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Entrepreneurial activity in Germany: between skills shortages and COVID blues

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Start-up activity in Germany: Between skills shortages and COVID blues

Start-up numbers have fallen

Entrepreneurial activity in Germany dropped to 550,000 newly started businesses in 2022 (-9%). Weaker economic momentum and twice the negative labour market effect compared with the previous year contributed to the decline in entrepreneurial activity. The shortage of skilled workers therefore is bad news for entrepreneurial activity as well. The drop was only around half as steep among full-time start-ups (-6%) as among part-time start-ups (-12%). Nearly one in five part-time start-ups intend to expand their business to a full-time activity.

More start-ups driven by conviction

For the first time in years, the proportion of businesses started for lack of better income alternatives rose again significantly, to 24%. Most of the growth, however, is attributable to entrepreneurs who prefer self-employment over salaried employment. For them, starting a business therefore was not so much a necessity as a genuine wish. This could be a reflection of the increased post-pandemic desire of many people to try out new career pathways.

Digital technology and internet continue to be important

Following the sharp increase in digital and Internet-based business models in the previous year, their shares in 2022 remained high in a multi-year comparison. Nevertheless, 29% digital and 36% Internet-based start-ups mean there is still upside potential.

Outlook for 2023

A minor increase in the rate of start-up planners suggests steady entrepreneurial activity in 2023. The market environment, however, remains challenging.

Entrepreneurial activity is declining – part-time more steeply than full-time

Entrepreneurial activity in Germany decreased noticeably in 2022. With 550,000 newly started businesses, 57,000 fewer persons ventured into self-employment than in 2021 (Figure 1), a drop of 9%. Entrepreneurial activity thus roughly followed the trend of start-up plans, which fell by 6% in 2021.¹ Thus, the development of start-up plans appears to have regained its predictive value for the trend in entrepreneurial activity in the following year. The link, which was steady for

many years, was temporarily broken with the outbreak of the COVID-19 pandemic. Weaker economic momentum and twice the negative labour market effect compared with the previous year also contributed to the decline in entrepreneurial activity.

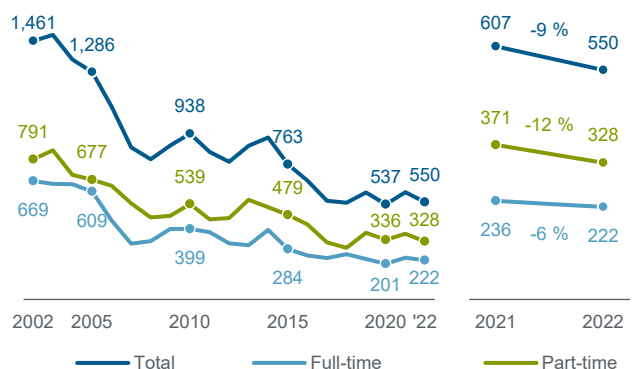
Start-up activity – both full-time and part-time – has fallen. However, the decline among full-time is lower than among part-time start-ups. At 222,000, there were 14,000 fewer full-time start-ups than in the previous year (-6%). The number of part-time business starters, however, dropped by 43,000 to 328,000 (-12%). Thus, 60% of new businesses started in 2022 were designed as a part-time operation, with 20% of these part-time entrepreneurs planning to scale their activity to a full-time venture.

Box 1: The KfW Entrepreneurship Monitor

The KfW Entrepreneurship Monitor is based on data from representative population surveys. These are sent to 50,000 randomly selected persons domiciled in Germany each year. The surveys cover a broad range of entrepreneurship categories: full-time and part-time male and female entrepreneurs, self-employed professionals and business owners, new businesses and takeovers. The KfW Entrepreneurship Monitor thus provides a comprehensive picture of entrepreneurial activity in Germany.

Figure 1: Number of business starters fell by 9% from 2021 to 2022

Number of start-ups in thousands



Source: KfW Entrepreneurship Monitor.

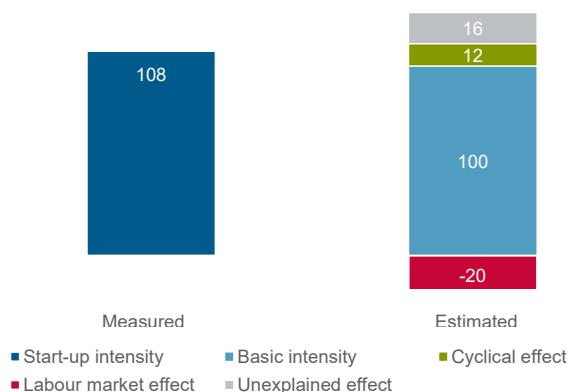
Economic momentum was weaker than in the previous year, absorption effect of the labour market doubled

The 550,000 new businesses started in 2022 represent a start-up intensity of 108 business start-ups per 10,000 persons aged 18 to 64 years (down from 119 in 2021). Start-up intensity can be disaggregated into four estimated components: A basic intensity, a cyclical effect, a labour market effect and an unexplained component.

The basic intensity is composed of a fixed structural component and a variable trend component which reflects, among other things, the realised longer-term start-up plans or the general entrepreneurial spirit. The basic intensity in 2022 was 100 start-ups per 10,000 individuals of working age (Figure 2).

Figure 2: Absorption effect of the labour market exceeded the cyclical impetus in 2022

Start-up intensity in start-ups per 10,000 people of working age



Basic intensity: Structural component minus trend.
Employable persons: Population 18 to 64 years of age.

Source: KfW Entrepreneurship Monitor.

The cyclical effect reflects the economic growth rate. The higher it is, the stronger the pull effect, since the good cyclical environment motivates people to put business ideas into practice and 'pulls' them into self-employment. In 2022 the cyclical effect accounted for 12 start-ups per 10,000 people of working age, which means the momentum was slightly lower than in the previous year.

The labour market effect reflects how start-up activity is influenced by available income alternatives in salaried employment. When the unemployment rate rises, the push effect increases since people are 'pushed' into self-employment because companies are hiring fewer workers. When the unemployment rate falls, potential entrepreneurs are 'absorbed' by the employment alternatives in the labour market. In 2022, the labour market effect was negative, with -20 start-ups per

10,000 people of working age. In other words, the absorption effect was roughly twice as high as in the previous year.

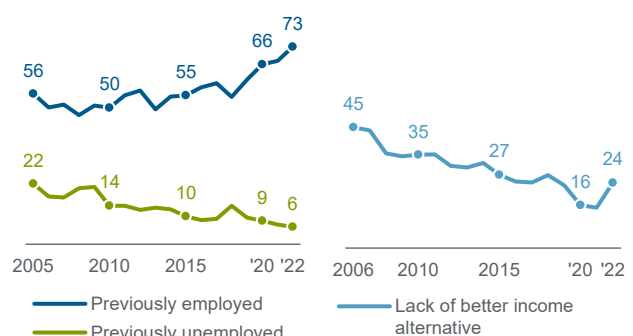
Thus, what remains as a difference to the start-up intensity measured in 2022 is a (relatively large) unexplained effect of 16 start-ups per 10,000 people of working age. It could at least partly be a reflection of an effect that has arisen from the COVID pandemic, in that people have developed a stronger desire to explore new occupational avenues. The findings for start-up activity in 2022 shown below provide indications that support this explanation.

Consequences of the labour market boom: Businesses started by salaried employees increased substantially

For many years, a good half of entrepreneurs on average were in salaried employment immediately before they started their business. From 2005 to 2018, the long-term average was 54% and annual averages oscillated around this share. For structural reasons, this long-term average is several percentage points (PP) higher for part-time than full-time start-ups. In 2019 the overall share of businesses started by salaried employees then broke the 60% mark for the first time, rose to 66 and 68% in the years 2020/2021 and added several percentage points again in 2022 to reach 73% (Figure 3, left). The rising share has to do with the fact that the booming labour market has placed increasingly more people into salaried employment. Therefore, the likelihood that entrepreneurs have previously been employees inevitably rises. At the same time, the share of businesses started from unemployment fell to an all-time low in 2022.

Figure 3: Increasingly fewer start-ups from unemployment but more businesses were started for lack of better income alternatives than in the previous year

Start-ups in per cent



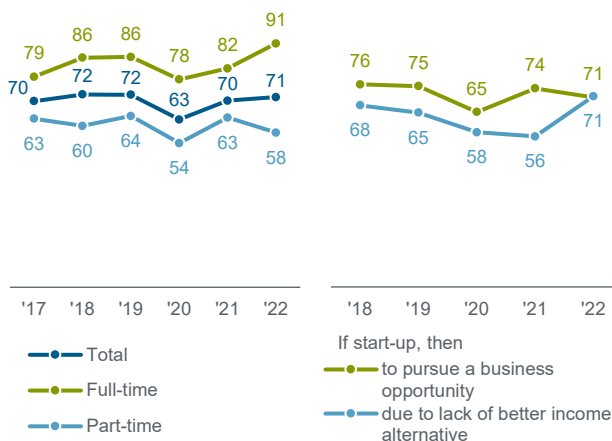
Source: KfW Entrepreneurship Monitor.

Despite the high absorption capacity of the labour market, the share of businesses started for lack of better income alternatives rose from 15 to 24% in 2022 from the previous year (Figure 3, right). A lack of better income alternatives can mean one of two things. Either a person had no income alternative in the labour market and therefore became an entrepreneur (necessity start-ups). Or that person had such alternatives but saw self-employment as the better income alternative ('best solution').

Those who currently regard self-employment as the best income alternative appear to account for the higher share recorded in 2022. An indication of this is that among people who started a business for lack of better income alternatives, the share of those who would prefer self-employment to salaried employment irrespective of their current situation rose from 56 to 71% year on year (Figure 4). Among full-time entrepreneurs, the share of those for whom self-employment is the preferred income alternative has now reached a record high of 91%.

Figure 4: Self-employment as a choice has reached a record high

Share of entrepreneurs who started a business as a preferred income alternative in per cent



Source: KfW Entrepreneurship Monitor.

By far the most common motive for people to become self-employed is independence or self-realisation. On a long-term average, this motive predominates in four of ten entrepreneurs. For around one third of entrepreneurs, however, the main motive is to earn a higher or additional income or to earn a livelihood. Pursuing a business idea is the main driver for a further 15%. Other, rather less common motives are the desire to end or avoid unemployment (5%) because of better job or career prospects (5%) or to safeguard the survival of an existing business (3%). In 2022, there was an interesting deviation from the long-term structure outlined here. The motive of 'better job or career

prospects' took a share of 1–4% in the years 2018–2021 but rose to 12% in 2022.

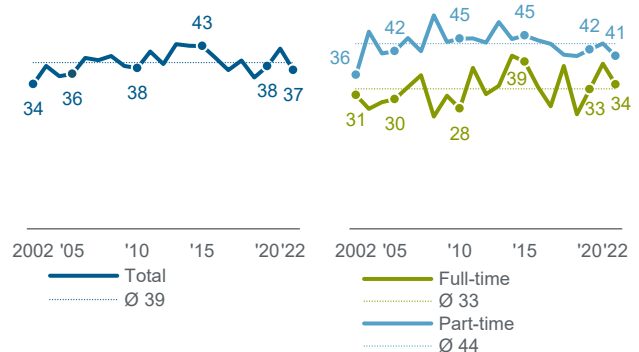
Thus, in 2022, more people became entrepreneurs because they saw no better income alternative in terms of job or career prospects, presumably because self-employment was the best income alternative for them and they preferred it to salaried employment. Thus, the unexplained positive component of start-up intensity could indeed to a great extent reflect an increased post-pandemic desire to try out new career pathways.

Share of female entrepreneurs fell again

The number of businesses started by women grew significantly in the first two years of the pandemic. However, the hope for the start of a positive trend proved to be premature again. The share of female business starters fell again steeply to 37% (Figure 5). The decline in start-up activity in 2022 is thus due in large part to a drop in female entrepreneurs. Thus, 205,000 women started a new business in 2022, approx. 20% fewer than in the previous year. The number of business starters remained almost steady at 345,000 (-1%). It became clear once again that the annual share of female entrepreneurs consistently hovers around its long-term average of 39%. The share of women in full-time start-ups fell to 34%, a steeper drop (-5 PP) than for part-time entrepreneurs (41%, -3 PP), but unlike the latter it remains just barely above average.

Figure 5: Share of female business starters continues to oscillate around the long-term average

Percentage of female entrepreneurs



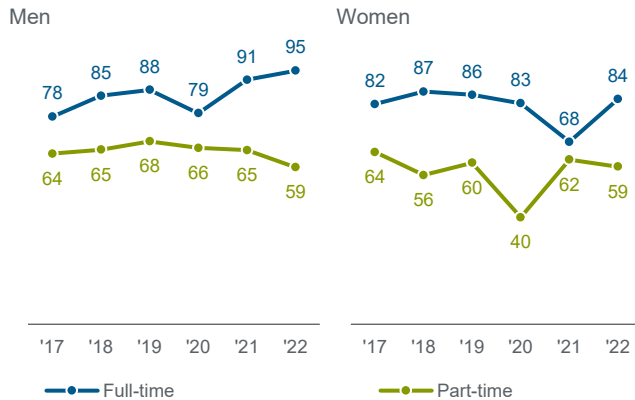
Source: KfW Entrepreneurship Monitor.

Full-time businesses were started much more often in 2022 because self-employment was regarded as the preferred income alternative. This development was seen particularly among female entrepreneurs. Already in 2021, self-employment was the preferred income alternative for 91% of full-time business starters (Figure 6). That share rose only minimally to 95% in

2022. The share of full-time female business starters fell sharply in the previous three years but rose again to 84% in 2022.

Figure 6: Self-employment surged as the preferred alternative for full-time business starters

Percentage of entrepreneurs who started a business as a preferred income alternative



Source: KfW Entrepreneurship Monitor.

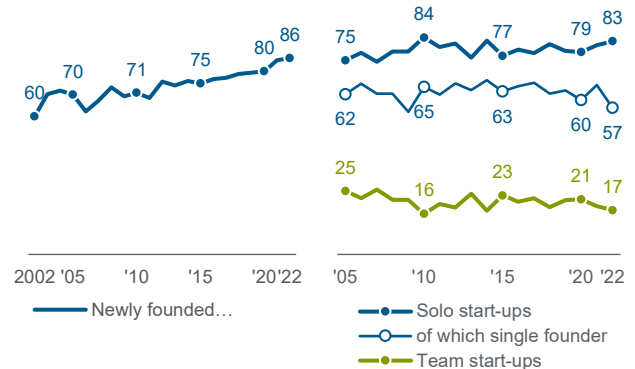
In part-time start-ups, the share of business starters with a preference for self-employment as an income alternative is lower than for full-time entrepreneurs and very steady over time. On average, this applies to just under two thirds (65%) of part-time business starters, although the rate for 2022 was slightly lower, at 59%. For female part-time business starters, the average is 57%. That figure fell sharply in 2020. The heavy burdens which women in particular had to shoulder in the first year of the pandemic in their private lives and as entrepreneurs, owing to their sectoral focus, also required adjustments for newly started part-time businesses.² This may have caused them to have more doubts as to whether or not to start a business.

Share of newly started businesses reached new all-time high

Most start-ups are greenfield start-ups. In other words, in legal and organisational terms they are new enterprises. For SMEs grappling with succession worries, the fact that takeovers make up only a small portion of entrepreneurial activity is a structural problem. In recent years, however, the problem has become more urgent and larger. One reason is that as society grows older, more and more entrepreneurs are keen to retire.³ Another reason is that for over ten years now, there have been fewer and fewer 'derivative' start-ups that build on an already existing enterprise. Entrepreneurial activity in 2022 has done little to improve this situation. At 86%, the share of newly started businesses remains on a record level (Figure 7).

Figure 7: Newly started businesses on an all-time high, with more solo start-ups but more often with employees

Start-ups in per cent



Source: KfW Entrepreneurship Monitor.

The structurally high share of newly started businesses in entrepreneurial activity is consistent with the equally high share of solo start-ups. Solo start-ups are businesses started by a single person. Team start-ups, by contrast, are started by two or more individuals. The share of solo start-ups averages 79% over the years. In 2022 it reached 83%, which is at the top of the previous range. By contrast, the share of team start-ups stood at 17%, dropping a bit more noticeably below the long-term average of 21%.

A large portion of solo start-ups are sole traders, meaning they have no employees.⁴ The long-term average is 63%, but in 2022 that rate was a sharply lower 57%. The share of solo business starters with employees therefore rose by 10 percentage points from 16% in the previous year to 26%. The 20 per cent mark typically remains unreached here. The only time it rose to a similar level was in 2009, when 23% of solo start-ups had employees.

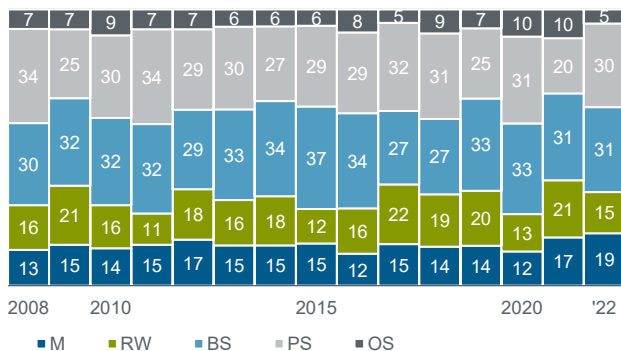
The share of employers among start-ups increased from 21 to 34% overall in 2022. Given the very good labour market situation and the disadvantage which start-ups have in recruiting workers compared with established companies, that rise was unexpected. In a long-term comparison, the rate at which both male and female business starters voice concerns about recruitment is high. Indeed, many have sought family support. Thus, several percentage points of the increase in the employer rate are attributable to family members working in the business (with or without pay). However, even without this family support, the share of employers would have grown noticeably on the previous year.

Most start-ups are service providers

Entrepreneurial activity in 2022 exhibited both typical and atypical structures. A typical feature was the high share of services, which stood at 66%, just under the long-term average (Figure 8). The share of personal services increased on the previous year and was again on a par with business services (30 and 31%). Personal services have a strong focus on retail customers (avg. 80%), while business services are heavily focused on commercial customers (avg. 63%).

Figure 8: Services predominate

Sector shares⁵ in per cent



M: Manufacturing, including construction and primary production; RW: Retail/Wholesale; BS: Business services; PS: Personal services; OS: Other services.

Source: KfW Entrepreneurship Monitor.

Deviations from the typical structure – of the past years at least – are apparent in retail/wholesale and the producing sector. Retail and wholesale had a share of roughly 20% in start-up activity since 2017. In the first year of the pandemic, that share then dropped to 13% but recovered again in 2021. It has now fallen back to 15%, the level of 2020. The inflation-induced effects in 2022 obviously led to similarly unattractive retail and wholesale conditions as two years before, when COVID-19 restrictions were in place. The second anomaly is an unusually high 19% share of businesses started in the producing sector, especially construction.

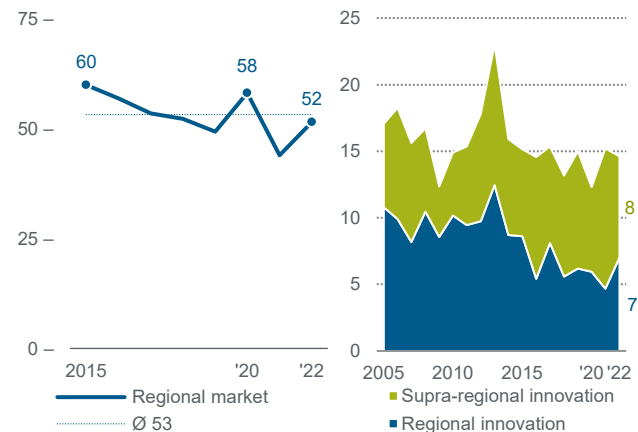
Start-up activity has a strong regional focus

Start-ups tend to have a regional focus, meaning their customers are either locals or domiciled in the relevant region. The long-term average is 53%. A falling trend seems to have emerged here since 2015, with a temporary increase in the share of regional start-ups in 2020 and 2022 (Figure 9, left). In 2020 the COVID-19-induced restrictions likely led to the creation of more regionally focused business start-ups. On the one hand, the restrictions put limits on a supra-regional focus but on the other hand they also opened up regional market opportunities. In 2022, by contrast, the rate likely reflected more of a normalisation of the

share of regional business start-ups. Regionality fell sharply in 2021, presumably in part due to the very small share of personal services in which start-ups were engaged.

Figure 9: Regionality of entrepreneurial activity is trending downward

Start-ups in per cent



Which market does your product or service target [Your region, the German market, the European internal market or the global market]? Are the products or services you offer a new-to-market innovation, that is, are there no other businesses or traders offering comparable products or services [in your region, in Germany or worldwide]?

Source: KfW Entrepreneurship Monitor.

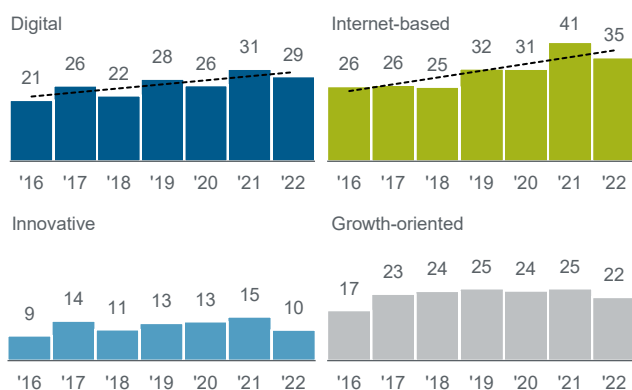
The decreasing regionality is also reflected in whether and how often the start-ups' offerings are new-to-market innovations. If an offering did not exist in the relevant target market prior to the founding of the business, it is a new-to-market innovation. New-to-market innovations are therefore more likely in regional markets than in supra-regional markets. Indeed, on a long-term average, each year around 16% of entrepreneurs report starting off with new-to-market innovations, a good half of them with regional new-to-market innovations. Since the regionality of start-up activity has been declining, a larger portion of offerings has also consisted in supra-regional new-to-market innovations (Figure 9, right). Thus, a larger portion of the 15% start-ups with new-to-market innovations in 2022 again offered supra-regional than regional new-to-market innovations (8 vs. 7%), meaning offerings that were new to Germany or even the global market.

Digital technologies and internet are important

In recent years, digital technologies and the internet have played an increasingly important role in entrepreneurial activity. Thus, the share of newly started businesses that required customers to use digital technologies to be able to use their products and services rose from one fifth to just under one third (Figure 10). In 2022, that share remained on the most recent level, at 29%. The internet also became a core element of business activity in a growing share of start-ups. Starting from one quarter of businesses started in 2016, the share of internet-based start-ups grew to 36% in 2022. The disruptions of the COVID-19 pandemic laid bare the weaknesses of many analogue business models. That appears to have boosted digital and internet-based business models yet again.

Figure 10: Importance of digital and Internet-based start-ups remains high

In per cent.



Is your product / your service a digital offering, that is, do your customers have to use digital technologies to be able to use your offering? Is the Internet a core element of your business? Do you conduct R&D activities as part of your business in order to make technological innovations market-ready? Do you agree with the statement 'My business is to become as large as possible'?⁶

Source: KfW Entrepreneurship Monitor.

That trend has so far not emerged in innovative and growth-oriented start-ups. Innovative start-ups – those that conduct technological research and development – account for 12% of entrepreneurial activity on a long-term average. Last year their share was slightly lower, at 11%. Growth-oriented start-ups that intend to grow 'as large as possible' account for 23% of start-ups on a long-term average. Their share was also just slightly lower, at 22%.

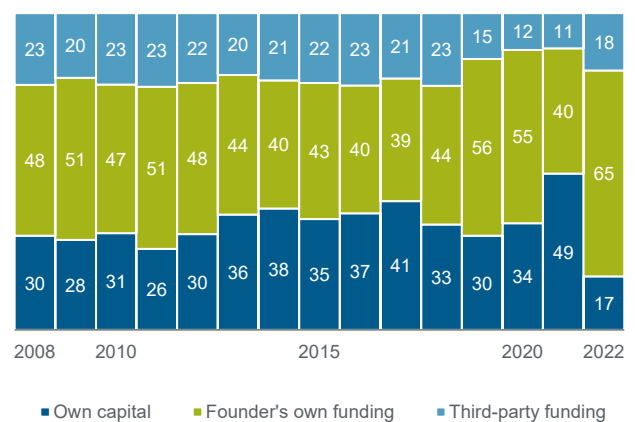
Structure of resources is changing noticeably

A large portion of entrepreneurial activity in 2022 was funded by the entrepreneurs themselves. Just under two thirds (65%) of business starters exclusively used their own capital (Figure 11). That was the highest share measured to date and is in sharp contrast to the

resources used by start-ups in 2021. At the time, only 40% were funded exclusively by the starters themselves, which is much lower than the long-term average. By contrast, the share of business start-ups that 'funded' themselves without external finance, for example with physical capital, was an exceptionally high 49%. That rate shrank to a mere 17% in 2022. External capital from third parties was raised by 18% of business starters. That was a higher share than in the previous years but remained just under the long-term average of 20%.

Figure 11: More business starters than ever are self-funded

Use of resources, shares in per cent



Note: Differences may be due to rounding.

Source: KfW Entrepreneurship Monitor.

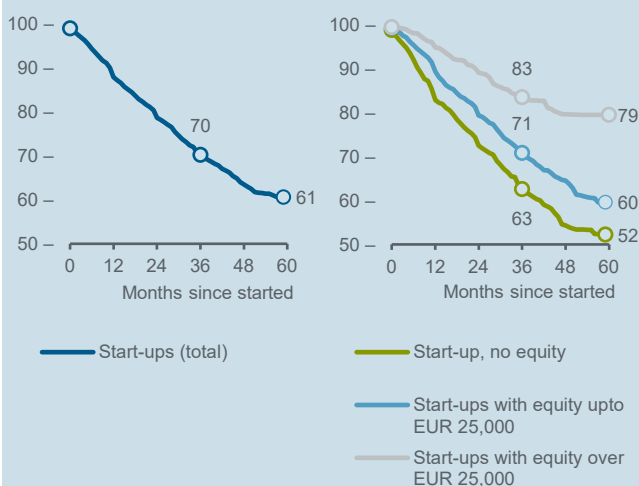
The noticeable change in the use of resources surely has to do with the structural shifts in entrepreneurial activity. In particular, there were fewer business starters with typically smaller start-up projects, such as solo self-employed, women or younger entrepreneurs. However, the broader inflationary environment is also likely to have had an impact, as the currency devaluation provided incentives for new acquisitions.

Start-up discontinuation rates

The survival rate of start-ups is derived from the data of the KfW Entrepreneurship Monitor, with the rule of thumb being that around one third of business starters have closed their business again within three financial years. Around 60% of start-ups are still in business 60 months after launching (Figure 12, left). The reasons for aborting are diverse. By far the largest proportion of business starters discontinue their venture in the first five years for personal reasons, not because of immediate financial stress (Figure 13). Examples of personal reasons include family pressures, illness, dissatisfaction with income achieved or the emergence of a more attractive job alternative.⁷ Besides, many start-ups are planned only for the short term to begin with, particularly part-time businesses.

Figure 12: The more capital a business has, the longer it survives

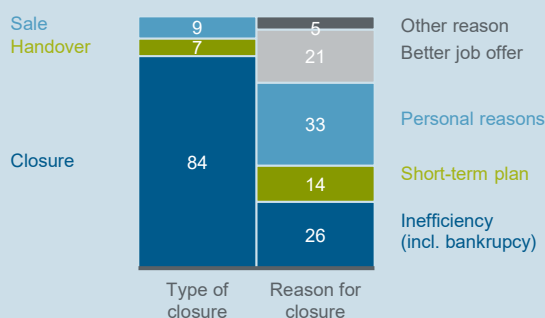
Survival rates of start-ups in per cent
(Kaplan–Meier survival function)



Source: KfW Entrepreneurship Monitor.

Figure 13: Start-ups are usually discontinued early for personal reasons

Shares in per cent of all closures in the first five years



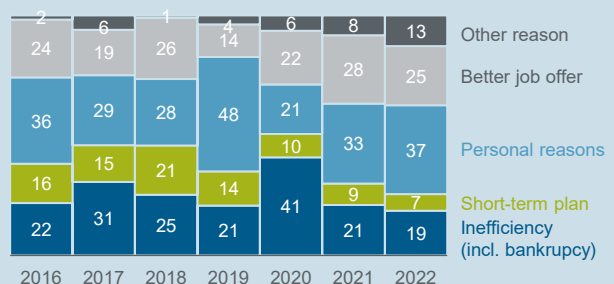
Source: KfW Entrepreneurship Monitor.

Only a small fraction of start-ups end because of insolvency. Discontinuation rates therefore cannot be equated to 'default rates'. That would also be wrong because a large portion of businesses start without external capital input, so they would not be able to 'default' at all. By comparison, starters who employ larger sums in excess of EUR 25,000 (regardless of whether these are their own or borrowed funds) have significantly higher survival rates (Figure 12). Discontinuation rates are particularly high among business starters who start off without any financial capital at all. This has to do with the fact that such start-ups are more likely to be intended as a source of temporary income, whereas more highly capitalised businesses are planned for the longer term.⁸

The reasons for closing newly founded businesses have changed at structural level since the outbreak of the COVID-19 pandemic. At first, the rate at which businesses were closed because they were unprofitable doubled in 2020. Loss of turnover as a result of pandemic restrictions was the main factor. After that, the rate returned to pre-crisis levels. Closures for personal reasons or because better job offers are available in the labour market now dominate again. What is striking, however, is that the temporary nature of the business was a less common reason. That was likely because the need to start a business intended to be temporary to begin with, for example to earn an income, has decreased.

Figure 14: Switch to paid employment was more important in business closures in 2021

Shares in per cent of all closures of businesses not more than five years old in each year



Source: KfW Entrepreneurship Monitor.

Bureaucracy, the business cycle and suppliers were more common obstacles than average in 2022

For years, bureaucracy has been among the most frequently mentioned start-up impediments. In 2022, too, 45% of business starters reported bureaucratic hurdles and delays – by far the most frequent mention and a high rate compared with previous years (Figure 15). In 2022, we measured concerns about the ability to make a profit (35%), high energy prices (33%) and high purchase prices (32%) for the first time. Around one third of business starters reported these as the next highest barriers. Nearly one third of start-up entrepreneurs cited the weak business cycle (28%) and excessive pressure on their relationship or family (27%) as factors that were causing problems. Combined with bureaucracy, economic worries and a shortage of suppliers, goods or materials were factors mentioned significantly more often in 2022 than in the long-term average.

Figure 15: Bureaucratic impediments are reported more often than average

Start-ups in per cent



Source: KfW Entrepreneurship Monitor.

Over the long-term average, 15% of start-ups experience funding difficulties. With a rate of 14%, the year 2022 was hardly any different (Figure 15). Externally financed start-ups are most likely to experience funding difficulties. There are two reasons for this: First, funding difficulties usually mean that the starters' own funds are insufficient, which requires them to raise capital from third parties in the first place. Second, attracting third-party capital is often a challenge and involves much convincing, which can be perceived as funding

difficulties. Thus, 36% of externally financed business starters had funding difficulties in 2022. Among business starters who employed no capital at all, that rate was 12%. It appears that these would have liked to employ capital (especially own funds) but were unable to.

For start-ups, funding problems are just the tip of the iceberg

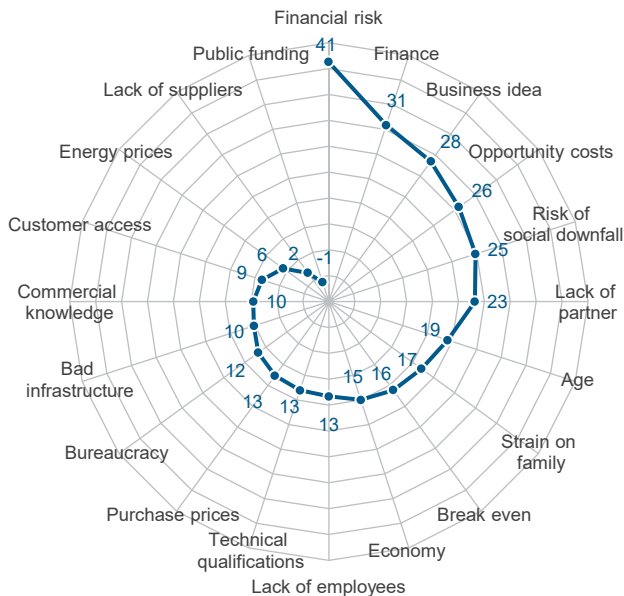
However, starters can provide only incomplete details about the extent of difficulties they experience in funding their business. After all, they successfully started their business. But the funding difficulties they exhibit are only the tip of the iceberg. This is because the potential entrepreneurs whose start-up plans were thwarted by funding problems remain invisible. Nevertheless, they are important when assessing the problem.

Start-up plans fail much more often than succeed. On average, since 2008 there have been roughly twice as many people who aborted their start-up plans each year than those who started a business successfully. In 2022, 40% of start-up plans were successful and 60% were aborted. If the share of aborted start-up plans is significantly higher when a specific impediment emerges, that is an indication of the impact it has as a barrier to entrepreneurship that thwarts the realisation of business start-ups.

The whole iceberg becomes visible when we take into account failed start-up plans: Whereas 14% of successful business starters reported few funding difficulties, 45% of start-up plans were abandoned because of funding problems. The share of start-up plans that were aborted because of funding difficulties is thus 31 percentage points higher (Figure 16). On that basis, funding difficulties are the second highest barrier to entrepreneurship overall. The only barrier associated with an even higher rate of plan discontinuers is financial risk. Where prospective entrepreneurs are worried about financial risk, the share of abandoned plans is 41 percentage points higher.

Figure 16: Where financial risk, funding or the business idea are a problem, the rate of discontinued plans is highest

Percentage point increase in rate of discontinued plans



Source: KfW Entrepreneurship Monitor.

Hurdles that play a major role in causing start-up plans to fail are rather uncommon among newly started businesses. Bureaucracy, the impediment most often mentioned by entrepreneurs, is therefore associated with only a slightly increased rate of abandoned start-up plans. In the ranking by causes of discontinuation, bureaucracy is in the lower third of barriers to entrepreneurship (Figure 16).

Thus, bureaucracy appears to play only a subordinate role in the discontinuation of start-up plans. It is more of a steady companion before and after a business is started. On the one hand, this is good because bureaucracy forms the basis for fair and legally compliant business management. But when more and more rules and requirements are imposed, when they are not harmonised, ambiguous or excessively complex, the benefits and costs of bureaucracy are thrown out of balance. That creates a burden for small and young businesses in particular, whose capacities and resources for responding to the demands are limited. The frequency with which bureaucracy is cited as a barrier to planning and founding a business should attract policymakers' attention. Removing or at least easing bureaucracy, for example through digitalisation, must therefore always be on the economic policy agenda. The goal should be: simpler, faster, more digital.⁹ That would also help to capitalise on

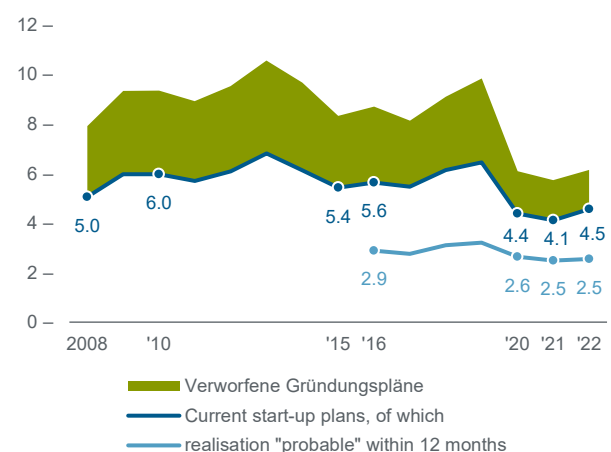
entrepreneurial potential. After all, even people who have not yet started or attempted to start a business are deterred by red tape. Their willingness to start a business would rise.¹⁰

More start-up plans again: a brighter outlook for 2023

Entrepreneurial planning activity picked up slightly in 2022. After 4.1% in the previous year, the rate of employable persons with start-up plans was 4.5% (Figure 17). The number of start-up planners (known as 'nascent entrepreneurs') thus increased.¹¹ The rate of planners wanting to start trading within the next 12 months remained at 2.5% of employable people in 2022, the same level of the previous year. On that basis, steady and gradually rising entrepreneurial activity should be expected for 2023. This is because it usually takes several months for an idea to be put into practice. The development of the planning rate is therefore normally a good indicator of how expected entrepreneurial activity will develop, even if only a fraction of start-up plans is realised.¹² Since last year, the development of start-up plans appears to have regained its predictive value for the development of entrepreneurial activity in the following year. The link, which was steady for many years, was temporarily broken with the outbreak of the COVID-19 pandemic. The positive trend in the rate of planners, however, continues to face a challenging macro environment with low growth and persistent skilled labour shortages.

Figure 17: Start-up plans remain on a low level

Employable persons in per cent.



In the past 12 months, have you ever given serious thought to self-employment – whether full-time or part-time? Have you given up these plans in the meantime? 'Do you expect your planned business to begin operating within the next twelve months?

Source: KfW Entrepreneurship Monitor.

Box 2: Further analyses of entrepreneurial activity and access to data of the KfW Entrepreneurship Monitor

The Appendix of Tables and Methods to the KfW Entrepreneurship Monitor along with further information and publications from KfW Research on start-up activity in Germany can be found on our [Thematic page](#) 'Innovations and Start-ups'.

The KfW Entrepreneurship Monitor is a scientific data record compiled for the purpose of economic analysis of entrepreneurial activity in Germany. It is available to external researchers for empirical research work subject to certain access criteria.

¹ Metzger, G. (2002), Start-up activity returned to pre-crisis level in 2021: More female, young and opportunity business starters., KfW Start-up Report 2022, KfW Research.

² Metzger, G. (2021), Start-up activity 2020: a rollercoaster of highs and lows: Coronavirus crisis brings new low in full-time business starters but also holds opportunities. KfW Entrepreneurship Monitor 2021, KfW Research.

³ Schwartz, M. (2023), Status report on SME succession 2022: Knappheit an Nachfolgekandidaten nimmt zu, Misserfolge dürften häufiger werden (Succession candidates are becoming increasingly scarce, failures are likely to become more common – in German). Focus on Economics No. 424, KfW Research.

⁴ 'Solo self-employed are self-employed persons without staff, also referred to as own-account employed.'

⁵ Start-ups were allocated to sectors on the basis of the descriptions of start-up projects in accordance with the 'Classification of Economic Activities', Edition 2008 of the German Federal Statistical Office.

⁶ Digital entrepreneurs are those whose product or service can be accessed only through digital technologies. The business models of digital start-ups are diverse: They can be purely digital, as in the case of app providers, operators of web portals or web hosting services; they can have a major digital component, as in the case of online traders or providers who sell products or services (they produce themselves) exclusively via online marketplaces ('gig economy'), or they comprise an activity that is essentially based on digital technology, such as that of software developers, web designers or IT consultants, or in online marketing or digital photography.

⁷ For more on the influence of various business founder and project characteristics on the survival rates of start-ups, see Metzger, (2022), KfW Entrepreneurship Monitor 2022. Appendix of Tables and Methods. KfW Research, page 22.

⁸ See also Egel, Falk, Heger, Höwer and Metzger (2010), Ursachen für das Scheitern junger Unternehmen in den ersten fünf Jahren ihres Bestehens (Causes for the failure of young enterprises during the first five years), study commissioned by the Federal Ministry for Economics and Technology, Mannheim and Neuss, March 2010 (in German).

⁹ Metzger, G. (2023), Dreiklang des Bürokratieabbaus: einfacher, schneller, digitaler (Three-pronged approach to cutting bureaucracy: simpler, faster, more digital – in German). Focus on Economics No. 422, KfW Research.

¹⁰ Metzger, G. (2023), Selbstständigkeit für viele nicht attraktiv, Gründungsbereitschaft aber gestiegen (Self-employment not attractive for many, but entrepreneurial drive has increased - in German). Focus on Economics No. 418, KfW Research.

¹¹ 'Nascent entrepreneurs' are persons who are in the process of starting a business, meaning they have start-up plans. Information on start-up plans has been collected in the KfW Entrepreneurship Monitor since the year 2008. A very steady pattern has emerged since 2012: Around 45% of annual start-up plans are in the brainstorming phase, 30% in the phase of conceptual review or feasibility assessment, and 25% in the implementation phase with initial organisational stages.

¹² The planning rate is many times higher than the start-up rate. That means many start-up plans are never realised. Up to 2019, on average 46% of nascent entrepreneurs expected to start their business activity within 12 months. The more advanced the start-up planning, the higher its share: 26% in the brainstorming phase, 52% in the design phase and in 76% the implementation phase.