



KfW Research

KfW Start-up Monitor 2018

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Start-up activity remains in a trough but growth, innovation and digitalisation are gaining importance

Number of business founders drops again

The labour market has had a strong influence on start-up activity in Germany for years. It offers potential business founders an abundance of attractive employment opportunities. That is why the number of first-time founders dropped again in 2017 despite the cyclical boost. A mere 557,000 persons (-17 %) started a new business of their own – fewer than ever before.

Business founders are more idea-driven, growth-oriented and innovative

The structural quality of newly started businesses, however, improved significantly in 2017. The number of idea-driven opportunity start-ups grew 8 % to 333,000. Opportunity-start-ups usually have higher survival rates and are more employment-intensive than average, which makes them particularly important for the economy. There was also an increase in the number of innovative entrepreneurs (76,000, +31 %), digital entrepreneurs (144,000, +3 %) and growth entrepreneurs (127,000, +10 %).

More full-time start-ups by men led to a decline in female founders

The share of women in start-up activity was down again in 2017, dropping to 37 %. The decline was most pronounced in full-time start-ups. This effect was due to increased full-time start-up activity by men.

Filling positions is more difficult than ever before

Founders who started a new business from the ground in 2017 created more than 150,000 full-time equivalent jobs. But a labour market swept clean of skilled workers put the handbrake on new businesses. One in two first-time founders with employees had difficulty filling positions – an unprecedented level.

No impulses for a trend reversal

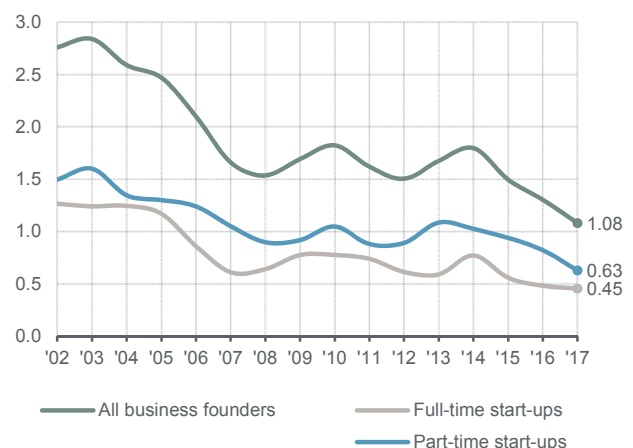
Currently there are no impulses in sight that could lead to an expansion in start-up activity. By current predictions, the absorption effect of the labour market will exceed the cyclical pull effect and start-up plans have also stagnated. Both factors signal continuing weak start-up activity in 2018.

Significant decline in part-time start-ups

The data of the KfW Start-up Monitor (Box 1) show: The decline in start-up activity continued in 2017 as well. Only 557,000 persons started a new business, 115,000 fewer than in 2016 (-17 %). That was an unexpectedly strong decline in the start-up rate from 1.30 to 1.08 % (Figure 1). In other words, 108 from 10,000 persons aged 18 to 64 years were business founders in 2017. Part-time start-ups in particular decreased. The number of part-time business founders plummeted by 101,000 to 323,000 (-24 %). The number of full-time business founders, in turn, dropped moderately by 13,000 to 234,000 persons (-6 %).

Figure 1: Start-up rate is down to just above the one-per cent mark

Start-up rate in per cent



Note: Annual share of business founders in the population aged 18 to 64 years in the period from 2002 to 2017.

Source: KfW Start-up Monitor.

Box 1: The KfW Start-up Monitor

The KfW Start-up Monitor is based on the information provided by 50,000 randomly selected persons domiciled in Germany. They are interviewed by telephone on an annual basis as part of a representative survey of the population. The survey covers a broad range of start-ups: full-time and part-time entrepreneurs, self-employed professionals and business owners, new businesses and takeovers. That makes the KfW Start-up Monitor the only data source in Germany to provide a comprehensive picture of German start-up activity.

Labour shortage breaks habitual patterns

The year 2017 actually extended an invitation to start a business. Adjusted for calendar effects, GDP growth was 2.5 after 1.9% in the previous year,¹ the strongest growth surge since 2011. The rate of unemployment, however, dipped only slightly to 3.7% (2016: 3.9%).² So the cyclical pull outweighed the absorption effect of the labour market. It would therefore have been plausible to expect more business founders in 2017 – especially part-time entrepreneurs, who tend to respond more strongly to the business cycle than full-time entrepreneurs. Instead, their numbers dropped sharply.

The tight labour market is obviously breaking the usual long-term correlation of unemployment and growth with start-up activity. Never before has it been easier to find salaried employment, even if just for extra income. Record numbers of vacant jobs and record short filling times show how strained the staffing levels are at many businesses. People who have a job also have less of a chance to start a part-time business. Both factors make part-time entrepreneurship extraordinarily difficult. Demand for full-time labour is also high. Persons of working age are currently spoiled for choice – having to decide between many attractive employment alternatives and, in general, between salaried employment and (full-time) self-employment. Increasingly often, they decide against self-employment. Lawmakers may also have made it difficult to venture into self-employment. The reform of the German Temporary Employment Act came into force in 2017. The new requirements may have reduced demand for labour from self-employed persons.

Structural quality of start-up activity is rising

The abundance of job vacancies which the record labour market is offering has affected what are known as ‘necessity start-ups’. The number of persons who took up self-employment for lack of better income alternatives dropped by a further 37,000 to 129,000 (-22%, Table 1). But a booming labour market also offers alternatives for potential opportunity entrepreneurs. Unlike in previous years, opportunity entrepreneurs were able to resist the lure of the labour market in 2017. The desire to put an explicit business idea into practice prompted 333,000 persons to start a business, 23,000 more than in the previous year (+8%). The ratio between opportunity entrepreneurs and necessity entrepreneurs thus improved for the third year in a row. Because opportunity start-ups usually have higher survival rates³ and more employees than average, the structural quality of start-up activity has improved further. From an economic perspective, that

is good news. But the total number of start-ups is nevertheless too low.

Table 1: Opportunity start-ups, innovative start-ups and high-growth start-ups bucked the trend

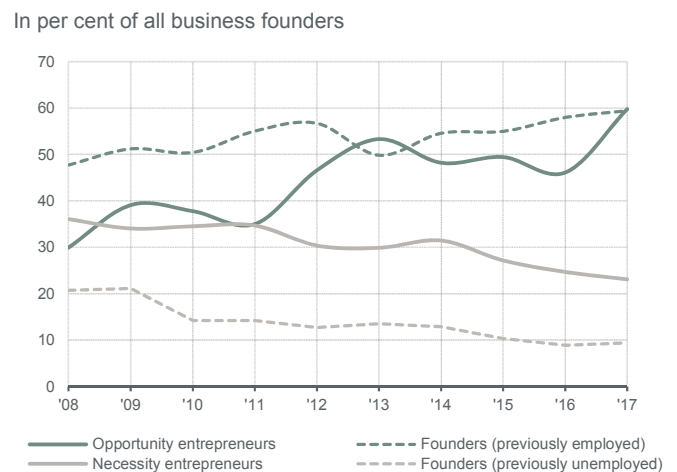
Number of start-up entrepreneurs in thousands

	2015	2016	2017
Total	763	672	557
Full-time start-ups	284	248	234
Part-time start-ups	479	424	323
Opportunity start-ups	377	310	333
Necessity start-ups	207	166	129
Innovative start-ups	95	58	76
Digital start-ups	160	140	144
High-growth start-ups	–	115	127

Source: KfW Start-up Monitor.

The fact that more entrepreneurs were opportunity-driven had to do with their previous employment situation. Many who start a business while they are working or give up their job to be an entrepreneur do it to realise a business idea. The share of opportunity entrepreneurs increased along with the share of business founders who were previously employed (Figure 2). But the proportion of necessity start-ups fell, as did the share of business founders who were previously unemployed.

Figure 2: Both necessity entrepreneurs and previously unemployed entrepreneurs dropped



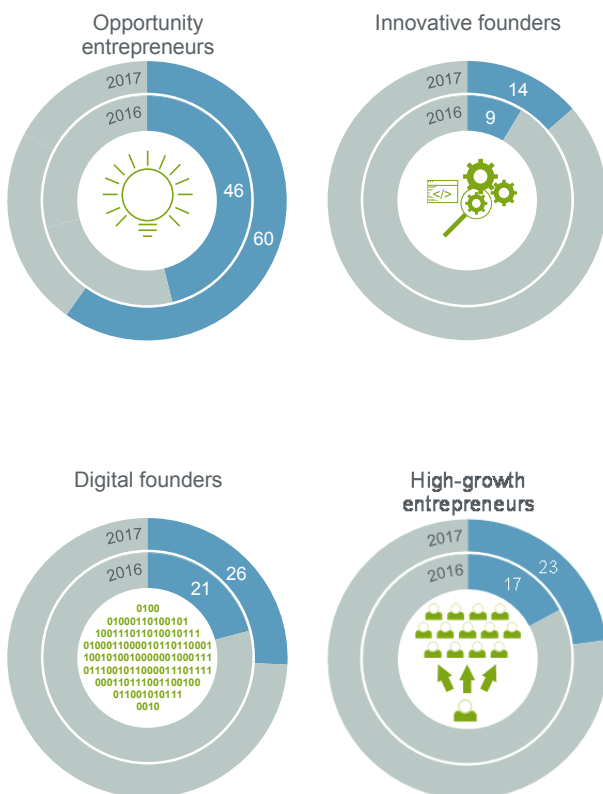
The question asked about the motive for self-employment was: ‘What was the main reason you took up self-employment? Was it to seize a business idea [opportunity], for lack of a better job alternative [necessity], or was it for a different reason?’

Source: KfW Start-up Monitor.

The share of opportunity entrepreneurs in all business founders climbed to 60 % year-on-year. That also benefited entrepreneur groups represented more often among opportunity entrepreneurs. Thus, the share of innovative business founders increased to 14 %, digital entrepreneurs⁴ to 26 % and growth entrepreneurs to 23 % (Figure 3). All of these were therefore able to increase in absolute figures against the overall trend (Table 1).

Figure 3: Business founders are more often driven by ideas, innovative, digital and growth-oriented

In per cent of all business founders



Note: Opportunity entrepreneurs are persons who found a business because they have a business idea; innovative founders are persons who conduct research and development in order to make a technological innovation ready for the market; digital founders are those whose offering is accessible exclusively through the use of digital technologies; high-growth entrepreneurs are persons who want their business to grow 'as large as possible'.

Source: KfW Start-up Monitor.

Specific economic expectations are associated with each of these groups of start-ups. Because they are so close to new technologies, innovative founders and digital founders play the role of 'creative destroyers' in Schumpeter's characterisation. They, in particular, target established markets or create entirely new ones, thereby driving structural change. Growth

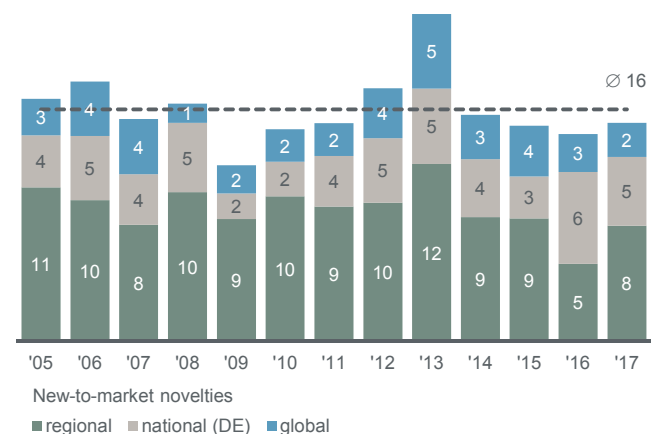
entrepreneurs, who want their business to grow 'as large as possible', carry the hope that they will make a lasting contribution to sustainable employment.

Business founders that start off with new-to-market innovations also have the potential for 'creative destruction' but most are concerned with being the first to bring existing products or services to a different area of the market – from other regions into their own or from other countries into Germany. On a long-term average, 16 % of start-ups offer new-to-market innovations (Figure 4 4). Most of them operate on a regional scale (9 %) and at national level (4 %). World-wide new-to-market innovations are by definition truly 'unprecedented' and therefore least common (3 %).

The proportion of start-ups with new-to-market innovations rose slightly to 15 % in 2017. It was still below its long-term average for the fourth consecutive year, however. The moderate rise primarily resulted from the renewed increase in the number of start-ups with regional new-to-market innovations. Their proportion recovered after a surprisingly sharp fall in the previous year. The shares of start-ups with new-to-market innovations for Germany or the world, on the other hand, dropped slightly.

Figure 4: Start-ups with new-to-market novelties are very stable

Share of start-ups with new-to-market innovations in per cent



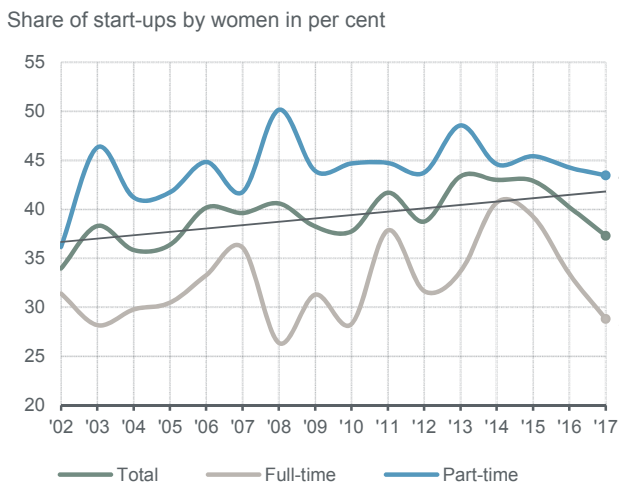
Note: New-to-market innovations are products or services viewed by the surveyed start-ups as being new to the regional, the national or the global market.

Source: KfW Start-up Monitor.

Share of women dropped again

As women’s labour market participation has been growing continuously for years, so has the trend of female participation in start-up activity increased (Figure 5). That trend peaked at 43 % in the years 2013 to 2015. In 2016, however, the proportion of women dropped, particularly the share of full-time female start-ups. One reason was the labour market trend, which went even better for women than for men.⁵

Figure 5: Share of women among full-time start-ups is down



Source: KfW Start-up Monitor.

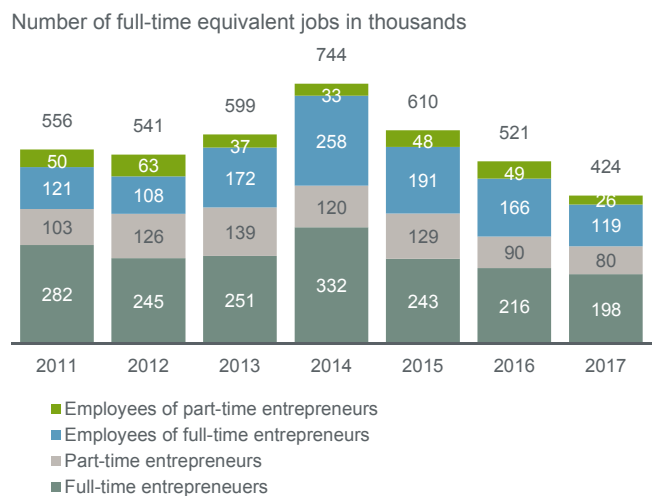
The share of women in start-up activity dropped again by three percentage points to 37 % in 2017. The decline among full-time start-ups was sharper again, from 33 to 29 %. The share of part-time start-ups by women, on the other hand, was almost steady at 43 % (2016: 44 %). Unlike in 2016, the declining share of women in 2017 does not represent an above-average withdrawal of women from full-time start-ups but is the result of stronger male participation. The proportion of 32 % full-time to 68 % part-time start-ups by women thus hardly changed (2016: 31 to 69 %). While 41 % of all start-ups by men were on a full-time basis in 2016, that share was a much higher 48 % in 2017. As a result, the share of full-time start-ups by men remained steady against the general downward trend at 167,000 (2016: 166,000).

Job creation by first-time business founders in a strong labour market

Start-ups emerge in different ways. The most frequent mode is ‘from the ground up’, which refers to the building of new business structures. Roughly three quarters of all start-ups (2017: 77 %) are established from the ground up. Alternatively, the business can be started by taking over or actively participating in an existing enterprise. But this type of start-up is less common. In 2017, takeover entrepreneurs took a share of 10 % of start-up activity and participation entrepreneurs 12 %.

In start-ups based on takeovers or active participations, the businesses often have a relevant number of staff already. Including them in calculating an employment effect of start-up activity would unjustifiably overdraw their contribution. In order to assess the contribution start-up activity makes to employment, new start-ups therefore have to be looked at separately. The direct gross employment effect of start-ups is measured in full-time equivalents (FTEs, cf. note below Figure 6). In 2017 that effect was 424,000, after 521,000 in the previous year (-19 %).

Figure 6: Employment effect drops to 424,000



Note: Employee full-time equivalents (FTEs) of new start-ups are expressed as their number weighted with their individual weekly working hours. Employee FTEs reflect the sum of full-time employees and part-time employees, which are counted half. Outliers of employee numbers and weekly working hours are not included.⁶

Source: KfW Start-up Monitor.

Start-up activity by state: Berlin leads Hamburg by a nose

In the state ranking of start-up activity, Berlin is back on top of the leaderboard after falling into second place for a year (Table 2) – but only by a nose. In both city states, 207 persons out of 10,000 started their own business each year on average for the years 2015 to 2017 (Figure 7). But the difference was only in the decimal digits. Hesse, which had gradually moved up to third place in the past years, took a surprisingly sharp dive to sixth place. The third rank is now occupied by Lower Saxony, which has 141 start-ups per 10,000 persons of working age. Start-up activity declined only minimally here and displayed the steadiest start-up rate of all federal states across the entire observable period. Brandenburg was the only federal state with higher start-up activity and a commensurate leap in the ranking. More of Berlin's above-average start-up activity may be moving to its periphery, which would directly benefit Brandenburg.

Start-up activity is higher in conurbations

Urban agglomerations promise short distances because many people live within a small space. That benefits service providers and retailers most of all.

Table 2: Berlin back on top

Start-up activity by federal state

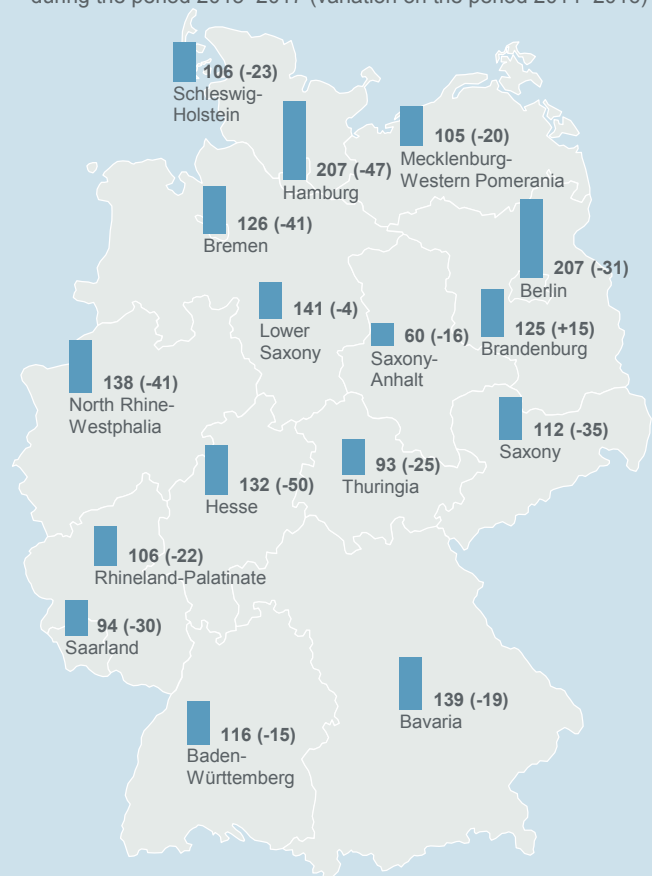
	Rank '14-'16	Δ	Rank '15-'17
Berlin	2	▲	1
Hamburg	1	▼	2
Lower Saxony	8	▲	3
Bavaria	5	▲	4
North Rhine-Westphalia	6	▲	5
Hesse	3	▼	6
Bremen	4	▼	7
Brandenburg	15	▲	8
Baden-Württemberg	9	•	9
Saxony	7	▼	10
Rhineland-Palatinate	11	•	11
Schleswig-Holstein	10	▼	12
Mecklenburg-Western Pomerania	12	▼	13
Saarland	13	▼	14
Thuringia	14	▼	15
Saxony-Anhalt	16	•	16

Source: KfW Start-up Monitor.

These are precisely the sectors where self-employment as a form of work is more widespread. Consequently, the higher density of western German (non-city) states is probably one reason they are typically behind the city states in the ranking. However, the federal states' particular economic structure also plays an important role. Thus, start-up activity in Hamburg and Berlin is strongly driven by the media and IT industries with their high shares of freelancers. An industrial economy, in turn, tends to have lower start-up activity. Large enterprises typically offer attractive jobs that are also of interest to potential business founders. Eastern German area states are consistently at the bottom of the state ranking. Start-up activity there is hampered by lower average purchasing power. The older population structure there also has an adverse effect on start-up activity as the propensity to start a business usually declines with age.⁷

Figure 7: Lower Saxony had lowest decline

Average number of business founders per 10,000 inhabitants during the period 2015–2017 (variation on the period 2014–2016)



Note: Average annual number of business founders per 10,000 inhabitants aged 18 to 64 years from 2014 to 2016. Variation on the previous period 2013–2015 in brackets.

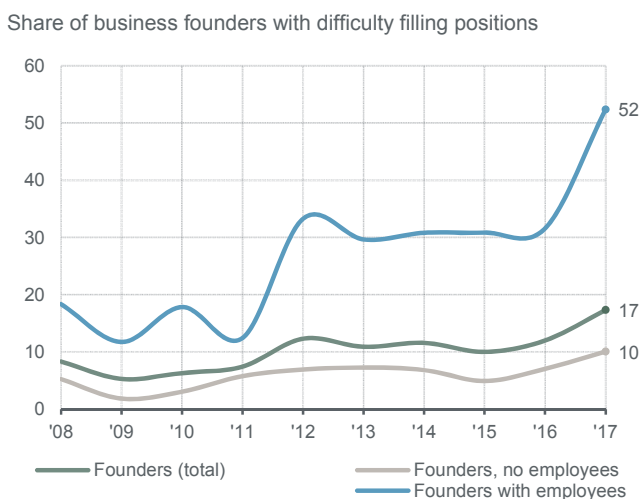
Source: KfW Start-up Monitor.

The drop in the direct employment effect is partly due to declining start-up activity and partly due to more subdued recruitment behaviour of business founders. The number of business founders fell by 16 % to 430,000. The decline was more pronounced among part-timers than full-timers, as was the case in overall start-up activity. The proportion of business founders with employees decreased to 30 % among full-timers (2016: 34 %) and to 8 % among part-timers (2016: 12 %). The contributions of full-timers and part-time start-ups to employment were as follows:

- The employment effect for full-time new business founders fell by 17,000 to 198,000 FTEs (-8 %) and for their employees by 47,000 to 119,000 FTEs (-29 %).
- The employment effect for part-time business founders fell by 11,000 to 80,000 FTEs (-12 %) and for their employees by 13,000 to 26,000 FTEs (-46 %).

Each new business founder provided 0.3 full-time equivalent jobs per capita in 2017. The value is less than one because eight in ten new business founders typically have no employees. The fact that 145,000 full-time equivalent jobs were still created shows how relevant start-ups are for the labour market. It is safe to say that the contribution to employment is also lower as a result of the tight labour market. Young businesses generally have greater difficulty attracting workers than established enterprises. The reason is that many potential employees fear losing their job if the start-up fails. For business founders it is far more challenging to find workers at a time when even established firms cannot fill 'safe' and well-paid jobs. Thus, the share of new founders reporting difficulties finding workers reached a record level in 2017 (Figure 8).

Figure 8: Filling positions is more difficult than ever before

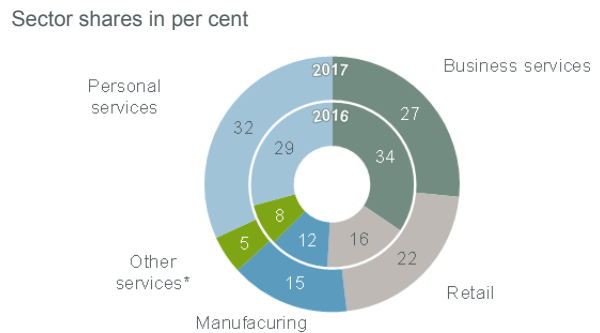


Source: KfW Start-up Monitor.

Service providers are in a solid majority

Service providers have a large share in start-up activity. Typically, roughly seven in ten entrepreneurs start a business in the services sector. In 2017, however, the share was lower at just under two thirds (64 %, Figure 9). Service providers who focus on commercial customers (business services) are usually more common than service providers who focus on retail customers (personal services). But that was different in 2017 as well. The share of personal service providers grew slightly to 32 % but the share of business service providers dropped sharply by comparison and on the previous year to 27 % (-7 percentage points). Other services accounted for around 5 % of start-up activity in 2017. The shares lost to the service sector benefited retailers in particular (22 %, +6 percentage points). The manufacturing sector represented 15 % of start-ups.

Figure 9: Service providers predominate, retailers gain



*Financial services, transport and communication services

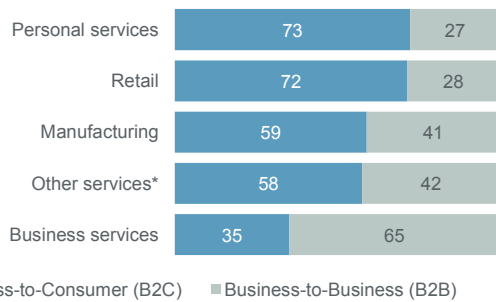
Note: Start-ups were allocated to particular branches of economic activity in accordance with the 'Classification of Economic Activities' of the German Federal Statistical Office, Edition 2008 (WZ 2008) on the basis of project descriptions provided by the business founders.

Source: KfW Start-up Monitor.

In 2017, 59 % of start-ups focused on retail customers (business-to-consumer, B2C), and 41 % on commercial customers (business-to-business, B2B). One reason for the stronger focus on retail customers was the high share of personal services and retail, as business founders in these sectors are clearly focused on retail customers (Figure 10). Overall, B2C start-ups are much more often part-timers (64 %) than B2B start-ups (48 %). Entering the B2B market appears to be more difficult than getting into the B2C market, so founding a part-time business is easier in the latter. B2B start-ups are also clearly more opportunity-driven, growth-oriented, innovative and focused on introducing supra-regional new-to-market innovations (Figure 11).

Figure 10: Most start-ups are in B2C

Customer focus by sector in per cent



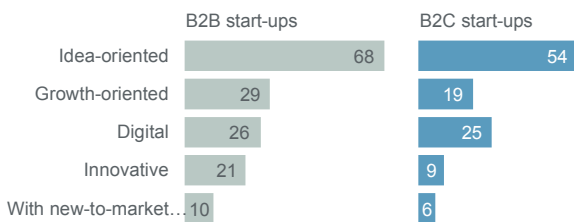
*Financial services, transport and communication services

Note: Start-ups were allocated to particular branches of economic activity in accordance with the 'Classification of Economic Activities' of the German Federal Statistical Office, Edition 2008 (WZ 2008) on the basis of project descriptions provided by the business founders.

Source: KfW Start-up Monitor.

Figure 11: B2B start-ups are more growth-oriented and innovative

Characteristics by customer focus in per cent



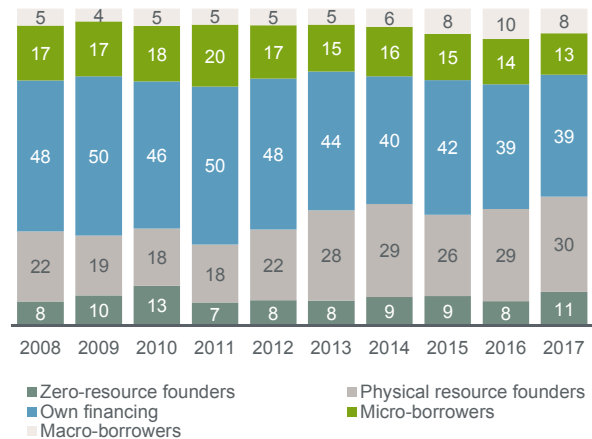
Source: KfW Start-up Monitor.

Most business founders rely on funding

Business founders are very heterogeneous overall. Their motives, goals and sector affect their resource requirements. What is undisputed is that most business founders have to apply financial resources to realise their start-up project (2017: 60 %, Figure 12). Four in ten use own funds exclusively. Furthermore, two in ten business founders raise funds from external capital providers additionally or exclusively. Micro-borrowers – who raise no more than EUR 25,000 externally – usually obtain their funds from family and friends. For macro-borrowers who borrow more than EUR 25,000 the primary sources of funding are credit institutions. Three in ten founders manage to start with just their existing physical capital. These physical-resource entrepreneurs use their private computer or car in their business. Roughly one in ten are zero-resource founders. Entrepreneurs of this type are able to offer independent services without resorting to physical or financial capital, such as self-employed interviewers, models or fitness trainers.

Figure 12: Share of macro-borrowers remains high

Start-ups by resources used in per cent



Note: Differences may occur due to rounding.

Source: KfW Start-up Monitor.

The share of macro-borrowers in all business founders fell again in 2017, after a noticeable rise since 2013 (Figure 12). Nevertheless, the average funding amount used per business founder has remained relatively steady. In 2017 an average business founder used EUR 15,800, of which they received EUR 8,400 from external capital providers (Table 3). However, this average figure also includes the 41 % business founders who did not use any funds. Those who required funds used an average EUR 30,100, of which EUR 14,200 came from the founders' own pockets and EUR 15,900 was contributed by external fund providers. The funding volume of macro-borrowers increased again in 2017. On average, they used EUR 159,100, EUR 122,600 of which came from external sources – the highest amount since 2012.

Table 3: Macro-borrowers increase share of external funds

Average amount used in euro thousand

	2015	2016	2017
All start-ups	15.8	17.0	15.8
of which external funds:	8.1	9.5	8.4
Funding-based start-ups	27.4	30.6	30.1
of which external funds:	14.1	17.2	15.9
Debt-financed start-ups	60.8	65.3	62.4
of which external funds:	41.7	47.1	46.9
Macro-borrowers	164.8	154.9	159.1
of which external funds:	115.5	115.3	122.6

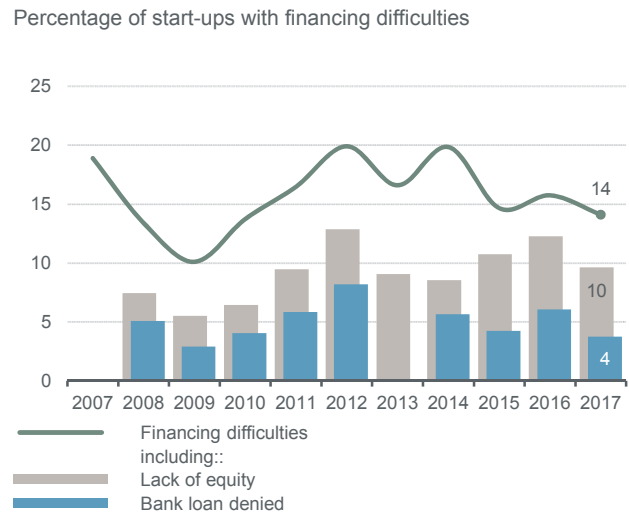
Source: KfW Start-up Monitor.

Founders are at a disadvantage when borrowing but financing environment is generally easier

When business founders need to borrow funds, they consistently have to overcome higher barriers than established enterprises. They often lack confidence-building elements, such as a corporate history or collateral. Their lower funding needs can also be a drawback. High fixed costs make it less attractive for institutional lenders to extend small amounts of finance. So business founders have to put more effort into planning and convincing lenders in order to successfully arrange start-up finance. This is illustrated by the proportion of business founders with financing difficulties. That proportion decreased slightly to 14 % in 2017 (2016: 16 %, Figure 13). Four per cent of business founders had at least one bank loan application denied and 10 % of business founders needed funds that exceeded their own.

On average, the proportion of business founders affected by loan denials was 5 % per annum for the years 2012 to 2017. But the following is also true: the more often a loan is applied for, the more likely it is that an application is denied. An average 7 % per annum of business founders resorted to a bank loan in the period under review. Of these loan-funded business founders, one in five (19 %) had at least one loan application denied.

Figure 13: Start-up financing difficulties

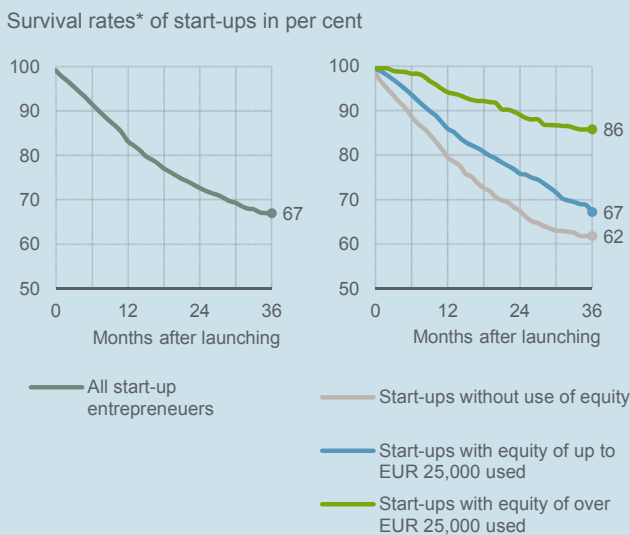


Source: KfW Start-up Monitor.

Start-up discontinuation rates

The KfW Start-up Monitor shows that the survival rate of business start-ups follows a stable empirical pattern. Some 30 % of new businesses close down again within the first three years (3–30 rule of thumb). Thirty-six months after launching, 68 % of business start-ups are still in business (Figure 14, left). The reasons for aborting are diverse but by far the largest proportion of business founders discontinue their venture for personal reasons, not because of immediate financial stress (Figure 15, right). These reasons include family pressures, illness, dissatisfaction with income achieved or because of a more attractive job alternative⁸. Besides, many start-ups are only planned for the short term to begin with, particularly part-time businesses.

Figure 14: The more funds a business has, the longer it survives

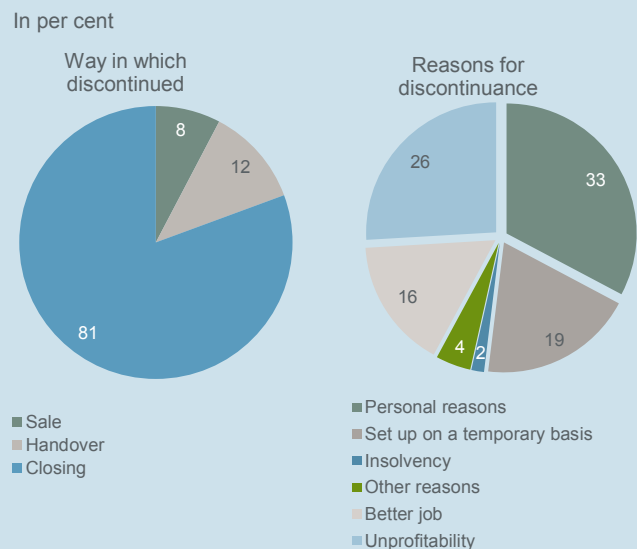


* Kaplan–Meier survival function.

Source: KfW Start-up 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, business founders who apply larger sums in excess of EUR 25,000 (regardless of whether these are their own funds or borrowed) have significantly higher survival rates (Figure 13, right). Discontinuation rates are particularly high among founders who start off without any financial capital at all. This has to do with the goal of their venture: zero-resource and physical resource founders are more likely to aim for temporary income while businesses with a higher level of capitalisation are designed for the long term.⁹

Figure 15: Start-ups are usually discontinued for personal, not financial reasons



Source: KfW Start-up Monitor.

Infrastructure, policymakers’ commitment and education system

The primary cause for declining start-up activity is the exceptionally good development of the labour market. Nonetheless, business founders also believe that start-up-specific conditions have also deteriorated in the past two years. In the additional survey to the KfW Start-up Monitor (Box 2), 10 of 13 business conditions surveyed were rated more negatively – if only slightly in most cases (Table 4). In the start-up survey of 2015, the quality of infrastructure was still rated ‘good’ (2.3). Business founders of 2017 rated it just ‘satisfactory’ (2.7). The image of business founders was given the highest score, at 2.5 on average (start-ups in 2015: 2.3). It was immediately followed by ‘free

market access’, which maintained its score of 2.5. The aspects advisory services, protection of intellectual property, legal framework, access to public promotional funds and to venture capital were rated ‘satisfactory’ to varying degrees, as was the case two years before. Business founders rated credit access, reporting requirements, the tax burden, policymakers’ commitment and the educational system ‘sufficient’. The latter two aspects, however, were clearly rated lower by business founders. They gave an average score of 3.9 to policymakers (business founders in 2015: 3.6) and 4.2 to the educational system (2015: 3.8).

Box 2: Follow-up interviews 2016 and 2018

For an in-depth analysis of new entrepreneurs of the years 2015 and 2017, follow-up interviews to the KfW Start-up Monitor were conducted in March of the following years. In these follow-up interviews, all start-up entrepreneurs who had been identified in the respective main survey and had given their consent to a follow-up interview and their contact details were contacted again.

Table 4: Business founders are more critical of conditions than two years ago

Average score using customary German school marks from one (very good) to six (insufficient)

	Business founders 2015		Business founders 2017
Business founder image	2.3	▲	2.5
Free market access	2.5	•	2.5
Advisory services	2.6	▲	2.7
Infrastructure quality	2.3	▼	2.7
Protection of intellectual property	2.9	•	2.9
Legal framework	3.2	▲	3.3
Access to public promotional funds	3.2	▲	3.4
Access to venture capital	3.3	▲	3.4
Access to credit	3.7	▼	3.6
Reporting requirements	3.5	▲	3.7
Tax burden	3.6	▲	3.8
Policymakers' commitment*	3.6	▼	3.9
Educational system**	3.8	▼	4.2

* To the concerns of business founders, self-employed persons and entrepreneurs

** With respect to the teaching of business knowledge and skills

Source: Follow-up interviews to the KfW Start-up Monitor 2016 and 2018 (Box 2), unweighted assessment of the participating interviewees.

Experts who deal with business start-ups professionally do not share the more critical views of business founders compared with previous years. In the GEM expert survey of 2017, 9 in 12 surveyed start-up-specific conditions were rated better than two years before. More critical views were expressed only with respect to procurement markets for start-ups, barriers to market access and the teaching of business skills at school. Experts hold different views not just of the variation but of the rank in the conditions. For example, experts rank start-up finance aspects (availability of own and borrowed capital, public promotion) in the upper one third but business founders see them in the lower midfield. In an international comparison of public promotion, experts see no country with a significantly higher performance than Germany. Public promotional

structures appear to set standards at international level.¹⁰ Policymakers' commitment to the concerns of start-ups is also rated higher by experts than business founders. Conversely, the free market access praised by founders is viewed more critically by experts.

Business founders and experts did agree on certain aspects, however. The highest level of agreement existed with respect to the delivery of business skills and knowledge. In both rankings, this aspect came last. The need for teaching business skills in greater depth at German schools thus appears to be high.¹¹ Opinions were not far apart on the topic of regulation and taxation either. Experts ranked this item second to last, while business founders assigned the aspects of tax burden and reporting requirements to the bottom one third of the ranking.

Table 5: Experts see a minor improvement in conditions

Mean score on the basis of a Likert scale (higher is better)

	Survey 2015		Survey 2017
Physical infrastructure	3.81	▲	3.96
Advisers and suppliers	3.53	▼	3.43
State promotional programmes	3.37	▼	3.40
Financing	2.59	▲	2.84
Market dynamics	2.69	▲	2.84
Market access barriers	3.05	▼	2.70
Policymakers' priority and commitment	2.54	▲	2.68
Start-up culture	2.53	▲	2.62
Knowledge and technology transfer	2.38	▲	2.60
Extracurricular entrepreneurial training	2.49	▲	2.58
Regulation and taxation	2.34	▲	2.48
Teaching of business skills in school	1.65	▼	1.56

Source: Global Entrepreneurship Monitor, expert survey.¹²

Policymakers have their sights set on business founders

The agenda for the 19th legislative term includes some aspects that are designed to improve start-up culture:¹³

- Examine the possibility of introducing 'start-up time' in analogy to family care time.
- Support parents in the start-up phase, e.g. through grants for household services.
- Lift the requirement of submitting a monthly turnover tax advance return in the first two years.
- Introduce mandatory contributions to a pension fund.

- Reduce minimum health insurance premiums for small business owners.

Business founders endorse coalition’s proposals

In the additional survey to the KfW Start-up Monitor (Box 2), business founders were asked about their opinions on these proposals. Overall, they were largely in favour (Figure 16 16). The rate of approval (i.e. a score of at least ‘good’) to lifting the requirement to file a turnover tax advance return was 83 % (of which 48 % ‘very good’). Ending the turnover tax advance return could temporarily reduce the tax burden on start-ups significantly. Half the business founders spend at least two hours a week meeting bureaucratic requirements.¹⁴

Reducing the minimum health insurance premium met with an even higher approval rate of 87 % (45 % ‘very good’). Reducing minimum health insurance premiums would reduce financial pressure and could enable more self-employed persons to obtain more comprehensive cover again.

The proposal to support parents in the start-up phase through grants for household services was welcomed by 92 % (rated ‘very good’ by 40 %). This proposal should be particularly beneficial for ‘mompreneurs’ – women with children who start a business.¹⁵ In male-led start-ups, by contrast, children hardly play a role in the design of the start-up.¹⁶ Balancing work and family life is particularly important for mompreneurs. Full-time mompreneurs, for example, clearly limit their working hours. Grants for household services could also do much to ease pressure on them so that mompreneurs could focus more on their start-up project.

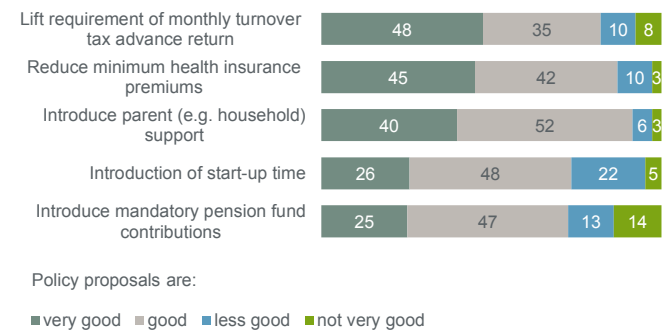
The proposal to introduce start-up time was approved by 74 % (rated ‘very good’ by 26 %). Start-up time could have a positive impact on start-up activity. An entitlement to take time off from work to pursue a start-up project could provide an incentive for more people to take the plunge because they would not have to immediately give up their job – provided their cost of living is covered.

The proposal of introducing mandatory contributions to a pension fund was supported by 73 % (25 % ‘very good’), the lowest rate but still clearly positive. Many self-employed persons give little priority to retirement provision for cost reasons. Introducing mandatory contributions to a pension fund could therefore considerably reduce the risk of poverty in old age for self-employed persons. It would probably lead to fewer micro or small businesses, however, which may not be able to afford such compulsory provision.

It was clear that proposals which promise to directly ease pressure on start-ups would receive the highest approval rates. It is likely, however, that business founders will initially see the latter two proposals as a burden. Their benefits, in turn, are still a long way off, so entrepreneurs’ lower appreciation is understandable.

Figure 16: Policy proposals meet with broad consensus

Business founders’ views of policy proposals, in per cent

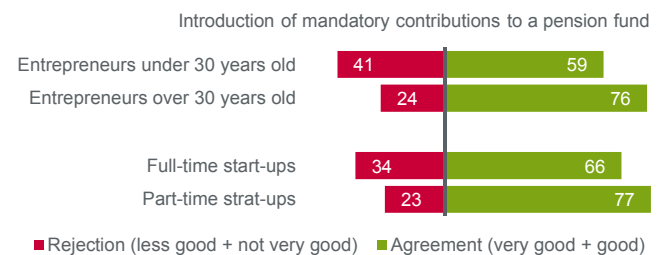


Source: Additional survey to the KfW Start-up Monitor 2018 (Box 2), unweighted assessment of the participating interviewees.

Business founders largely welcomed the individual proposals. There are hardly any differences between various groups of start-ups. Major deviations are evident only with regard to introducing mandatory contributions to a pension fund (Figure 17). This was rejected by 41 % of business founders aged up to 30 years, while only 24 % of over 30-year-olds had misgivings. It was also rejected by a higher proportion of full-time than part-time business founders, at 34 vs. 23 %.

Figure 17: Younger entrepreneurs are less in favour of mandatory contributions to a pension fund

Business founders’ attitudes to mandatory contributions to a pension fund, in per cent



Source: Follow-up interviews to the KfW Start-up Monitor 2018 (Box 2), unweighted response by interviewees.

Start-up activity 2018: We expect a steady to slightly negative trend

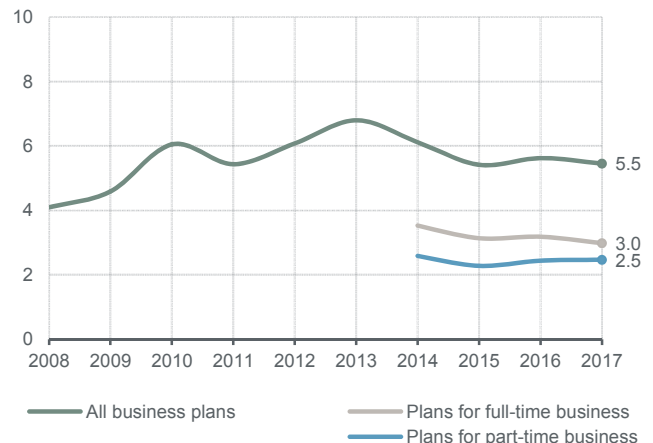
Start-up activity in the year 2018 is set to follow a neutral to negative trend. We expect a weaker cyclical pull effect on start-up activity this year compared with 2017¹⁷. At the same time, the decline in the unemployment rate looks set to pick up pace again.¹⁸ Accordingly, the negative absorption effect of the labour market would strengthen and the positive cyclical pull effect would weaken. The economic signal is therefore negative overall.

The share of start-up planners has hardly changed, which is a relatively neutral signal (Figure 18). The share of persons entertaining serious thoughts about starting a business has remained stable in comparison with the previous year. The share of planners is significantly higher than the share of start-ups because many who plan never carry out their project. The ratio of full-time planners to full-time founders is particularly high which is indicative of higher opportunity costs and, hence, a higher barrier to setting up a full-time than a part-time business. However, what is decisive is not the share of planners but how it evolves. The planning process from idea to realisation often takes several months. In 2017, business founders needed eight and

a half months of lead time on average. The variation in the share of planners is thus a good indicator of the development of the start-up rate in the following year. With two exceptions, the signs emitted by the trend in the share of planners have proven accurate so far. ■

Figure 18: Share of start-up planners has hardly changed – a sign of steady start-up activity in 2018

People seriously considering starting a business in per cent of the working age population



Source: KfW Start-up Monitor.

Box 3: A quick note on the Start-up Monitor

The **Appendix of Tables and Methods** to the KfW Start-up Monitor contains a wealth of further information on the structure of start-up activity. It can be found along with further publications by KfW Research on start-up activity in Germany on our thematic page 'Innovations and Start-ups' at www.kfw.de/research-innovation-gruendung.

The KfW Start-up Monitor surveys start-up activity in Germany for the purpose of economic analysis. As a scientific dataset it is also available to external researchers for empirical research work. An overview of the terms of access can be found on the [website](#) of KfW Research (in German only).

¹ Federal Statistical Office (2018), Deutsche Wirtschaft wächst auch im Jahr 2017 kräftig (*Germany's economy grew strongly in 2017 as well*), Press Release No. 011 dated 11 January 2018, (in German only). https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2018/01/PD18_011_811.html.

² Federal Statistical Office (2018), National accounts, as at: 2 January 2018, <https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erwerbstaetigkeit/TabellenErwerbstaetigenrechnung/EinwohnerErwerbsbeteiligungJahr.html>.

³ Analyses based on the KfW Start-up Monitor. For more on the lower survival rates of necessity start-ups see Metzger, G. (2017), **KfW Start-up Monitor 2017, Appendix of Tables and Methods**, KfW Research, page 22.

⁴ 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'). They can also 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.

⁵ Unemployment among women fell on average to 5.8% in 2016 (-0.4 percentage points; men: 6.4%, -0.2 percentage points), see Federal Employment Agency (2017), Statistik/Arbeitsmarktberichterstattung: Der Arbeits- und Ausbildungsmarkt in Deutschland – Monatsbericht, Dezember und Jahr 2016 (*Statistics/Labour Market Report: The labour and education market in Germany – monthly report, December and year 2016*), Nuremberg 2017, p. 118 (in German).

⁶ Full-time equivalents (FTEs) of new start-ups reflect the sum of their individual weekly working hours in relation to a standard working week of 40 hours. As full-time business founders worked more than a standard working week in 2017, at 45 hours, and part-time business founders worked 13 hours, or less than a standard working week, their contribution is higher and lower, respectively, than their headcount as measured in FTEs. In order to calculate the employee FTEs, those working full-time are counted in full and those working part-time are treated as half jobs. Outliers of workforce numbers and weekly working hours are not counted.

- ⁷ Metzger, G. (2015), **Are start-ups the same throughout Germany? Hardly! A comparison of German states**, Focus on Economics No. 111, KfW Research.
- ⁸ See also Egel, J., Falk, U., Heger, D., Höwer, D. and Metzger, G. (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 only).
- ⁹ For more on the influence of various business founder and project characteristics on the survival rates of start-ups see Metzger, G. (2016), **KfW Start-up Monitor 2016, Appendix of Tables and Methods**, KfW Research, June 2016, page 21.
- ¹⁰ Sternberg, R. and von Bloh, J. (2017), Global Entrepreneurship Monitor, Country Report Germany 2016, Hannover, June 2017, page 22.
- ¹¹ The intention of the German Federal Ministry for Economic Affairs and Energy to bring entrepreneurial spirit into the schools is therefore an important approach. 'Unternehmergeist in die Schulen' (*Bringing the spirit of entrepreneurship into schools*) is a partnership initiative sponsored by the German Federal Ministry for Economic Affairs and Energy to equip youths with entrepreneurial skills: <http://www.bmwi.de/DE/Themen/Mittelstand/Gruendungen-und-Unternehmensnachfolge/staerkung-des-unternehmergeistes.html>.
- ¹² Data of the German expert survey of the Global Entrepreneurship Monitor, retrieved from <http://www.gemconsortium.org/data> on 23 April 2018.
- ¹³ See coalition agreement 'Ein neuer Aufbruch für Europa, Eine neue Dynamik für Deutschland, Ein neuer Zusammenhalt für unser Land' (*A new awakening for Europe, new momentum for Germany, new cohesion for our country* – our title translation) between the CDU, CSU and SPD of February this year (retrieved from https://www.cdu.de/system/tdf/media/dokumente/koalitionsvertrag_2018.pdf?file=1 on 24 April 2018), specifically the following sections (in German only): Prüfung der Einführung einer „Gründerzeit“ analog zur Familienpflegezeit (Z 1859ff), Unterstützung für Eltern in der Gründungsphase, wie durch Zuschüsse für haushaltsnahe Dienstleistungen (Z 1861ff), Befreiung von der monatlichen Umsatzsteuervoranmeldung in den ersten beiden Jahren (Z 2850f), Einführung einer Altersvorsorgepflicht (Z 4306ff), Reduktion der Mindestkrankenversicherungsbeiträge für kleine Selbstständige (Z 4313ff).
- ¹⁴ Leifels, A. (2017), **Existenzgründer und Bürokratie: für jeden Dritten eine Schwierigkeit, aber selten ein Abbruchgrund (Entrepreneurship and red tape: a challenge for one in three start-ups but rarely a reason to give up)**, Focus on Economics No. 175, KfW Research (in German only).
- ¹⁵ Mompreneurs are defined as women with underage children living in the household; see Metzger, G. (2017), **Starting a business with kids: mompreneurs balance work and family life**, Focus on Economics No. 184, KfW Research.
- ¹⁶ *ibid.*
- ¹⁷ For 2018 we expect real GDP growth of 2.1% (adjusted for price and calendar variations: 2.1%) after 2.2% in the previous year (adjusted for price and calendar variations: 2.5%), see Borger, K. (2018), Germany's upswing is losing some pace, cyclical risks are rising, **KfW Business Cycle Compass Germany, May 2018**, KfW Research.
- ¹⁸ Based on Fuchs, J., Hummel, M., Hutter, C., Klinger, S., Wanger, S., Weber, E. and Zilka, G. (2017), Arbeitsvolumen so hoch wie nie, IAB-Prognose 2017/2018, IAB-Kurzbericht No. 21, 26 September 2017 (in German only).