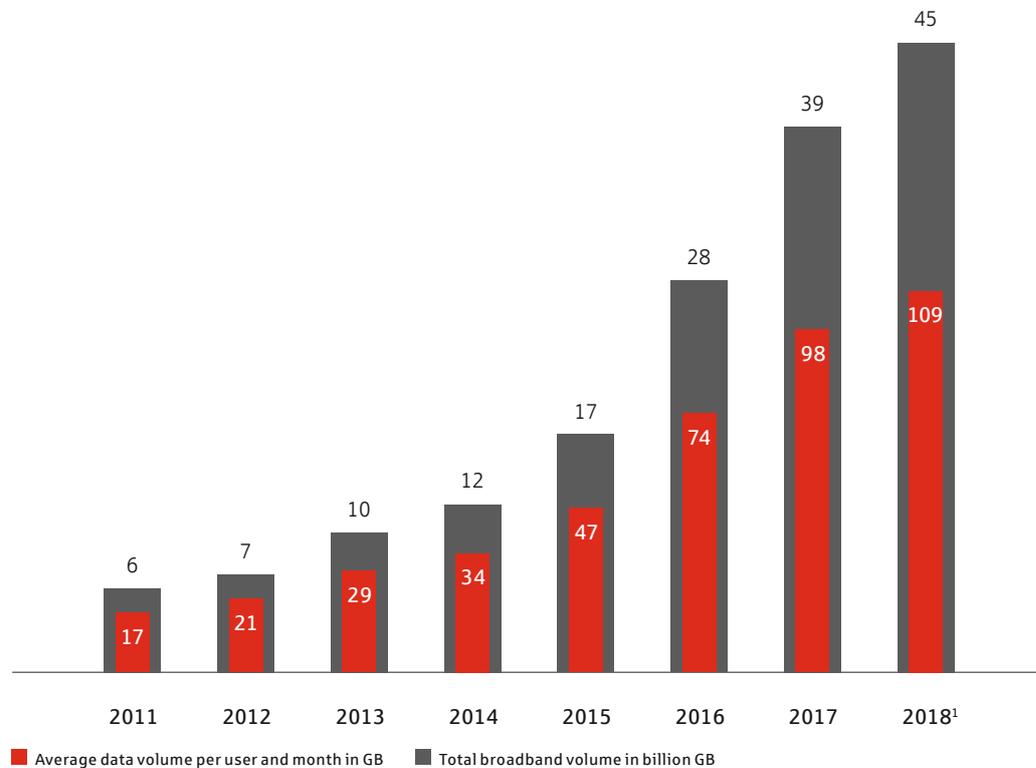
In an age of globally networked economic structures, the availability of broadband connections has become an important location criterion for enterprises.

As a result, rural regions lag substantially behind metropolitan regions, in particular with regard to high transmission rates that could be achieved by fibre-optic technology. While nearly full availability is achieved in both cities and rural areas in a transmission range of up to approx. 16 Mbit/s, transmission rates of more than 100 Mbit/s are available in rural communities at a rate of only slightly more than 20 percent. In small towns, such transmission rates were achieved at an average rate of only approx. 50 percent (see table T01).

... of lower transmission rates, above all in rural regions.

Broadband use by private households in Germany

G03

¹ Forecast

Source: Bundesnetzagentur, Annual Report 2018

Slow Internet impedes the development of enterprises and also affects people's quality of life.

This major discrepancy between urban and rural areas has implications, in particular for enterprises in rural regions. They cannot benefit from opportunities provided by digitalisation for more innovation, growth and employment to the same extent as their competitors in German metropolitan regions or abroad. In an age of globally networked economic structures, the availability of broadband connections has become an important location criterion for enterprises.

However, the demand for high-speed Internet is growing rapidly, in particular among private users.

However, private households are also affected because their data transmission needs are rapidly growing due to the use of streaming services and cloud applications. While the average data volume per household was still at 17 GB per month in 2011, Germany's Federal Grid Agency predicted as much as 109 GB per month for 2018 (see chart G03). Germany's Broadband Association assumes that the data volume of private households will continue to grow and will amount to eight times the current level by the year 2025. By then, the average data transmission volume per month will be 825 GB per connection, which will require download speeds of up to 1 Gbit/s. Networks in Germany are still a long way from this point.

Poor high-speed Internet coverage can hinder migration to rural regions.

Insufficient coverage of high-speed Internet can lead to an increased exodus of people from rural regions to cities. At the same time, it deprives many people – in particular young families – of the opportunity to enjoy the advantages of rural life, such as clean air, low noise pollution and traffic volumes or lower property prices and to “move to the countryside” in order to work from home. According to a survey conducted by the Baukultur Foundation in 2015¹, 45 percent of the German population would live in the countryside if they were free to decide where to live regardless of their financial circumstances.

¹ Source: <https://www.bundesstiftung-baukultur.de/presse/45-der-deutschen-wollen-aufs-land>

Speaking on behalf of Germany's counties, Professor Dr Hans-Günter Henneke, Managing Member of the Executive Committee of the Association of German Counties, summed this up as follows: "The public policy remit for digital services of general interest encompasses all the digital support that will enable citizens, enterprises and craft enterprises to benefit considerably from the opportunities provided by digitalisation. Digitalisation can therefore help to meet the challenges of demographic change and to make rural areas more attractive with a better standard of living."¹

For small and medium-sized enterprises as well as local authorities, high-speed Internet connections form the basis for an array of new technologies. On-demand mobility and autonomous driving can help to solve public transport problems in the countryside. Initial pilot studies are already being conducted in Bavaria and Brandenburg. In the field of agriculture, soil cultivation and harvesting methods can be improved by combining weather, soil, plant and machine data. The use of smaller agricultural robots to replace large agricultural machines is already being tested. Digital construction sites, the use of drones in forest management, and telemedicine – there is a whole range of completely new opportunities to achieve productivity gains for business enterprises and local authorities in rural regions. However, this requires an efficient national digital network.

Rural communities are trying to counteract this development by providing a wider range of digital services.

However, they are also dependent on the availability of high-speed Internet connections.

For small and medium-sized enterprises in rural regions, high-speed Internet connections form the basis for an array of new technologies.

A survey conducted in 2017 by the Association of German Counties among 294 counties showed that 34 percent of the respondents saw the lacking or inadequate broadband rollout as the greatest obstacle to digitalisation in Germany's counties. In a survey recently conducted among more than 300 savings bank SME experts, more than 80 percent of the respondents saw a clear connection between their SME clients' business success and access to high-speed Internet. At the same time, however, more than 60 percent of the SMEs are dissatisfied with the current broadband coverage. In rural regions, as many as 65 percent of the SMEs are dissatisfied. In nearly one-third of the savings banks' business territories, business clients have therefore considered or already implemented a relocation of their registered office. Part 4 of this brochure provides more detailed information on the results of the survey.

Savings banks – as medium-sized credit institutions – are also dependent on high-speed Internet connections. New state-of-the-art online applications such as Internet banking, authorisation and identification services and payment methods, for instance, need reliable high-speed Internet connections around the clock.

Neither local authorities nor enterprises in rural regions are satisfied with the current broadband coverage.

¹ Source: Der digitale Landkreis – Herausforderungen – Strategien – Gute Beispiele; Vol. 136 of the publications of the Verein für Geschichte der Deutschen Landkreise e. V.



3.4 Business and financing models for broadband expansion projects

Digital infrastructure includes not only cable ducts and radio masts (passive network infrastructure)...

... but also systems for the transmission of signals (active network infrastructure).

An efficient digital data network comprises two parts: passive and active network infrastructure. Passive network infrastructure includes, on the one hand, cable ducts with fibre-optic cables and, on the other hand, radio masts for mobile communication transmission. Active network infrastructure includes all devices that are used together with the passive components to transmit and receive the necessary data signals. While the active network infrastructure is usually planned, installed and operated by telecommunications companies, the development of the passive infrastructure involves local authorities, special-purpose associations and municipal utilities, in particular in rural regions. Within the framework of the auction of 5G mobile communications frequencies, which was completed in June 2019, the German government also plans to participate in the development of passive network infrastructure via the mobile infrastructure company MIG (Mobilfunkinfrastrukturgesellschaft) by building cell towers on properties owned by the German government.

Passive infrastructure poses the greatest challenges when financing the broadband roll-out. In addition to high volumes and long timelines, the main problem is that the earnings generated by these projects are very low during the initial phase.

There are different operator concepts...

The owners of the passive infrastructure (network tier 1) usually provide the infrastructure for a fee to the operators of the active components (network tier 2) and to the providers of Internet services (network tier 3). The fee is usually financed from the Internet providers' retail business. Business models differ in terms of how the three network tiers are distributed among the providers. If all three tiers are in the hands of one company, for instance, the model is referred to as a fully integrated business model. If the network tiers are owned by three different providers, the model is referred to as a fully separate business model. Other hybrid versions are also possible.

... and also various financing options.

Passive infrastructure poses the greatest challenges when financing the broadband roll-out. In addition to high volumes and long timelines, the main problem is that the earnings generated by these projects are very low during the initial phase. Earnings usually begin to flow when retail customers are connected to the networks. In addition, there are further risks like rising construction costs, unpredictable user numbers, lack of exclusivity of the network¹ and the inability to use the investment asset as collateral for loans.

¹ Due to statutory requirements, third parties may have the right to request the additional installation of their own passive network infrastructure in the case of public, non-funded roll-out projects. This is referred to as "strategic superstructure" and may lead to a reduction of the originally planned user numbers and the associated revenues due to the new competitor.

As a result, the share of pure bank-loan financing in the total investment volume is currently still relatively low. Wherever banks finance digital investments, essentially two financing models have proven to be successful. On the one hand, funding for established enterprises – in particular municipal enterprises – with a sufficiently good credit rating is provided by means of traditional corporate or municipal loan financing. However, for small and medium-sized enterprises that are still growing and for which the investment volume required for the broadband roll-out is very high in proportion to their balance sheet total, banks tend to give preference to the project financing option. In an ideal case, project finance focuses exclusively on the cash flows of the project concerned and not on the cash flows of the enterprise as a whole. In addition, the passive data network is rolled out and operated by a legally independent economic entity, referred to as the network company.

Projects that are financed exclusively by the private sector (referred to as independent commercial roll-out) are usually only an option in regions with a sufficiently strong demand for Internet services. However, if the number of households connected to the network is not sufficient to ensure that the loans can be repaid from the user fees, it is possible to make use of public funding. A municipal builder and operator of passive network infrastructure can obtain public funds directly (referred to as “operator model”), or a private-sector investor can obtain a grant via the local government from public funds to cover a profitability gap (referred to as “subsidy model”). A profitability gap develops if the sum total of the investment and operating costs of passive infrastructure exceed the planned future revenues. Public funds of Germany’s federal government, state-level governments and the European Union are available in both cases. Public funds are usually allocated by the Kreditanstalt für Wiederaufbau (KfW – Reconstruction Loan Corporation) or the development banks of Germany’s federal states.

Banks finance the broadband roll-out either by means of traditional corporate and municipal loans ...

... or within the scope of project financing. In addition, it is possible to use public funding available from the federal government, state-level governments or the European Union.



3.5 Commitment of the institutions of the Savings Banks Finance Group

Germany's savings banks act within a strong Group together with Landesbanken and other financial service providers.

Municipal lending business

Along with Landesbanken, DekaBank, Berlin Hyp, Deutsche Leasing, public-sector insurers, Landesbausparkassen and many other companies, savings banks today form one of the most efficient banking groups in the European financial market. The decentralised structure, local corporate responsibility and cooperation within a strong network ensure the commercial success of all savings banks, regardless of their size. The institutions of the Savings Banks Finance Group have close business relationships with three-quarters of all German enterprises. They finance nearly one out of two business start-ups and provide over 40 percent of all loans to enterprises.

Savings banks and Landesbanken hold a market share of nearly 40 percent in the municipal lending business.

The institutions of the Savings Banks Finance Group are involved in a wide range of activities in connection with broadband roll-out, including municipal financing and the financing of specific roll-out projects, which covers not only the allocation of public funds but also the acquisition of share-holdings in enterprises that are directly involved in rolling out fibre-optic networks in their home region. Both savings banks and Landesbanken as well as their subsidiaries provide finance for this purpose.

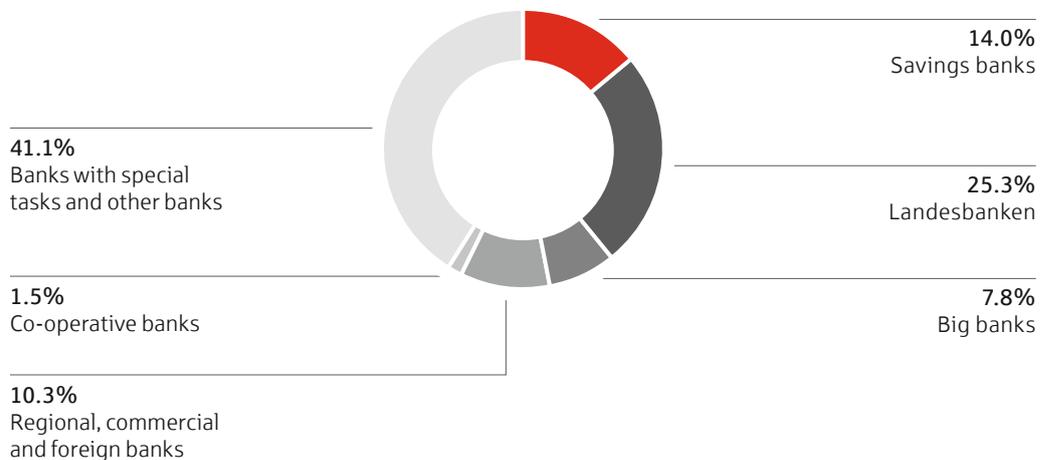
The institutions of the Savings Banks Finance Group are as diverse as their activities in connection with the broadband roll-out.

Some of these funds are also earmarked for broadband expansion.

Since not only private-sector enterprises but also many local authorities support the expansion of the digital infrastructure in their administrative regions within the framework of operator models, the municipal lending business of savings banks and Landesbanken plays an important role in financing broadband roll-out. Their combined market share in this sector is just below 40 percent, which is approximately as high as the market share of banks with special tasks such as KfW (see chart G04). A large proportion of the municipal loans provided by the Savings Banks Finance Group is spent on expanding the local infrastructure. This includes not only roads and supply lines, but also the passive infrastructure of digital data networks.

Municipal lending business – Market shares by banking group, 2018

G04



Source: Banking statistics of Deutsche Bundesbank and own calculations

However, above and beyond this more general financing approach, there is a whole range of specific models designed to support the broadband roll-out. The models vary widely depending on the institution involved. Five specific examples that are not exhaustive are described below.

Ingolstadt Eichstätt Savings Bank

Back in 1998, the former Ingolstadt Savings Bank - together with other partners such as the municipal utility of Ingolstadt and the local newspaper publisher Donaukurier – decided to establish COM-IN Telekommunikations GmbH (or COM-IN for short); a joint venture for the development of a state-of-the-art fibre-optic network. The Ingolstadt Savings Bank had recognised that it needed high-speed digital communication in its entire IT network and wanted to play an active role in developing a pioneering infrastructure project in the region of Ingolstadt as part of its regional public service mission. One of the first network development projects was particularly focused on the need of regional businesses for high-speed IT communication.

In addition to the municipal lending business, savings banks also engage in other activities in connection with the broadband roll-out.

Some savings banks have established subsidiaries or acquired stakes in enterprises.

The Ingolstadt Savings Bank had recognised that it needed high-speed digital communication in its entire IT network and wanted to play an active role in developing a pioneering infrastructure project in the region of Ingolstadt as part of its regional public service mission.

COM-IN was quickly accepted in the market as a competent and efficient partner. In 2009, the partners decided to build up a region-wide fibre-optic network in Ingolstadt. This network was also to be made available to the citizens of Ingolstadt. Today, more than half of the city's buildings have been connected by COM-IN. The rising demand for high bandwidths has confirmed that relying on fibre-optics as a highly efficient technology was the right decision to take.

These associated companies build and operate fibre-optic networks themselves ...

COM-IN now includes four partners: the municipal utility of Ingolstadt, the Ingolstadt Eichstätt Savings Bank, Donaukurier GmbH and Gebrüder Peters Gebäudetechnik GmbH – four powerful enterprises in the city of Ingolstadt. All four partners enjoy a very good reputation in Ingolstadt, and nearly all the private households and enterprises are customers of at least one of the partners.

... and thereby make a direct contribution to the development of digital infrastructure in their region.

In the next few years, the partners intend to cooperate more closely in their sales to residential customers and to leverage the reputation and competence of a regional network operator as a competitive advantage. The Ingolstadt Eichstätt Savings Bank remains committed to COM-IN and is convinced that its investment is viable and sustainable.

In this way, they make it possible to supply private households and enterprises with high-speed Internet access.



Some savings banks became involved very early on in the broadband roll-out.

Pforzheim Calw Savings Bank

In accordance with its regional responsibility, the Pforzheim Calw Savings Bank started to build up a fibre-optic broadband network in 2002. The Savings Bank did not want its business territory to lag behind the large conurbations in terms of digital infrastructure. The state-of-the-art data network is operated and managed by Sparkassen Informationstechnologie GmbH und Co. KG (Sparkassen-IT), a wholly-owned subsidiary, which also meets the legal requirements and holds the licenses needed to provide telecommunications services.

The data networks they developed ...

The Savings Bank's entire business territory is now connected to this high-performance data network. In addition, Sparkassen-IT also operates network nodes at several locations, including Deutscher Sparkassenverlag in Stuttgart and the municipal data centre in Karlsruhe. The network also covers the large industrial parks at Böblingen and Sindelfingen. The core network with nearly 1,000 kilometres of its own fibre-optic cable is operated with a transmission rate of 10 Gbit/s. This is more than 1,000 times the performance of a conventional DSL connection.

The availability of high-performance data connections has long become the best selling point for counties, towns and cities of the regions when marketing business parks.

... have helped to attract businesses and to market business parks.

The close links to cities, local authorities, municipal utilities and energy providers make it possible to leverage synergies and to increase the penetration rate. Stephan Scholl, Chief Executive Officer of the Pforzheim Calw Savings Bank and Jürgen Sautter, Managing Director of Sparkassen-IT, see their broadband initiative as "innovative business and structural development on a high-tech level". The development of industrial estates with high-performance data connections has long become the best promoter for marketing the business parks in the counties, cities and towns of the regions. For most enterprises, the extremely high speeds are indispensable for the transmission of large data volumes. Their location decisions are no longer based solely on available road connections; instead, businesses increasingly also enquire about broadband Internet access.

The connection of educational institutions to the data network helps to reduce regional disparities.

A number of small and medium-sized enterprises – including automotive suppliers, large trading companies and newspaper publishers – have recognised the benefits of the Savings Bank network. Educational institutions use the opportunity to be connected via broadband and to exchange data and information via the state-level research network (BeWue). This reduces disparities with regard to educational opportunities in the region. To give private households access to attractively priced Internet connections, Sparkassen-IT cooperates with relevant providers.

The local savings bank can also use the resulting efficient IT infrastructure.

Last but not least, the Pforzheim Calw Savings Banks also uses the fibre-optic backbone of Sparkassen-IT to connect its larger branch offices and to link the Savings Bank's data centres in Pforzheim and Calw. In 2018, Sparkassen-IT invested more than four million euros to roll out the fibre-optic infrastructure and to advance the creation of additional capacity in the data centres.

Wirtschafts- und Infrastrukturbank Hessen (WiBank)

WiBank is the development bank of the State of Hesse. It operates as an independent organisational and financial unit; legally, it is a dependent public-law agency that is part of Landesbank Hessen-Thüringen (Helaba). WiBank supports municipalities and counties in developing broadband access in the State of Hesse with a total of three funding instruments: loans, guarantees and grants.

Funding by grants is currently in greatest demand. This applies in particular to projects in rural regions where connection density is lower than in urban agglomerations. WiBank awards the grants and is responsible for the monetary implementation of the funding programmes of the State of Hesse. Several funding pools are available to provide funding by grants. Resources from the coffers of the European Agricultural Fund for Rural Development (EAFRD) and the Joint Task for the Improvement of Agricultural Structure and Coastal Protection are designed exclusively for the broadband roll-out in rural regions. In addition, the State of Hesse also provides funds to expand the broadband network.

Some development banks are also a part of the Savings Banks Finance Group in legal terms.

Development banks allocate public funds available from Germany's federal government, the state-level governments and the European Union.

The broadband roll-out strengthens and fosters the networking of rural regions and is an important location criterion for local authorities in the region.

Often, local authorities in rural regions choose to join forces and establish infrastructure companies. These independent undertakings then take on the roll-out of digital infrastructure in the region. One case in point is Breitband Nordhessen GmbH, which was established by five counties of the Northern Hesse region. The EU's biggest broadband roll-out project to date – the NGA Cluster Nordhessen – will provide over 500 districts with broadband coverage of at least 30 Mbit/s by 2020. The purpose of the project is to give high-speed Internet access to small and medium-sized enterprises as well as residents of the region. The broadband roll-out strengthens and fosters the networking of rural regions and is an important location criterion for local authorities in the region.

Large, publicly funded infrastructure projects have enabled entire regions to build up high-speed Internet and have thus made a major contribution ...

WiBank supports this project with broadband loans and grants from the European Agricultural Fund for Rural Development.

... to improving living conditions in the regions.

Deutsche Kreditbank AG (DKB)

The Berlin-based DKB is a wholly-owned subsidiary of Bayerische Landesbank and part of the Savings Banks Finance Group. The bank has been engaged in financing broadband projects for more than ten years. Since the first large financing project in 2011, DKB has financed more than 20 fibre-optic roll-out projects with a loan volume of approx. EUR 200 million. Since 2018, the momentum in this business area has increased significantly, in particular for publicly funded roll-out projects.

Landesbanken and their subsidiaries also actively support broadband roll-out projects.

Gigabit-capable data transport networks are a basic prerequisite for digitalisation and an important location factor for the economic value added and the sustainability of regions. Like schools, hospitals, and local public transport, such data transport networks are necessary to create a level playing field in terms of living conditions in urban and rural areas. However, a glance at a map of Germany shows that broadband networks are mainly rolled out in larger cities. Far too little is happening in this field in rural regions. For this reason, the financing services available from DKB as part of the Savings Banks Finance Group are designed equally for roll-out projects in urban and rural areas.

They mainly provide a wide variety of different financial products.

In addition to standardised financing, DKB also provides tailor-made customer solutions.

In addition to providing municipal finance, DKB offers both financing products based on credit-worthiness and products that are independent of credit ratings for municipal enterprises – both involving development loans, available from regional development institutions, or KfW. If a customer's credit rating is not sufficient for the financing volume of a roll-out project, DKB and the customer will jointly try to find alternative solutions, which may include leasing models, local resident participation models or crowd-funding concepts.

Expertise is pooled in centres of excellence ...

Early on, DKB recognised the correlations between digitalisation and the necessary broadband roll-out. For this reason, DKB decided to establish a broadband centre of excellence. This centre pools the broadband expertise available, supports customer relationship managers during customer meetings, develops financing solutions, and monitors the latest market developments. The know-how from networks to associations or experts with industry experience is also used here.

... and network co-operatives.

Landesbank Baden-Württemberg (LBBW)

LBBW sees it as its mission to support the digital structural transformation and to make a contribution to the sustainability of its federal state.

In this way, the institutions help municipalities and local authorities on their way towards establishing local fibre-optic networks of their own.

For cities and local authorities, the entire value chain – ranging from planning and building broadband networks to financing and marketing them – is often beset with uncertainties. To serve their public clients – which includes not only local authorities, but also municipal utilities, counties and special-purpose associations – and project companies in all of these phases, LBBW has established what is referred to as a “network co-operative” with savings banks, its subsidiary KE (LBBW Immobilien Kommunalentwicklung GmbH) and an engineering office. The co-operative provides a wide range of services to clients to help while they establish a local fibre-optic network of their own. This can help to close the gap between the “backbone or carrier networks” (some of which were installed by counties) and the often patchy and not very efficient networks in the local authorities themselves.

In this context, KE is a municipal service provider that offers a full package of project management, development and contract management services. KE ensures smooth execution, from the design of the network to its transfer to the network operator. In addition, the provision of civil engineering and cable-laying services is ensured via a development contract with KE.

They closely cooperate with savings banks in financing such projects.

LBBW is responsible for the financing in cooperation with savings banks. For this purpose, LBBW uses not only long-term investment loans but also – and more importantly – public funds available from Germany's federal government, the government of the State of Baden-Württemberg and the Kreditanstalt für Wiederaufbau (KfW – Reconstruction Loan Corporation). This permits special financing models that tie all borrowed funds to refinancing the investment. It facilitates broadband roll-out while taking into account both economic and municipal objectives and needs.

3.6 Political challenges

Preserving efficient small and medium-sized business structures cannot be taken for granted with the power concentration in an increasingly global and digital world. It will take more commitment to preserve such structures and the necessary economic environment. To this end, all regions need appropriate access to global economic cycles by means of state-of-the-art transport and data connections. This will require a joint effort by all parties concerned.

Hedging instruments such as exemptions from liability and guarantees provided by Germany's federal government and state-level governments play an important role, in particular in rural regions, where an independent commercial broadband roll-out is usually not feasible. An improvement of the local economic environment and the scope of instruments would be highly desirable.

Improvements are also conceivable with regard to regulatory requirements. The next amendment to Germany's Telecommunications Act could be used to ensure that the risk of a "strategic super-structure" – mainly in rural areas that do not yet have access to high-speed Internet – will be mitigated by clearly defined rules against unreasonableness.

Profitability aspects will continue to limit nationwide coverage of broadband Internet connections in rural areas. In view of the importance of efficient Internet connections for the alignment of living conditions in urban and rural areas, it would be logical to define high-speed broadband as a service of general interest.

Joint efforts by all parties concerned will be necessary to advance the broadband roll-out in Germany.

Exemptions from liability and guarantees provided by public authorities, improvements in the regulatory environment ...

... and the inclusion of the digital infrastructure in the list of services of general interest ...

... could help to make broadband coverage in Germany internationally competitive.



4 SURVEY AMONG THE SAVINGS BANKS' EXPERTS

The survey conducted among the savings banks' experts complements the S-SME Fitness Index and the topic theme of the SME Diagnosis. For the purpose of the survey, a total of 321 of the savings banks' customer relationship managers for business clients were interviewed nationwide in the period from August to September 2019. These experts not only have very extensive knowledge of the sector of small and medium-sized enterprises, but they also meet regularly for discussions with their SME clients. This enables them to provide a professionally sound and up-to-date assessment of the business performance, views and plans of their more than two million business clients.

SMEs are dissatisfied with digital infrastructure

Germany lags behind many other industrialised nations in terms of broadband roll-out. For a country that owes a large part of its economic success to competitive exports and innovations, this is not good news. One of the main reasons is the current slow pace of the roll-out of fibre-optic networks, in particular in rural regions. This affects not only people's living conditions, but also the development of digitalisation in small and medium-sized enterprises.

More than 80 percent of the respondents see a clear connection between the business performance of their SME clients and access to high-speed Internet. At the same time, however, nearly 60 percent of the SMEs are dissatisfied with the current broadband coverage. In rural regions, as many as 65 percent of the SMEs are dissatisfied. In nearly one-third of the savings banks' business territories, business clients have therefore considered relocating their registered office or have already done so.

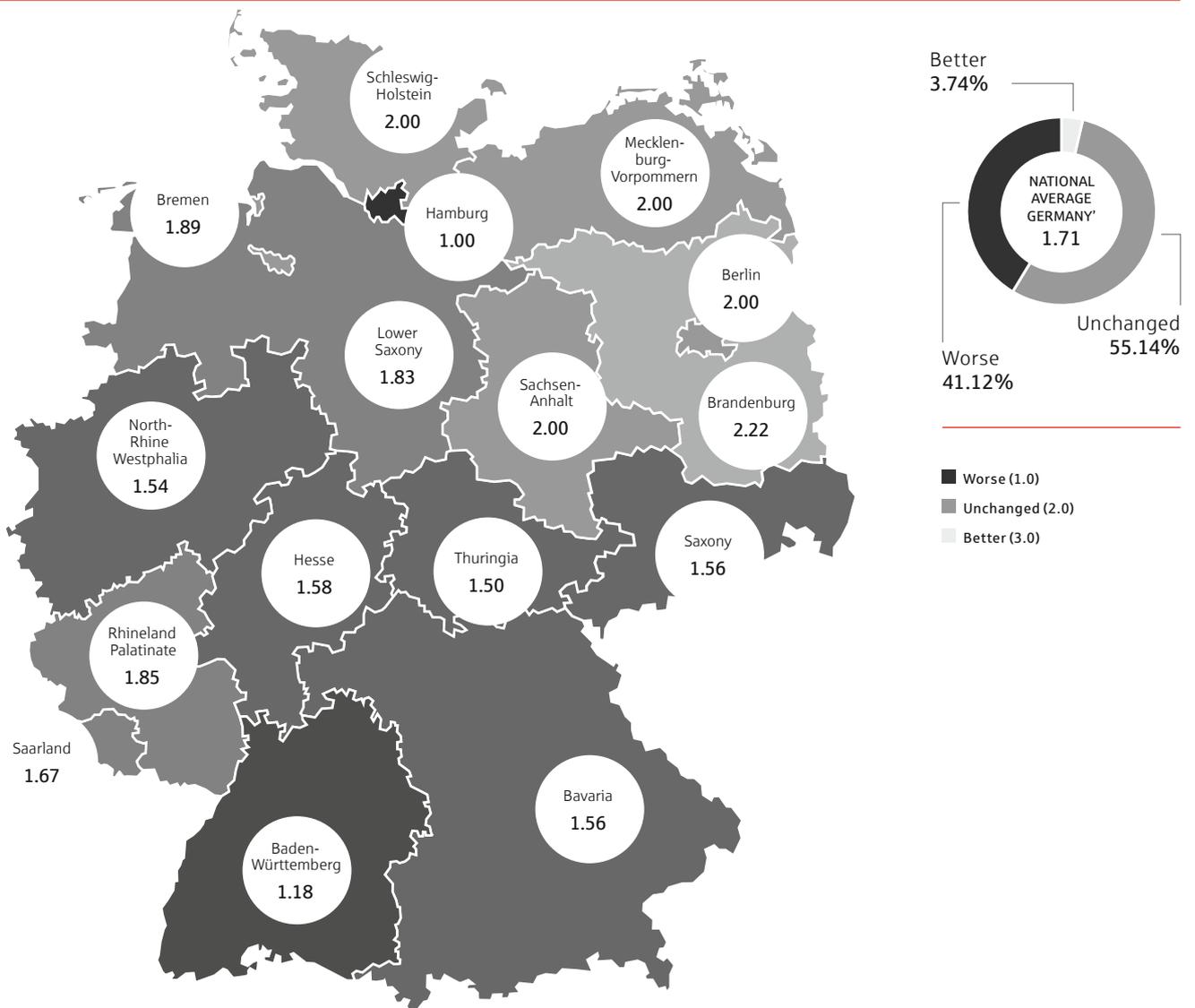


Part 1: Current business performance, outlook and economic environment

Question 1: How do you assess the current business performance (orders, turnover, earnings) of your SME business clients compared with the previous year?

Choice of answers: better, worse, unchanged

According to the savings banks' experts, the business performance of 41 percent of the SME clients has deteriorated in the past twelve months. One year ago, only approx. 12 percent of the respondents had expected such a development for SMEs. In 2018, an initial downturn in the growth momentum was already reflected in lower turnover growth of 5.1 percent (2017: 6.3 percent). Although the return on sales increased by 0.1 percentage points to 6.1 percent in 2018, the latest survey results suggest that profitability growth is likely to stagnate in the next few years.

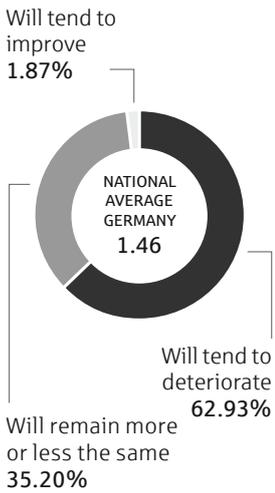




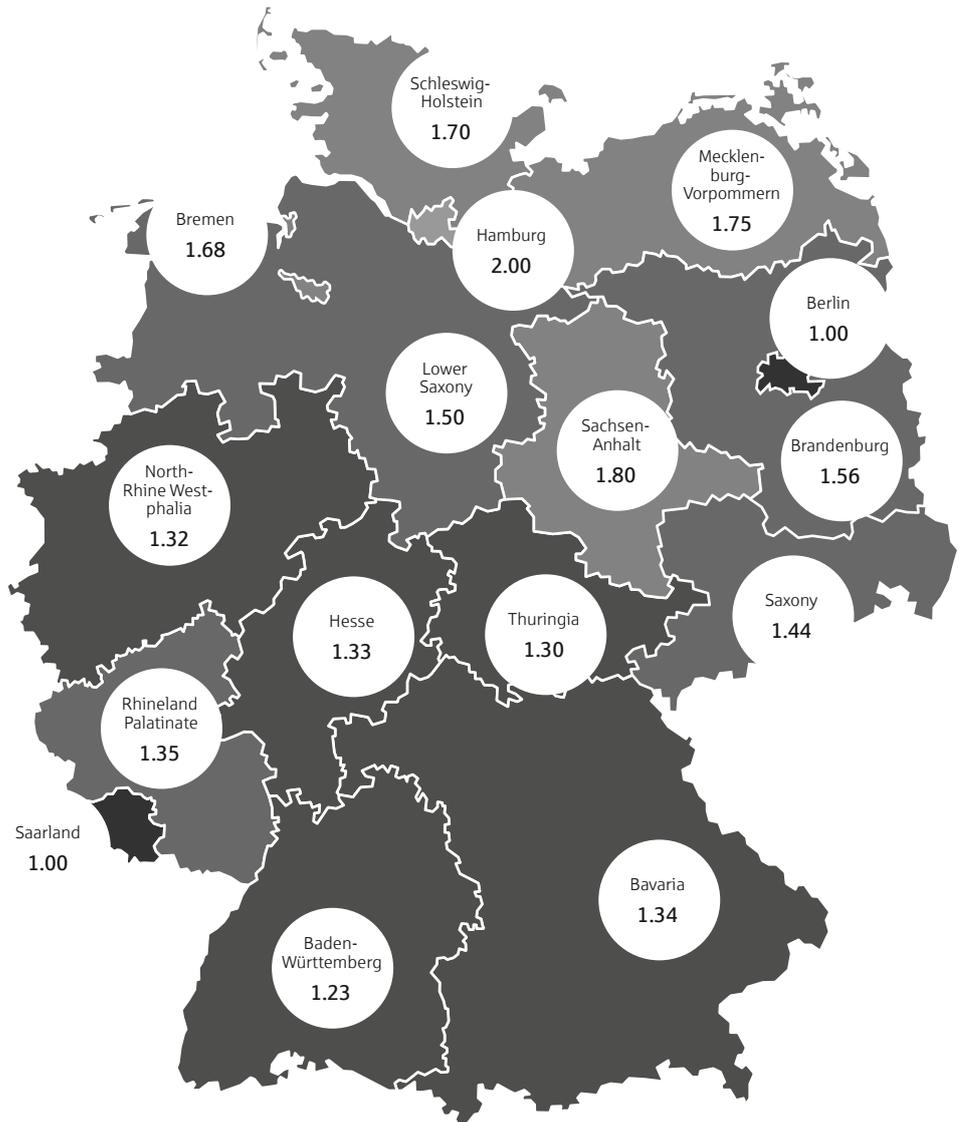
Question 2: On average, do your SME business clients expect that their business performance will:

Choice of answers: remain more or less the same, tend to improve, tend to deteriorate

Looking ahead, the SME experts' assessments have also deteriorated significantly. In the previous year, only approx. 12 percent of the respondents assumed that the enterprises' business performance would deteriorate in the next twelve months. This year, this view was expressed by approx. 63 percent. This result reflects the growing uncertainty about the future development of important economic factors in Germany and abroad. The answers to questions 3 and 4 provide further information about this.



- Will deteriorate (1.00)
- Will remain the same (2.00)
- Will improve (3.00)



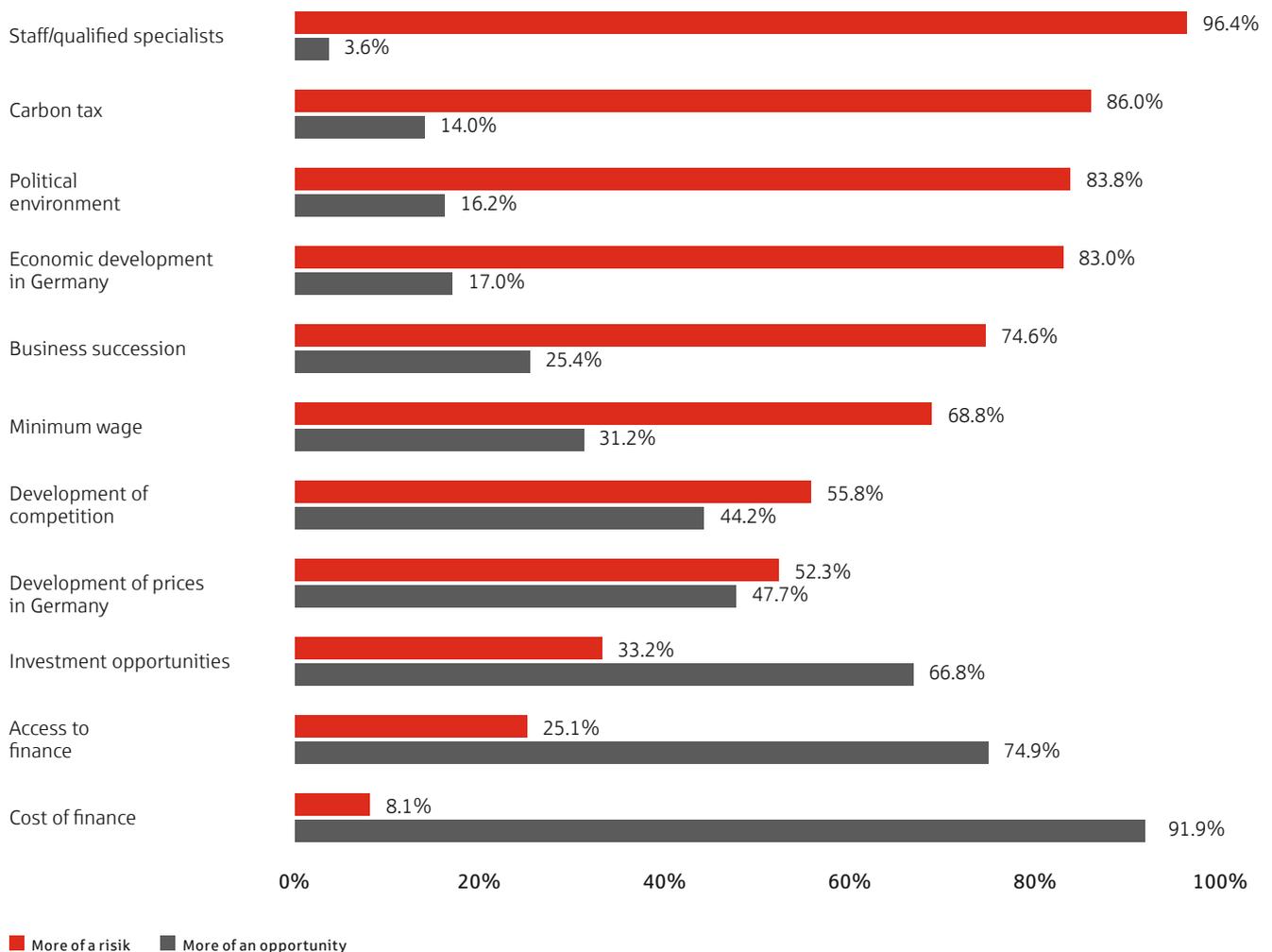


Question 3: How do the majority of your SME business clients assess the following factors with a view to the future development of their enterprises?

Choice of answers: as an opportunity, as a risk

When asked about the greatest challenges for the future success of their SME clients' enterprises, the experts cited first and foremost the shortage of skilled labour (97 percent) and unresolved questions in connection with the carbon tax (87 percent). The shortage of skilled labour therefore ranges at the top of the list of the biggest risk factors for the third time. This means that the situation has not improved. A particularly strong increase in the development of risks was observed with regard to the outlook for economic development in Germany. While in 2018 only 38 percent of the respondents perceived this issue as a risk for the future economic development of SMEs, the share increased to 85 percent in 2019. This also went hand in hand with a substantial increase in the assessment of the risk associated with new investment opportunities.

The cost of financing (92 percent) and access to finance (75 percent) continue to be given very positive assessments by SME customers. The enterprises have obviously become accustomed to the low-interest-rate environment and do not expect a turnaround in the European Central Bank's monetary policy, at least not in the short term.

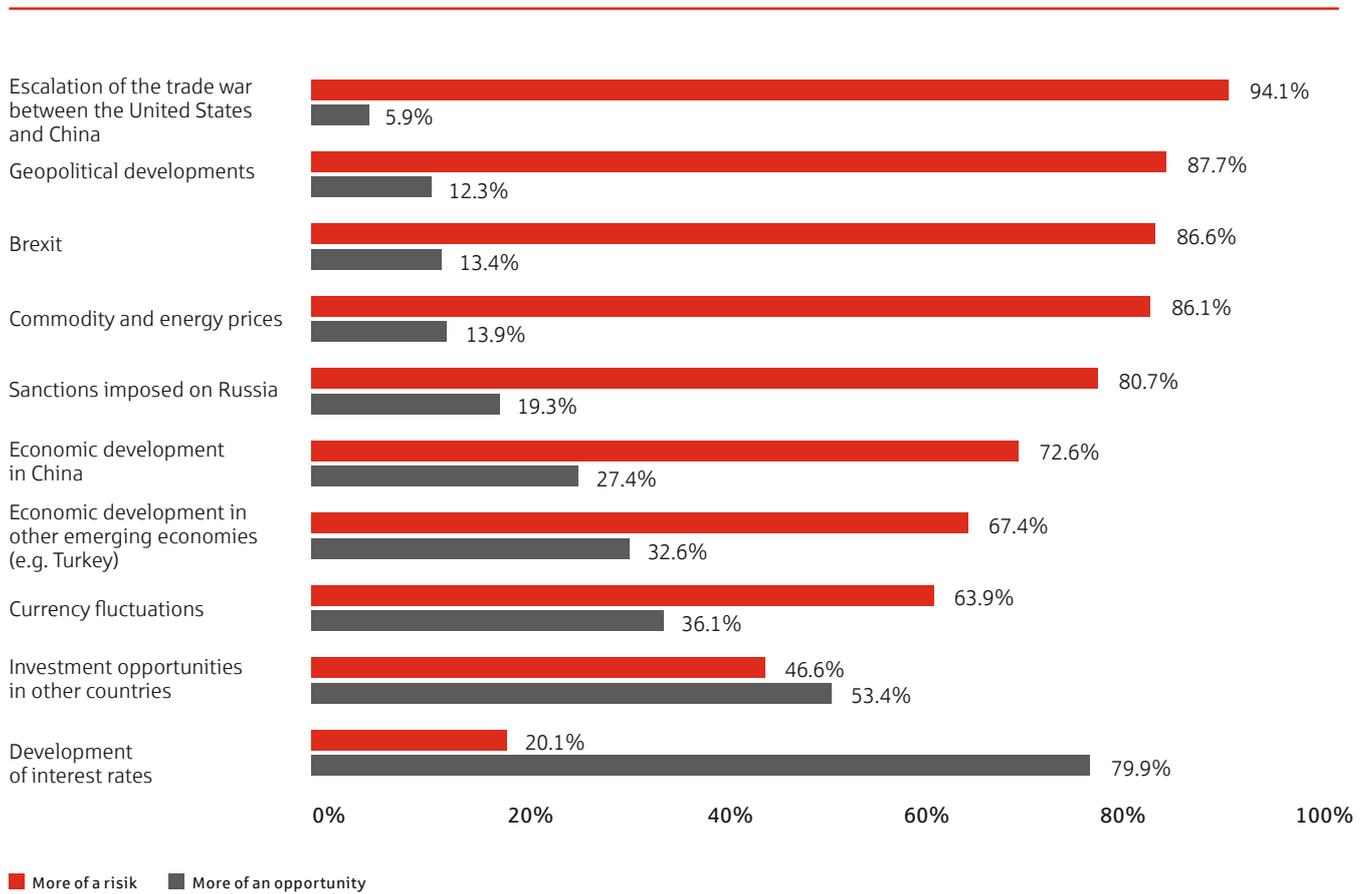




Question 4: How do the majority of your SME business clients assess the following global economic factors with a view to the future development of their enterprises?

Choice of answers: more of an opportunity, more of a risk

Compared with the previous year, the assessment of the global environment has continued to deteriorate. The trade war between the United States and China was perceived as the most important adverse factor, as it was twelve months ago (94 percent; 2018: 91 percent). The assessment of the risk of geopolitical tensions and wars has also increased significantly (88 percent; 2018: 47 percent). Brexit has moved up from number 4 (35 percent) to number 3 (87 percent) on the list of concerns. The answers demonstrate that global developments are being monitored and viewed critically by the savings banks' SME business clients.



Part 2: Digitalisation and high-speed Internet coverage

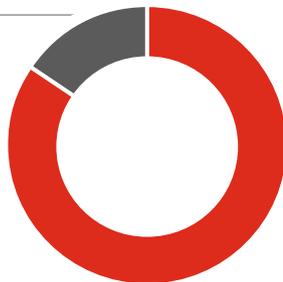


Question 5: Do you agree with the following statement: “The availability of high-speed Internet connections is an important prerequisite to the commercial success of my SME business clients”?

Choice of answers: fully agree, largely agree, agree to lesser extent, do not agree

The focus topic of the SME Diagnosis 2019 – “Lack of broadband in rural areas – effects on SMEs and savings banks” – is introduced by inquiring about the importance of high-speed Internet connections for the commercial success of SMEs. A vast majority of 85 percent of the respondents see a clear link between high-speed Internet and commercial success. This is already evidence of the enterprises’ strong dependence on the digital infrastructure in their region. The increasing digitalisation of a wide variety of business processes, including administration, communication and production, is not feasible without the availability of high-speed broadband connections.

Largely agree
15.4%



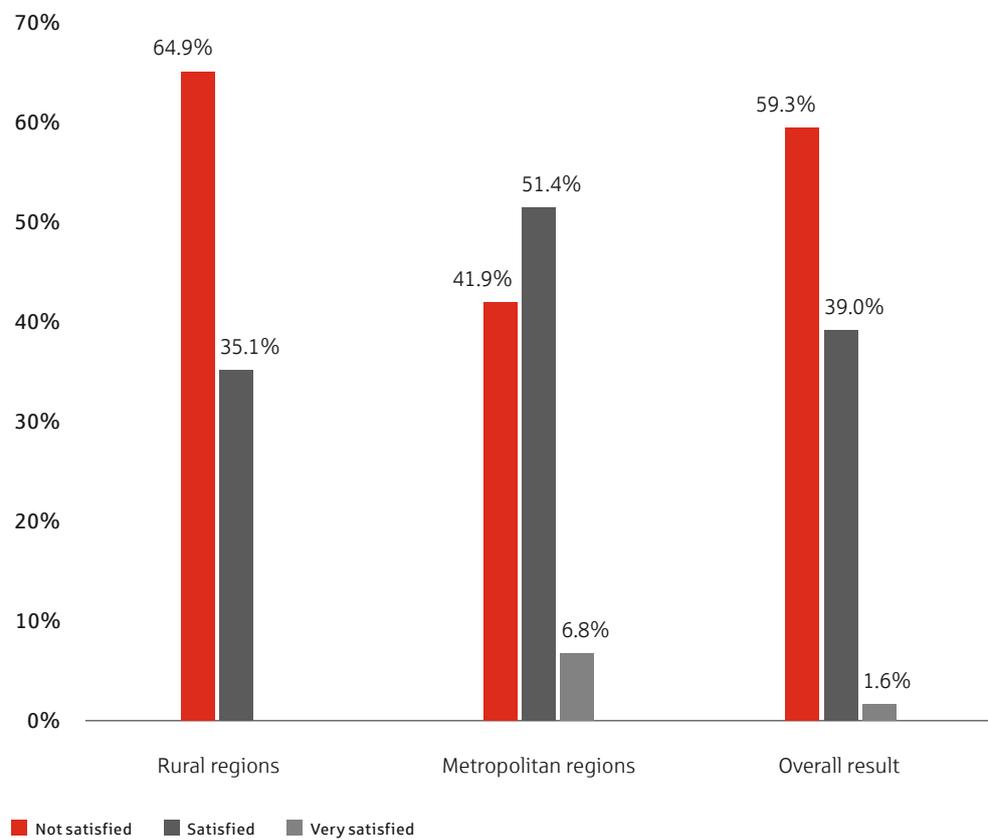
Fully agree
84.6%



Question 6: How satisfied are your business clients with the Internet capacity available in their region?

Choice of answers: very satisfied, satisfied, not satisfied

59 percent of the SME clients are not satisfied with the current Internet coverage. This result does not come as a surprise if one bears in mind the slow pace of the expansion of broadband networks in Germany. If one considers the difference between urban and rural areas, the result is even more severe. 65 percent of the savings banks' business clients whose business areas are located mainly in rural regions are not satisfied with the digital infrastructure in their region, whereas only 42 percent of the clients of savings banks in urban areas expressed this view.

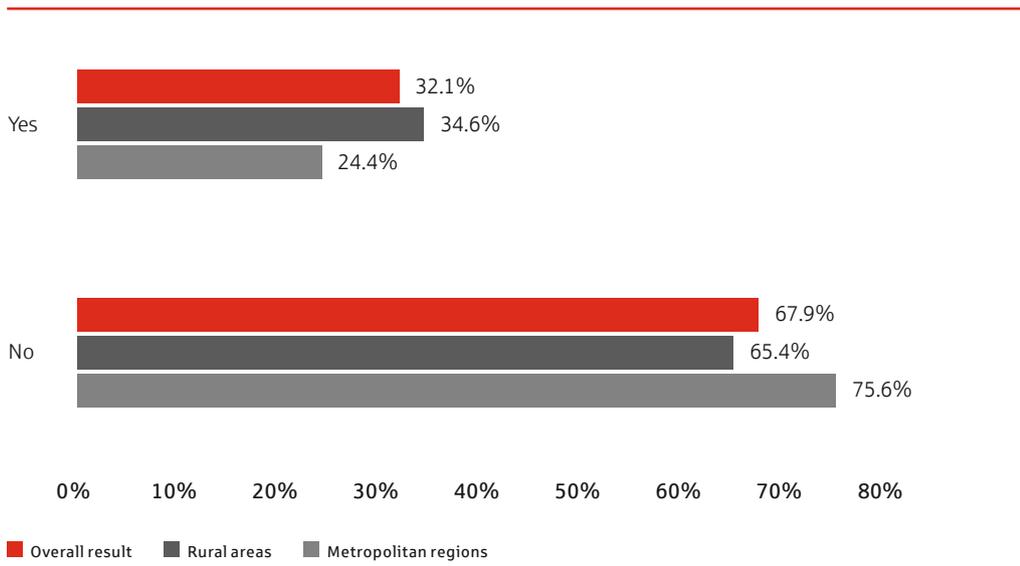




Question 7: Are there business clients in your business territory who have considered relocating their registered office or who have already done so because of insufficient high-speed Internet coverage?

Choice of answers: Yes, No

The dissatisfaction of enterprises with the quality of Internet coverage has consequences. In approx. one-third of all savings banks territories, enterprises have already considered relocating their registered office or have already done so because of inadequate digital infrastructure. This percentage is again higher for savings banks in rural areas (35 percent) than for savings banks in metropolitan regions (24 percent). This shows that broadband coverage has become an important location criterion for SMEs and that it must be a priority in regional structural development programmes.

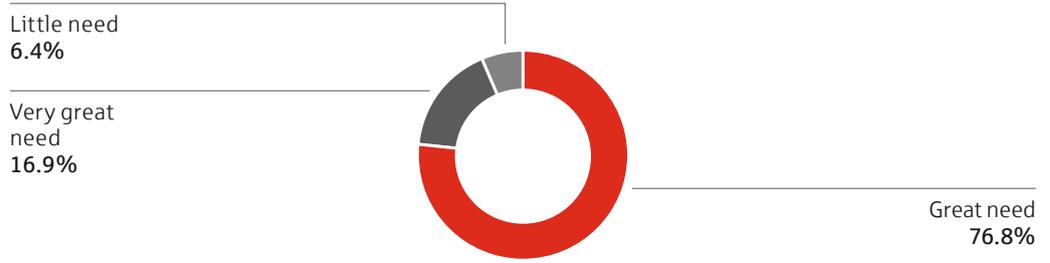




Question 8: How do your business clients assess the need for investments in the digitalisation of their enterprises?

Choice of answers: very great need, great need, little need, no need

The pressure to expand broadband networks will not lessen in the coming years. The driving force is businesses' growing need for digitalisation. 94 percent of business clients see a great or very great need to invest in the digitalisation of their processes. Other questions have shown that only approx. 5 percent of all SME clients of savings banks are well advanced in the implementation of digitalisation or have already fully implemented it. For this reason, more than half of all SMEs plan to make digital investments in the next three years.



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In case of discrepancies, the German version is definitive.

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