

GERMANY

1. Introduction


In 2020, the COVID-19 pandemic and corresponding relief measures dominated the policy agenda for small and medium-sized enterprises (SMEs) in Germany, with the focus on bolstering SME-related strengths (e.g. exports and access to capital). The gradual decline in the number of SMEs involved in innovation, the need to further boost investments in digitalisation and the skilled labour shortage remain key challenges for SMEs in the country.

The large number of relief measures adopted in 2020 lessened the effects of the pandemic on German SMEs. However, SME value added dropped by 3.9% and employment by 1.3%¹. The *accommodation and food services* sector, *tourism* sector and parts of the *retail* sector were the most affected sectors and experienced a sharp contraction, with SME value added declining by 31.3% and SME employment by 11.7%. Other badly affected sectors were *manufacturing*, where SME value added fell by 11.8% and SME employment by 6.7%, and *administrative and support services*, falling by 11.4% and 6.9% respectively. The *construction* sector, by contrast, continued its growth trend, with an increase of 8.7% in SME value added and 1.9% in SME employment in 2020.

In 2021, SMEs are expected to recover, generating growth of 6.6% in value added and 1.4% in employment. Overall, SME value added in 2021 is expected to rise 2.4% above its 2019 level, while SME employment will return to its 2019 level.

SMEs generated 49.0% of total value added and 59.2% of total employment in the German 'non-financial business economy' in 2020, against the slightly higher EU averages of 53.2% and 65.0% respectively. Average SME productivity, calculated as value added per person employed, was approximately EUR 47 900, exceeding by some margin the EU average of EUR 40 000. SMEs in Germany are relatively large, employing an average of 7.1 people in 2020, almost double the EU average of 3.7.

Figure 1: Number of enterprises, persons employed and value added in 2020



	Number of enterprises			Number of persons employed			Value added		
	Germany		EU-27	Germany		EU-27	Germany		EU-27
	Number	Share	Share	Number	Share	Share	€ billion	Share	Share
Micro	2 165 429	83.8%	93.3%	6 313 987	20.5%	29.6%	259.4	14.6%	18.7%
Small	353 274	13.7 %	5.7%	6 764 750	21.9%	19.7%	320.2	18%	17%
Medium-sized	55 243	2.1 %	0.9%	5 171 322	16.8%	15.8%	294.3	16.5%	17.3%
SMEs	2 573 946	99.6%	99.8%	18 250 059	59.2%	65.2%	873.8	49%	53%
Large	11 572	0.4%	0.2%	12 573 137	40.8%	34.8%	908.2	51.0%	47%
Total	2 585 518	100%	100%	30 823 196	100%	100%	1782.1	100%	100%

Source: These are estimates for 2020 produced by DIW Econ, based on 2008-2018 figures from the Structural Business Statistics Database as well as provisional data for 2019-2020 from the National Accounts Database and the Short-Term Business Statistics Database (Eurostat). The data cover the 'non-financial business economy', which includes industry, construction, trade, and services (NACE Rev. 2 sections B to J, L, M and N), but not enterprises in agriculture, forestry and fisheries and the largely non-market service sectors such as education and health. The following size-class definitions are applied: micro firms (0-9 persons employed), small firms (10-49 persons employed), medium-sized firms (50-249 persons employed), and large firms (250+ persons employed).

2. Key strengths

COVID-19 response: financial measures to help SMEs through the pandemic

Germany's policy response to the pandemic has been largely effective, swift and hands-on. Between the end of March 2020 and the end of 2020, it introduced numerous financial support measures (ranging from loans, subsidies, equity and basic security benefits to tax deferrals, safeguards for vocational training places and legal provisions like the temporary suspension of the obligation to file for insolvency). As of mid-April 2021, EUR 89.4 billion had been paid out, more than half of it as credits (EUR 49.6 billion)². In June 2020, the government introduced a stimulus package of EUR 130 billion (which was also accessible to large firms), composed of 57 measures such as the reduction in VAT from 19% to 16% until the end of 2020. Most of these measures aimed to optimise existing measures to make it easier for companies, in particular SMEs, to access finance until the end of 2020. One of the key support measures for SMEs is the short-time allowance (*Kurzarbeitergeld*), which allows them to keep their workforce without the need to pay them. Companies where at least 10% of the workforce is affected by a drop in demand can access the allowance, which will be paid until the end of 2021. During the first 3 months, employees affected receive 60% of their net income, with this amount increasing up to 80% after the 7th month. These conditions are more generous than usual due to the pandemic.

To support export activities during the COVID-19 pandemic, the government has also issued export guarantees. These protect German companies in the event of non-payment by foreign debtors. This measure is particularly important for SMEs as their activities depend heavily on exports.

Excellence in international competition

Germany ranks among the top three exporting countries in the world, accounting for 7.1% of total world trade. 28% of its jobs are directly linked to export activities, with this percentage even higher for the manufacturing sector dominated by SMEs. Although sometimes overlooked, most exporting firms are SMEs. In fact, 97.1% of export-driven companies in Germany are SMEs. From 2000 to 2019, SME exports increased by 40% to EUR 200 billion, accounting for 24% of total exports³. Moreover, 17.3% of German SMEs export goods outside of the EU which is higher than the EU average of 9.7%⁴.

A critical role in this is played by 'hidden champions' – businesses that are global leaders in their market niches. Although many of them have outgrown their SME origins, many started their operations as rather modest businesses, often outside the big urban agglomerations.

Germany has around 1 300 hidden champions, accounting for more than half of the firms that fall under this definition worldwide (the USA has 366)⁵.

Hidden champions invest proportionally more in innovation (around 6% of their turnover) and register five times more patents than other firms, making them highly innovative. In addition, most are family-owned with strong ties to their local community⁶. They have less than EUR 3 billion turnover and are generally considered SMEs, although there are some exceptions. 85% have fewer than 499 employees and around 60% have fewer than 249 employees⁷.

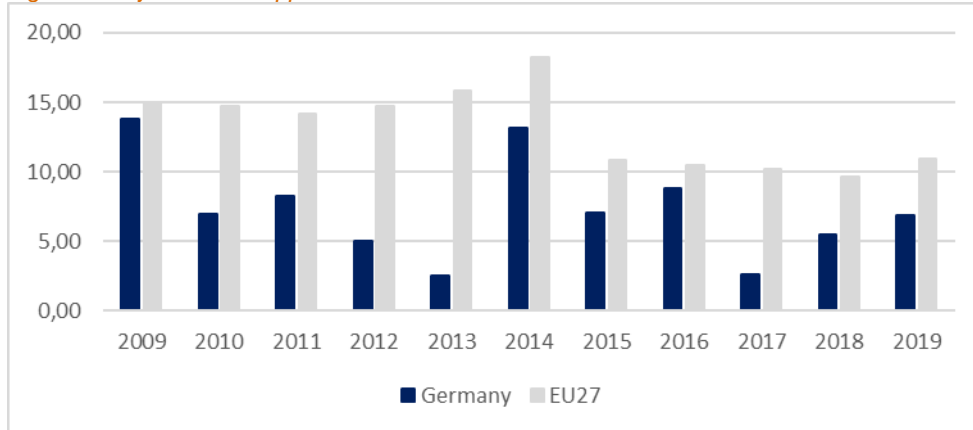
According to a recent research study, the success of hidden champions in Germany relies on their strategic orientation and superior capabilities, which result from skilled entrepreneurs with a long-term focus. As they are highly innovative firms, they need to have access to effective R&D support programmes that face the typical barriers to R&D, i.e. knowledge spillovers and high uncertainty⁸. Recent data indicates that hidden champions tend to digitalise their processes faster and rely heavily on collaboration between public and private research institutions. The skilled labour immigration act, which came into force in 2020, will also make it easier for these companies to recruit workers. This is crucial as they generally depend on exports⁹.

Access to capital/finance

93% of SMEs have a credit line with one single financial institution, with their banking relationship stretching back 20 years on average. For credit, 80% of SMEs rely on their 'house bank' (main bank)¹⁰. Larger SMEs have access to more options for accessing capital (higher number of credit institutions). On a more general level, long relationships with their house bank reduce the cost of capital for firms.

Overall, access to capital for SMEs in Germany is relatively easy compared to other EU countries. Only a small number of SMEs have restricted access to financial instruments¹¹. However, it is worth noting that smaller firms generally face higher hurdles (e.g. self-rationing, shorter loan tenure with their house bank) in accessing financial instruments¹².

Figure 2: Rejected loan applications and loan offers to SMEs whose conditions were deemed unacceptable (%)



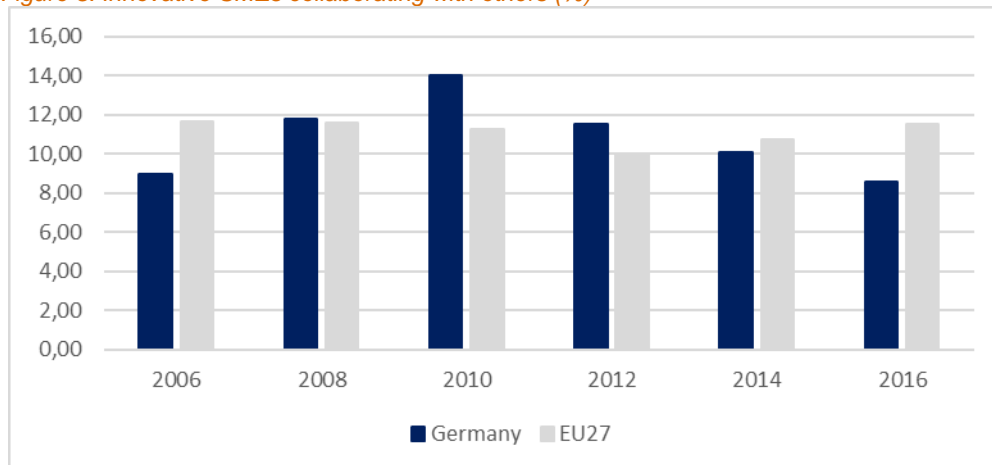
Source: Survey on the Access to Finance of Enterprises, 2020¹³

3. Key challenges

Signs of innovation slowing down among SMEs

In recent years, the innovation rate of SMEs has declined in Germany, reaching only 19% in 2019. In addition, the number of innovative SMEs has dropped by 56% since 2006, with smaller SMEs increasingly less focused on the innovation process¹⁴. The share of innovative SMEs collaborating with others also seems to have decreased in recent years. In addition, the number of new start-ups in knowledge-intensive industries gradually declined by more than 25% between 2005 and 2019. The share of newly founded businesses in research-intensive industries amounted to only 0.7% in 2019¹⁵.

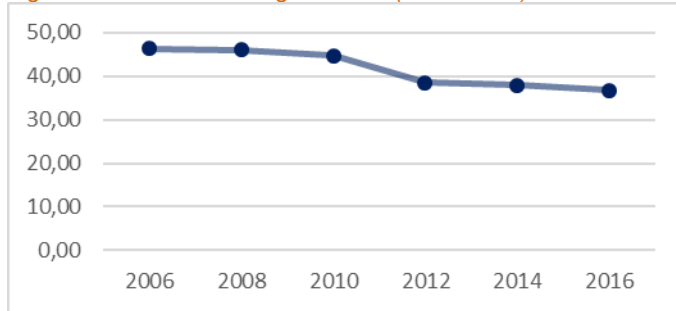
Figure 3: Innovative SMEs collaborating with others (%)



Source: European Innovation Scoreboard, 2020¹⁶

Compared to other countries, innovation expenditure is low in Germany. The country currently ranks in the bottom third among EU countries. Innovation has been identified as a key challenge for SMEs in Germany¹⁷. Further progress could be made by creating additional Centres of Excellence (*Kompetenzzentren Mittelstand 4.0* and *future Network of Centres of Excellence Mittelstand-Digital*) as announced in 2019, where SMEs can receive innovation support, in particular on digitalisation¹⁸. Studies show that innovation, in particular on digitalisation, had not been a top priority up to 2017¹⁹.

Figure 4: SMEs innovating in-house (% of SMEs)



Source: Community innovation survey, Eurostat, 2016²⁰

Investment in digitalisation

In Germany, the number of companies including SMEs that invest in digitalisation is on the rise, although IT investments represent a small amount compared to what companies invest in traditional innovations (EUR 19 billion against EUR 34 billion in 2019)²¹. In 2019, 40% of SMEs in Germany successfully implemented a digitalisation project. This is 380 000 companies more than for 2015-2017. In 2020, 85% of SMEs planned to complete a digitalisation project.

In addition, the number of businesses sending e-invoices (16%) and those buying cloud computing services (22%) is significantly lower in Germany compared to the EU average of 24.2% and 27.8% respectively²².

Nevertheless, overall SME spending on digitalisation projects has remained the same over the last 3 years, with an average of EUR 17 000 per project. 50% of SMEs also mention being limited by the lack of digital infrastructure such as broadband connections²³. To support SMEs in their digitalisation efforts, the government implemented '*digital jetzt*', which helps companies invest in digital projects. It is combined with the '*go-digital*' programme for upskilling workers, which enables them to become more IT savvy²⁴.

Another impediment to the digital take-up by SMEs is the relatively slow progress in improving digital public services across all levels. The government has not yet implemented key aspects of a public administrative agenda that could provide businesses with incentives to speed up digital solutions and, at the same time, help reduce the bureaucratic burden, such as the 'only-once' principle. As the most recent issue of the EU's Digital Economic and Society Index states: '[...] However, the level of online interaction between public authorities and the general public is very low. Only 49% of German online users engage actively with e-government services, compared with an EU average of 67%, with Germany ranked 26th for this indicator. On the indicator for pre-filled forms, Germany's score remained the same at 41, well below the EU average of 59 [...]'²⁵. An accelerated catch-up process in this area could provide an additional trigger for private businesses to step up their digitalisation investments.

Skilled labour shortage

Germany has an increasing shortage of skilled labour. The average time to fill vacancies has more than doubled since 2010. One in five positions has a vacancy time of 160 days on average. The most affected sectors are construction, data & information management, nursing & care, and doctors²⁶.

In addition, entrepreneurial intentions are lower in Germany compared to the EU average, at 12.5% against 15.9% for the EU average in 2019. Moreover, Germany also performs below the EU average when it comes to viewing entrepreneurship as a desirable career choice. 53.6% of the

18-64 population agrees with the statement that starting a business is a desirable career choice, compared to 58.9% for the EU average²⁷.

Despite the current COVID-19 pandemic, the skilled labour shortage is expected to increase until 2030. After 2030, the labour force potential is expected to further decrease due to strong demographical changes. Overall, 185 out of 535 occupation classes are affected by a lack of skilled workers²⁸. The imbalance of labour supply and demand will continue to vary greatly across sectors and regions. To meet this challenge, the German government has developed a skilled labour strategy to secure and expand the potential of domestic, European and international skilled workers across all industries²⁹. The National Skills Strategy (*Nationale Weiterbildungsstrategie*) forms one of its pillars. For the first time, all relevant stakeholders have agreed to empower companies and employees to get ready for the digital transition throughout their entire working life. As part of this initiative, Germany also implemented the new skilled labour immigration act in 2020. It simplifies the acceptance of graduates from abroad and makes immigration and job searching easier.

4. Other key SME-related brief insights



START-UP ENVIRONMENT

The low level of start-up activity in Germany remains a problem. 117 800 new businesses were created in the first half of 2020, a drop of 15.5% compared to the same period last year³⁰. Prior to the pandemic, there were also some positive signs, including an uptick in the business creation rate. However, this slowed as the crisis unfolded. The government has implemented selected measures to support start-up companies during the pandemic, including low interest loans for start-ups. The KfW Special Programme 2020, which was implemented in April 2020, expands the ERP Start-up Loan – Universal and helps companies overcome the coronavirus crisis with low interest rates and high liability exemptions. The ‘ERP Start-up Loan – Universal’ supports business start-ups, business successors, the self-employed and freelancers. Funding is available to SMEs with fewer than 250 employees and an annual turnover of no more than EUR 50 million, and to large companies with no turnover limit.



SOCIAL ASPECTS OF SUSTAINABILITY

The government has provided up to EUR 17 billion to encourage energy-efficient renovation. Up to 20% of the investment costs can be recovered thanks to this policy³¹.



REGULATORY BURDEN

To lower the compliance costs borne by German SMEs, the government implemented a new law (*Bürokratieentlastungsgesetz III*) providing EUR 1.1 billion in total compliance cost relief³². Despite the fact that these compliance costs have decreased in recent years, 60% of SMEs still questioned the logic behind many laws and regulations in 2019, and 78% criticised the high number of regulations³³. The progress made in improving digital public services across all levels has also been limited³⁴.

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- ¹ The data for 2020 are estimates produced by DIW Econ, based on 2008-2018 figures from the Structural Business Statistics Database as well as provisional data for 2019-2020 from the National Accounts Database and the Short-Term Business Statistics Database (Eurostat).
- ² Bundesministerium für Wirtschaft und Energie (2021), *Bewilligungen beziehungsweise *Auszahlungen in Milliarden Euro*, published 13.04.2021, available at: <https://www.bmwi.de/Redaktion/DE/Infografiken/Wirtschaft/corona-hilfen-fuer-unternehmen-marginalspalte-IG.html>
- ³ Eurostat (2019), *Shares by size class for exporting (goods) enterprises*.
- ⁴ Comext (2017), *International trade by enterprise characteristics*, available at: <http://epp.eurostat.ec.europa.eu/newxtweb/setupdimselection.do>
- ⁵ Institut der deutschen Wirtschaft (2020), *Den deutschen Hidden Champions auf der Spur* (Following the tracks of the German hidden champions), Made in Germany.
- ⁶ Förderkreis Gründungs-Forschung e.V. & IfM Bonn (January 2020), *Unternehmertum im Focus* (Ownership in the spotlight).
- ⁷ Markt und Mittelstand, 2020.
- ⁸ C. Rammer and A. Spielkamp (March 2019), *The distinct features of hidden champions in Germany: A dynamic capabilities view*, available at: https://www.researchgate.net/publication/333052218_The_Distinct_Features_of_Hidden_Champions_in_Germany_A_Dynamic_Capabilities_View
- ⁹ Institut für Mittelstandsforschung (2020), *Worauf der Erfolg der Hidden Champions beruht* (What is the basis of the success of hidden champions), available at: https://www.ifm-bonn.org/fileadmin/data/redaktion/publikationen/Policy_Brief_Mittelstand_aktuell_/dokumente/policybrief_01_2020.pdf
- ¹⁰ Kreditanstalt für Wiederaufbau (February 2019), *Mittelstand mit großer Treue zur Hausbank* (SMEs show strong loyalty to their main bank).
- ¹¹ Bundesministerium für Wirtschaft und Energie (March 2020), *Überblick zu Förderinstrumenten zur Gründungs- und Wachstumsfinanzierung* (Overview of policy measures for start-up and growth financing).
- ¹² Kreditanstalt für Wiederaufbau (October 2019), *Mittelstandspanel* (SME panel), [https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-KfW-Mittelstandspanel/PDF-Dateien-Mittelstandspanel-\(EN\)/KfW-SME-Panel-2019_EN.pdf](https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-KfW-Mittelstandspanel/PDF-Dateien-Mittelstandspanel-(EN)/KfW-SME-Panel-2019_EN.pdf)
- ¹³ European Commission (2020), *Survey on the Access to Finance of Enterprises*, available at: <https://ec.europa.eu/growth/access-to-finance/data-surveys/>
- ¹⁴ Kreditanstalt für Wiederaufbau (February 2020), *Innovationsbericht Mittelstand* (KfW innovation report).
- ¹⁵ Expertenkommission für Forschung und Innovation (2019), *Unternehmensdynamik in der Wissenswirtschaft in Deutschland 2019*.
- ¹⁶ European Commission (2020), *European Innovation Scoreboard*, available at: http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en
- ¹⁷ Institut für Mittelstandsforschung (July 2020), *Materialien (IfM-Materials)*.
- ¹⁸ Bundesministerium für Wirtschaft und Energie (2020), *Digitalisierung im Mittelstand voranbringen*, available at: <https://www.bmwi.de/Redaktion/DE/Dossier/mittelstand-digitalisieren.html>
- ¹⁹ Institut für Mittelstandsforschung (July 2020), *IfM-Mittelstandspanel*.
- ²⁰ Eurostat (2016), *Community innovation survey*, available at: http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en
- ²¹ See Note 14.
- ²² Eurostat (2018), available at: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_bde15disc&lang=en, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_cicce_use
- ²³ Bundesverband mittelständische Wirtschaft Unternehmerverband Deutschland e.V. (July 2020), *Digitalisierung in KMU* (Digitalisation for SMEs).
- ²⁴ Bundesministerium für Wirtschaft und Energie (May 2020), *Digital jetzt – Investitionsförderung für KMU* (Digital now – promoting investment for SMEs).
- ²⁵ European Commission (2020), *Digital Economic and Society Index (DESI) 2020; Germany country profile*.
- ²⁶ Kreditanstalt für Wiederaufbau (June 2020), *Corona-Krise und Fachkräftemangel bremsen das Wachstum*, (Coronacrisis and skilled labour shortage slow down growth).
- ²⁷ Global Entrepreneurship Monitor (2019), *Global Entrepreneurship Report*, available at: <http://www.gemconsortium.org/data/key-aps>
- ²⁸ https://statistik.arbeitsagentur.de/SiteGlobals/Forms/Suche/Einzelheftsuche_Formular.html?nn=20626&topic_f=fachkraefte-engpassanalyse
- ²⁹ BMAS - Fachkräftestrategie der Bundesregierung, <https://www.bmas.de/DE/Arbeit/Fachkraefteversicherung-und-Integration/Fachkraeftestrategie/fachkraeftestrategie.html>
- ³⁰ Institut für Fort- und Weiterbildung (October 2020), *IfM-Hintergrundpapier* (background paper), available at: https://www.ifm-bonn.org/fileadmin/data/redaktion/publikationen/ifm-hintergrundpapier/dokumente/IfM-Hintergrundpapier-Fluktuation-1._Halbjahr_2020.pdf
- ³¹ Bundesministerium für Wirtschaft und Energie (2020), *Förderprogramme für Unternehmen*, available at: https://www.deutschland-machts-effizient.de/KAENEF/Redaktion/DE/Publikation/factsheet-foerderprogramme-fuer-unternehmen.pdf?__blob=publicationFile&v=23
- ³² Bundesministerium für Wirtschaft und Energie (2020), *Drittes Bürokratieentlastungsgesetz (BEG III)*, available at: <https://www.bmwi.de/Redaktion/DE/Artikel/Service/buerokratieentlastungsgesetz-III.html>

³³ Institut für Mittelstandsforschung (2019), *IfM-Materialien*, available at: https://www.ifm-bonn.org/fileadmin/data/redaktion/publikationen/ifm_materialien/dokumente/IfM-Materialien-274_2019.pdf

³⁴ European Commission (2021), *Staff working document – Germany, section 5.1, CSR implementation* (unpublished academic paper).