

# KfW Start-up Monitor 2015

# Start-ups on the rise – freelancers in the majority

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- Number of start-ups rises again full-time entrepreneurs bounce back from historic low, more freelance entrepreneurs: The number of start-ups rose to 915,000 in 2014 an increase of 47,000. The rise came thanks to full-time new entrepreneurs, whose numbers rose by 87,000 to 393,000. In contrast, the number of part-time new entrepreneurs fell by 40,000 to 522,000. Our early forecasts indicate that the number of start-ups will fall again in 2015.
- Fresh demand proves attractive for freelance start-ups: More and more new entrepreneurs are engaged in free-lance activities (368,000), while the number of new entrepreneurs involved in commercial activities is falling (547,000).
- Company takeovers are unpopular with entrepreneurs as self-employment option: Typically, three quarters of new entrepreneurs set up a new company. Takeovers and holdings in existing companies are less popular ways of starting up a new business. However, new entrepreneurs with long-term business projects are more likely to choose the takeover route.
- Gross effect on employment from start-up activity increasing: Driven by higher numbers of business start-ups, the gross effect of start-up activity on employment has become stronger. Newly-established businesses (i.e. excluding take-overs and the acquisition of holdings in existing companies) created around 745,000 jobs (full-time equivalent) in 2014 (2013: 602,000). Of this figure, new full-time or part-time entrepreneurs themselves made up 453,000 FTE, with employees accounting for 292,000.
- Hamburg catching up with Berlin; Bremen closes the gap again: The changes in German federal states' rankings compared with the previous year revealed a familiar pattern in terms of average start-up rates for 2012–2014. The city states hold the top rankings, far above the western and eastern German states (Berlin: 2.60%, Hamburg: 2.36%, Bremen: 2.25%).
- Most new entrepreneurs have a specific business idea: Just under half (48%) of new start-ups are set up by entrepreneurs who became self-employed to capitalise on a specific business idea. Entrepreneurs who found themselves forced into self-employment because of a lack of salaried employment alternatives accounted for 30%, with one in five new entrepreneurs taking the decision for reasons other than financial or personal concerns.
- More new entrepreneurs exchanging employment for self-employment many new freelance entrepreneurs
  were previously economically inactive: Fifty-five per cent of new entrepreneurs left an existing job to become
  self-employed a slightly higher proportion than in the previous year. One in four new entrepreneurs was previously
  economically inactive, i.e. neither in employment nor unemployed. At 31 %, the level was significantly higher among new
  freelance entrepreneurs.
- Proportion of female entrepreneurs remains high women now strongly represented in full-time selfemployment too: Forty-three per cent of new business start-ups were established by women, meaning that in 2014 the level of female entrepreneurs once again reached the peak seen in 2013. The proportion of women starting up part-time businesses decreased slightly but this was more than made up for by the rise in full-time female entrepreneurs.
- New entrepreneurs better qualified: More new entrepreneurs had an academic, professional or vocational qualification; only 18 % of new entrepreneurs had no qualifications or training. The proportion of women with an academic qualification setting up new businesses was especially high.
- New entrepreneurs investing less capital: The higher proportion of new entrepreneurs not investing capital and the
  lower peak amounts of capital invested are putting downward pressure on the average. However, many new entrepreneurs invested more capital. As a result, the number of new entrepreneurs experiencing financing problems rose.

Brisk start-up activity plays an important role in an economy, as new entrepreneurs constantly challenge established companies to update their offerings and hence put them under constant pressure to innovate and improve efficiency. Entrepreneurs also create jobs for themselves and often for others too.

As the labour market began to recover in 2005/2006, there was a noticeable drop in the level of start-ups in Germany. Since that time, start-up rates have remained within relatively narrow bounds. Over the last two years, levels have revived somewhat. Nonetheless, it is still too early to talk in terms of a significant reversal of the trend.

#### Levels of start-ups increasing again

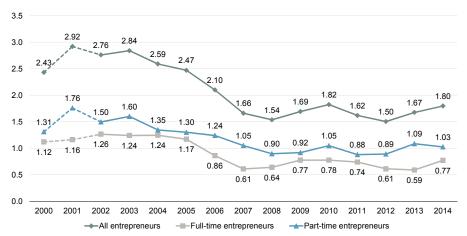
The KfW Start-up Monitor 2015 reports a start-up rate of 1.8% for 2014 (Figure 1). This corresponds to 915,000 people who became self-employed in 2014 – 47,000 more than in 2013 (Table 1). In contrast with the previous year, when start-up rates increased because of a rise in part-time entrepreneurs, this increase can be attributed solely to a higher number of new full-time entrepreneurs. The number of part-time new entrepreneurs fell.

### Stimulus from the economy but labour market remains weak

On a macroeconomic level, two factors typically have an influence on start-up activity: the economy and changes in the labour market. Changes in economic trends are a "pull factor" for start-ups, i.e.

Figure 1: Start-up rates in Germany, 2000-2014

(Share of new entrepreneurs in the population aged 18 to 64 years, percentages)



Note: The start-up rates for 2000 and 2001 are based on questions that were different in each of those years and that also differed from the questions in subsequent years. As a result, comparability between the rates in these years and with start-up rates in subsequent years is limited.

Source: KfW Start-up Monitor.

Table 1: Number of start-ups

[Thousands]	2012	2013	2014
Total	775	868	915
Full-time	315	306	393
Part-time	460	562	522
Freelancers	304	307	368
Commercial sector	471	561	547

Source: KfW Start-up Monitor.

a healthy economy "pulls" people who are able to work into self-employment. In contrast, the negative effects of a declining labour market act as a "push factor", which "pushes" people capable of working into self-employment. In 2014 gross domestic product grew by 1.6% in real terms (2013: 0.1%) and the unemployment rate fell by 0.2 percentage points² (2013: -0.1 percentage points). In terms of the economy, therefore, start-ups

gained momentum in comparison with 2013, while labour market pressure on jobseekers continued to decline. Based on estimated results in connection with the multivariate relationship between the start-up rate, the unemployment rate and real economic growth,<sup>3</sup> the effect of these two macroeconomic factors was a slight net decline. Hence the rise in the

Figure 2: Services the main area of start-up activity

Personal services

Personal services

70

per cent Services

18

Commercial services

Manufacturing

Construction Other manufacturing and primary production production

\*Financial services, transport and communication Note: Start-ups are allocated to sectors based on the descriptions entrepreneurs provided for their projects, in line with the industry sector classifications published in 2008 (WZ 2008) by Germany's Federal Statistical Office.

#### KfW Start-up Monitor methodology

The KfW Start-up Monitor is based on information provided by 50,000 people resident in Germany and selected at random, who are interviewed each year as part of a representative survey. A broad definition of start-ups is used when identifying entrepreneurs, covering both full-time and part-time entrepreneurs, as well as freelancers and those active in the commercial sector. The KfW Start-up Monitor is the only source of data on this topic in Germany and hence provides a comprehensive picture of start-up activity in Germany.

In March 2015, an additional survey was carried out for the KfW Start-up Monitor to provide more in-depth analysis of the increase in start-up activity. For this additional survey, all entrepreneurs that were identified by the main survey in 2014 as having consented to answering further questions and who provided contact details (41%) were interviewed again. The additional survey focused on two areas. The first of these set out to establish whether (new) legal provisions were a decisive factor in the decision to become self-employed. The second aimed to bring new entrepreneurs' motivation for becoming self-employed into sharper focus.

start-up rate in 2014 cannot be explained by macroeconomic changes in the economy and the labour market. Rather, the decisive factor is a combination of structural changes, such as the emergence of new demand, changes in the structure of qualifications and higher labour market participation among women.

### Services represent the majority – strong growth in freelance activities

The majority of new entrepreneurs set up businesses in the service sector, with economic services frequently making up the largest proportion of these (2014: 35%). Personal services are the second largest area (27%). A further 6% relates to financial services, transport and communication (Figure 2). Commercial services (18%) and manufacturing (15%) are broadly balanced.

Nonetheless, examination of start-up activity in terms of the field in which entrepreneurs operate reveals an interesting development: The number of new freelance entrepreneurs has risen sharply, while the number of new commercial entrepreneurs has fallen. This trend has been evident for quite some time: New businesses are increasingly set up by people who become self-employed to work as freelancers (Figure 4). The proportion accounted for by such start-ups has more than doubled over the past ten years (Figure 3). They also played an important part in the higher numbers of start-ups in 2014, when they accounted for more than 40% of new businesses for the first time. In contrast, the number

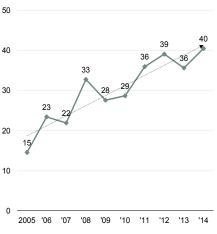
of new entrepreneurs operating in the commercial sector fell.

One reason for the boom in business start-ups operating as freelancers is the increasing demand for education and training services - a demand that is met by entrepreneurs. The general trend towards academic qualifications has also been a contributing factor. Because of the close relationship between academic qualifications and freelance activities, as well as the fact that graduates are more likely than most to set up their own business, increasing levels of academic qualifications are reflected in start-up activity. As in the previous year, the most commonly cited freelance activity was business consultancy (Table 2).

Self-employed freelancers have increasingly become a mainstay of start-up activity over the last two years. On the other hand, business start-ups in the commercial sector have a better record in terms of direct economic effects. For example, they strive more often to build up a company (15 vs. 6%) - particularly the full-time entrepreneurs among them (21 vs. 7%) - instead of just trying to earn a living. They are therefore also more likely to employ staff (32 vs. 13%), and if they do, they employ more people than freelancers (full-time equivalent (FTE) of 4.6 vs. 3.6 jobs). Overall in 2014, almost a quarter of new entrepreneurs employed staff, providing on average of 4.5 jobs (FTE).

Figure 3: Freelance start-ups gaining ground

(Proportion of new entrepreneurs involved in freelance activities, percentages)



Source: KfW Start-up Monitor.

Table 2: Top 10 freelance start-up projects

Rank		Activity
2014	∆2013	
1	•	Business consultancy
2	1	Lectureship
3		Child day care
4	<b>1</b>	Web design
5	•	Engineering consultancy
6	1	Translation
7	1	Psychotherapy
8	1	Software engineering
9	1	Legal consultancy
10	•	Coaching

Source: KfW Start-up Monitor.

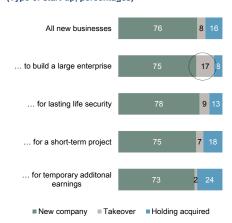
Figure 4: Start-ups by activity type in 2014

(Larger type represents more common areas)



Figure 5: Takeovers of interest to "business developers"

(Type of start-up, percentages)



Source: KfW Start-up Monitor.

### New entrepreneurs usually establish new projects

Self-employment activity has always been the domain of individuals with original start-ups, that is to say new businesses. With three quarters of business start-ups embarking on self-employment by setting up a new company, 2014 was no exception (Figure 5). In contrast, people setting up derivative start-ups use structures from existing companies, by taking those companies over (8%) or by acquiring a holding in them (16%).

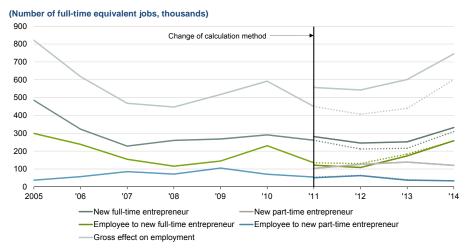
Increased use of existing structures, whether by taking over a company or acquiring a holding in it, would bring benefits to the economy. For example, early succession planning can mean that established companies and hence also jobs can be retained. There is no shortage of companies where a takeover might be an option.<sup>4</sup>

## Increase in start-up activity has a substantial effect on employment

New business start-ups set up new structures, while starting up by taking over an existing company or acquiring a holding in one makes use of existing structures. These structures also include the available workforce. The direct effect on employment of start-up activity, i.e. its contribution to employment, therefore typically relates to new business start-ups.

The direct gross effect on employment of new business start-ups and their employees (measured as FTE, see note to

Figure 6: New full-time entrepreneurs create disproportionately more jobs



Note: The calculation method changed in 2011. Since then, part-time new entrepreneurs themselves have been included in the calculation of the gross effect on employment. The FTE for new business start-ups corresponds to the total hours the entrepreneurs themselves work each week, based on a standard working week of 40 hours. Since full-time (part-time) new entrepreneurs work longer (shorter) hours on average (2014: 45 and 14 hours respectively), their contribution in terms of FTE is higher (lower) than their headcount. For the purposes of calculating FTE, full-time staff are counted as one post and part-time workers are counted as half. When considering the gross effect on employment, the top one per cent of the workforce is disregarded as outliers.

Source: KfW Start-up Monitor.

Figure 6), was 745,000 in 2014, up from 602,000 in the previous year. The increase can be attributed to the contribution made by full-time new business start-ups, consisting of the increased levels of new entrepreneurs themselves (an additional FTE of 80,000) and the higher proportion of employees they take on (an additional 85,000). The effect of employing staff grew stronger for the second time in a row, from 108,000 FTE posts in 2012, to 173,000 FTE in 2013 and 258,000 FTE in 2014. Part-time new entrepreneurs, measured as FTE, accounted for 120,000 in 2014 (decrease of 19,000) and contributed 34,000 FTE employees (decrease of 4,000).

On average, each new entrepreneur created 0.4 FTE jobs in 2014. This average contribution to job creation is a fairly strong indication of the fact that two thirds of people becoming self-employed set up business on their (2014: 68%), without a partner or employees. New business start-ups are especially likely to be one of these loners (2014: 75%). Nonetheless, the changes in the direct effect on employment of start-up activity over the last two years are a striking demonstration of the importance of new entrepreneurs for the labour market.

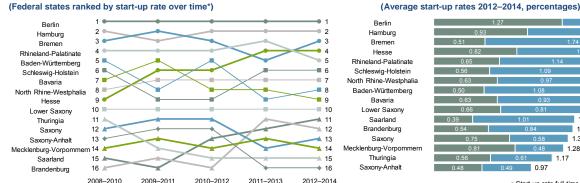
#### Hamburg closing the gap with Berlin

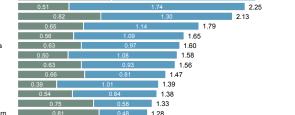
There were very few changes to the rankings of federal states in terms of start-up activity (Figure 7). Berlin and Hamburg remained at the top of the list with the highest start-up rates between 2012 and 2014, while Hamburg further closed the gap with the frontrunner Berlin. The third highest start-up rate was in Bremen, meaning that the city states again led the rankings. In previous years (2011–2013), Bremen only managed fifth place, behind Rhineland-Palatinate and Hesse, which have now swapped places.

In terms of start-up activity, the city states essentially benefit from their position as metropolitan areas. A large population in a limited amount of space means that people do not have far to travel. This is a particular advantage in the services and commercial sectors areas where self-employment is more prevalent. The higher population density of the western German federal states may also be a significant factor in their position in the rankings just below the city states. The individual economic structures of the federal states also play a part - the proportion of new entrepreneurs involved in freelance activities in Berlin (2014: 51%) and Hamburg (2014: 46%) is disproportionately high and this may be connected to the fact that they are attractive centres for the media and IT sectors. In contrast, a fo-

Figure 7: City states lead the way once again

(Federal states ranked by start-up rate over time\*)





Start-up rate full-time Start-up rate part-time

\* Rankings based on a simple moving average of new start-up rates for each state over three years. Note: The overall start-up rate is equal to the sum of the start-up rates for full-time and part-time entrepreneurs and corresponds to the number of entrepreneurs as a percentage of the population between the ages of 18 to 64

Source: KfW Start-up Monitor.

2.36

cus on industry tends to be associated with lower levels of start-up activity because a higher proportion of workers are employed by large companies. The opportunity costs of the shift into selfemployment (i.e. giving up a well-paid job) are then relatively high. Accordingly, a large number of those able to work choose a job rather than employment. Because average spending power is lower in the eastern German federal states, part-time entrepreneurs in particular are much less common. This explains why they come at the bottom of the federal state rankings.

Variations between regional labour markets are a key driver of changes in the federal state rankings. Economic activity in the respective industries influences the levels of new staff taken on by large companies and can play an important role in this, as can major insolvencies. Institutional changes in the individual states' schemes to promote start-ups also have an impact.

#### New entrepreneurs with specific business ideas still in the majority

New entrepreneurs usually make the leap into self-employment because they want to put into practice a specific business idea or because no better alternative way of making a living is open to them. In the past, the numbers of entrepreneurs motivated by a business opportunity and those motivated by necessity have been roughly the same. However, since 2012 entrepreneurs motivated by a specific opportunity have made up the clear majority. Although the proportion of entrepreneurs motivated by a specific opportunity fell to 48% in 2014 (2013: 53%), it nonetheless is still far higher than the proportion of entrepreneurs motivated by necessity. From an economic point of view this is a positive development because it reflects higher quality start-up activity. The new business ideas implemented by those entrepreneurs that are motivated by a specific opportunity are not necessarily unique or show particular promise. Even so, on average they are more likely to bring something new to the market, more likely to employ staff and manage to stay in business for longer than entrepreneurs motivated by necessity.

### Most entrepreneurs previously had a job - including those motivated by necessity

Roughly a third of entrepreneurs are motivated by necessity and this proportion has been very stable for a number of years. The share of entrepreneurs who were unemployed before they made the move into self-employment (Figure 9, left-hand side) has also remained stable at around one in seven (2013: 13%). It is therefore clear that a relatively low proportion of entrepreneurs motivated by necessity were previously unemployed. In fact 40% of entrepreneurs motivated by necessity were previously in employment and 34 % were economically inactive, i.e. neither in employment nor unemployed (Figure 9, bottom right). This means that "only" 23% of new entrepreneurs motivated by necessity were previously unemployed.

The proportion of people who left an existing job to become self-employed rose

Figure 8: Business opportunities still the main driver of start-ups

(Motivation to start up new business, percentages) 100 90 80 70 30 31 30 60 35 35 50 36 40 30 20 10 0 2008 2009 2010 2011 2012 2013 2014 Other motivation

No better alternative

Put business idea into practice

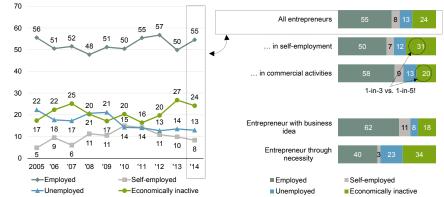
The question was: "What was the main reason why you became self-employed? Was it to put a business idea into practice, because there was no better alternative way to make a living or another reason?'

Source: KfW Start-up Monitor.

once again in 2014, to 55%, having slumped in the previous year. In contrast, the proportion of people starting up business who were previously economically inactive fell slightly, to 24 %. Nonetheless, this figure is still higher than average, which reflects the continuing increase in the German workforce's desire to work. This means that increasing numbers of economically inactive individuals - primarily those responsible for looking after a household and students are starting to work and are also choosing self-employment.

Figure 9: Entrepreneurs increasingly leaving existing jobs to start businesses

(Proportion of start-ups with previous employment status, percentages)



Note: Employment status before becoming self-employed is as stated by those surveyed.

Source: KfW Start-up Monitor.

The proportion of individuals who were previously economically inactive is significantly higher among self-employed free-lancers (2014: 31%) than it is for entrepreneurs engaged in commercial activities (20%). As mentioned above, this is likely to be connected to the close relationship between academic qualifications and freelance activities, as it reflects the start-up activities of e.g. university leavers.

### Women's participation remains high

The share of women in start-up activity continues to stay at peak level: As in the previous year, women made up 43% of all people becoming self-employed in 2014 (Figure 10). In contrast to 2013, when the high proportion of women was mainly accounted for by part-time entrepreneurs, full-time start-ups are now in the majority. The proportion of women starting a full-time business increased very considerably, from 33 to 41%. In terms of part-time start-ups, the proportion of women fell from 49% in the previous year to 44% in 2014.

For over ten years now there has been a trend towards more women starting up part-time and full-time businesses. This is likely to be a consequence of two developments: <sup>5</sup>

- 1. Above-average growth in the desire to work among women. The number of women as a proportion of all individuals available in the labour market therefore increased.
- 2. Above-average growth in employment among women. Women are therefore

putting their desire to work into practice earlier – whether as employees or in self-employment.

The high level of women starting full-time self-employment is one reason why the proportion of start-ups involved in free-lance activities rose so sharply in 2014, as women have always made up a larger proportion of such start-ups. In recent years, they accounted for more than half of people becoming self-employed for the first time (2014: 56%, up from 52% in 2013).

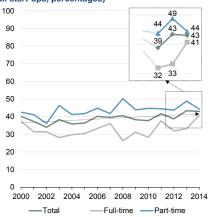
### Female graduates raising entrepreneurs' level of qualifications

New entrepreneurs in 2014 were more likely to have qualifications than their counterparts in the previous year (Figure 11). Thirty-one per cent had an academic qualification and around half had a professional or vocational qualification. The proportion of graduates among part-time and full-time entrepreneurs was roughly the same. Fifty-four per cent of full-time entrepreneurs had a professional or vocational qualification (part-time: 47%), while the proportion of part-time entrepreneurs with no qualifications was somewhat higher at 21% (full-time: 15%).

As a result of the close relationship between academic qualifications and freelance activities referred to above, the proportion of freelance entrepreneurs with an academic qualification was 49% – considerably higher than for those in commercial activities (20%). In comparison with the previous year (44%), the proportion of entrepreneurs with an aca-

Figure 10: Women in full-time selfemployment forging ahead – record participation

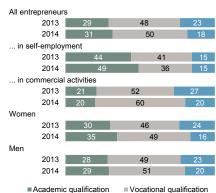
(Self-employed women as a proportion of all start-ups, percentages)



Source: KfW Start-up Monitor.

Figure 11: More entrepreneurs with academic, professional or vocational qualifications

(Proportion of qualified individuals, percentages)



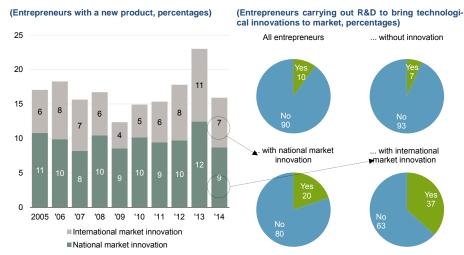
Academic qualificationVocational quaNo qualification

Note: Academic qualifications comprise those gained from universities, universities of applied sciences and (specialist) academies; professional and vocational qualifications comprise those from technical colleges, master certification and apprentice certification.

Source: KfW Start-up Monitor.

demic qualification rose by as much as five percentage points. This is primarily due to the higher level of better-qualified women starting up their own businesses. Among such women, both the proportion holding an academic qualification (35% in 2014 vs. 30% in 2013) and the proportion with professional or vocational training (49 vs. 36%) rose. For men, the level of qualifications remained almost unchanged (29% with an academic qualification, 51% with a professional or vocational qualification and 20% with no qualifications).

Figure 12: Entrepreneurs once again less likely to bring new product to market



Note: National or international market innovations are considered to be products and services that are new either in Germany or around the world in the opinion of those surveyed.

Source: KfW Start-up Monitor.

#### Innovation rate only at average levels

In assessing start-up activity, the innovation rate, i.e. the proportion of products and services that are new to the market, is an important indicator. Regional market innovations are often the result of a (continuous) process of diffusion for new products and services from urban to rural areas. As a result, the percentage of entrepreneurs bringing a regional innovation to market has remained very stable over time. National or international market innovations, by contrast, are more likely to be genuinely new. This means that they occur less frequently and at more irregular intervals, which explains why the proportion of start-ups they represent is subject to wider fluctuations.

Having almost tripled to 11% between 2009 and 2013, the number of entrepreneurs bringing national or international innovations to market, as a proportion of start-up activity, returned to normal in 2014, falling to 7% (Figure 12, left-hand side). This is partly due to a decline in the proportion of entrepreneurs motivated by a specific opportunity, among whom the innovation rate remained otherwise largely unchanged (11 % national or international market innovations in 2014 vs. 13% in 2013). It is also a result of the substantial fall in the proportion of innovations brought to market by entrepreneurs setting up businesses out of necessity or for other reasons, which had a considerably greater effect.

New national or international products and services especially are closely linked with innovation. According to their own statement, 37% of entrepreneurs with products or services that represent national or international innovations carry out research and development (R&D) to be able to bring them to market (Figure 12, right-hand side). Overall, one in ten entrepreneurs is involved in research and development work on technological innovations. These innovative entrepreneurs play an important role in the economy because they are mainly people who bring about Schumpeter's "creative destruction" by contributing to technological progress and driving forward structural change. If they become a smaller proportion of all entrepreneurs, this economic effect will be lessened. With respect to the lower proportion of entrepreneurs working on national or international market innovations, the proportion of entrepreneurs involved in technological innovations was also likely to be lower.

# Summary for 2014: Entrepreneurs working in freelance activities are key – women play an important role

Table 3 presents a summary of the most significant changes in start-up activity in 2014, in absolute figures. With growth of 87,000, full-time entrepreneurs made an important contribution to the increase in start-up activity, as did those involved in freelance activities, whose numbers rose by 61,000. In contrast, the number of

part-time entrepreneurs and of entrepreneurs involved in commercial activities fell. Women becoming self-employed played an important role in the growth experienced in both groups. People who had previously been economically inactive (i.e. who were neither employed nor unemployed) were disproportionately more likely to make the move into selfemployment. Although there were a few more start-ups owing to a lack of alternative employment, motivations such as self-fulfilment or family reasons became more prevalent. There were also noticeably more entrepreneurs between the ages of 45 and 55. This is also likely to have been represented in the higher levels of qualifications: More entrepreneurs than usual had an academic, professional or vocational qualification. However, the higher levels of qualifications were not reflected in the innovation rate, since entrepreneurs brought considerably fewer innovations to market.

The possibility that the rise in start-ups can be attributed to changes in the law can be ruled out. The results of the additional survey carried out specifically for this purpose were unambiguous: (New) legal regulations, for example the possibility that entrepreneurs might be anticipating minimum wage legislation, played no part in the changes seen in start-up activity. With respect to the motivation of entrepreneurs to become self-employed, three factors were of primary importance. In each case, more than half of those surveyed agreed that they were motivated by "earning additional income" (particularly for part-time entrepreneurs), they "wanted to do justice to their own qualifications" (particularly full-time entrepreneurs and freelancers) and that they wanted "a change in their daily routine." For women, "reacting to the general situation on the labour market" and "to make the move into employment" were considerably more important than for men. This is especially the case with female graduates.

### Outlook for 2015 start-up activity expected to decline

In terms of the economy, no additional stimuli for start-up activity are evident in the current year: Our forecasts indicate that the economic trend in 2015 will be

Table 3: Number of entrepreneurs compared with previous year

[Thousands]	Total		Full-time		Freelance	
2014 (Δ2013)	915	(+46)	393	(+87)	370	(+61)
Full-time	393	(+87)	_		159	(+48)
Part-time	522	(-40)	_		211	(+13)
Freelance	370	(+61)	158	(+48)	_	
Commercial activities	544	(-15)	234	(+39)	_	
Women	393	(+17)	160	(+58)	206	(+46)
Men	521	(+30)	233	(+29)	165	(+15)
Previously employed	499	(+66)	200	(+61)	184	(+24)
Previously self-employed	76	(-10)	41	(-19)	27	(+0)
Previously unemployed	118	(+1)	83	(+12)	46	(-0)
Previously economically						
inactive	221	(-11)	69	(+32)	113	(+37)
Motivated by necessity	288	(+28)	150	(+38)	133	(+26)
Motivated by opportunity	441	(-22)	171	(+30)	162	(+15)
Other motivation	186	(+40)	71	(+18)	75	(+20)
No market innovation	769	(+101)	332	(+86)	324	(+76)
Regional market innova-						
tion	80	(-29)	37	(+7)	24	(-3)
National or international						
market innovation	66	(-26)	24	(-6)	22	(-11)
Academic qualifications	288	(+36)	121	(+24)	182	(+46)
Professional and voca-						
tional qualifications	458	(+44)	213	(+49)	132	(+6)
No qualifications	169	(-34)	58	(+14)	57	(+10)
Aged 18–25	113	(-40)	31	(-4)	45	(+6)
Aged 25–35	287	(+21)	110	(+16)	131	(+18)
Aged 35–45	221	(-1)	117	(+31)	81	(+2)
Aged 45–55	210	(+64)	99	(+35)	83	(+26)
Aged 55–65	84	(+2)	36	(+9)	31	(+9)

Note: Disproportionately high contributions to the rise in the number of start-ups within the specified groups are printed in bold. Figures in the table may include rounding differences

Source: KfW Start-up Monitor.

similar to that in 2014.6 Given that we are also expecting to see negative effects on the labour market, start-up activity may return to a decline in 2015. This forecast is based on macroeconomic economic factors and also on changes in the numbers of people planning to start up their own business (Figure 13). Compared to 2013, the number of people seriously considering becoming self-employed decreased in 2014.

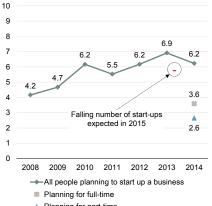
Because many people with plans to start up a business never put them into practice, the average ratio of such individuals to the start-up rate is three to one. For full-time self-employment, the number of people with plans to start a business exceeds the number that put those plans into practice by a particularly large margin. This provides a clue as to the higher opportunity costs and hence the higher barriers to entry when it comes to starting a new business, compared with parttime self-employment. However, they key lies not in the rate of people planning to set up a business but in the movement in that rate. The planning process, from having an idea up to the point where it is implemented, frequently takes many months. On average, entrepreneurs in 2014 took eight months to get their businesses started. Changes in the rate of people planning to start up a business are therefore a good indicator of future changes in the rate of start-ups: With the exception of 2010, changes in the level of people planning to start up a business were a good qualitative predictor of changes in the start-up rate.

#### Entrepreneurs' average income lower than in the previous year

The increase in start-up activity and the accompanying structural changes had an

Figure 13: Lower numbers of people planning to start up a business heralds fewer start-ups in 2015

(Proportion of people able to work that are seriously considering setting up a business, percentages)



▲ Planning for part-time

Source: KfW Start-up Monitor.

impact on the financing situation for entrepreneurs in 2014. When someone becomes self-employed, they typically start on a small scale. Thus 55 % of entrepreneurs were not required to register for VAT because their annual turnover was lower than EUR 17.500 in the year they set up their business and they only expected a moderate increase in the subsequent year.1

Entrepreneurs starting out in 2014 had a lower turnover than those in the previous year. In their first year of trading, they turned over EUR 4,700 per month on average (2013: EUR 6,600, Figure 14, left-hand side). At EUR 1.300 (2013: EUR 2,500), the average turnover of part-time entrepreneurs was substantially lower than the figure for those in full-time self-employment, whose income was EUR 9,500 (2013: EUR 14,500). Because of their lower turnover, the regulations regarding small businesses are much more likely to be relevant to parttime entrepreneurs: Taking into account their expected turnover, three quarters of

Under Section 19 of the German Value Added Tax Act (Umsatzsteuergesetz), businesses with a low annual turnover (below EUR 17.500) and who expect only moderate turnover in the following year (below EUR 50,000) are not required to charge VAT and pay it to the tax authorities. However, they are also not permitted to deduct any input tax on invoices they receive from other businesses. The level of economic activity of many people starting out as selfemployed for the first time is so low that they are exempt from tax altogether because their annual income falls below the relevant tax thresholds or exemption limits for supplementary income and fees.

part-time entrepreneurs (76%) were able to take advantage of the small business regulations in 2014, compared with just one in five full-time entrepreneurs (21%). At the same time, entrepreneurs are optimistic about the immediate future: Seventy-one per cent of entrepreneurs expect their turnover to increase in 2015 and one in four expects it to at least double (Figure 14, right-hand side).

Full-time and part-time entrepreneurs have different turnover expectations. Full-time entrepreneurs mostly expect moderate to substantial increases in turnover of up to 50%. Among part-time entrepreneurs, however, there is a considerably greater range of expectations: a third of them expect their income to remain the same, while a further third expect their income to be at least double what it was in 2014. This broad range of expectations is a consequence of the nature of part-time start-ups, which for the most part are only intended to provide additional income. At the same time. part-time entrepreneurs' low turnover allows room for significant increases.

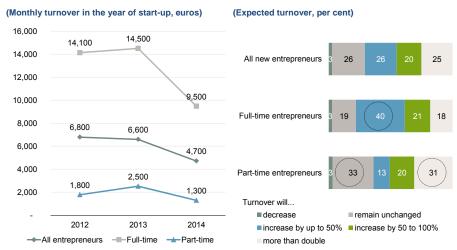
### Majority of entrepreneurs need financing

The small-scale nature of start-ups is also demonstrated by the fact that roughly one in ten entrepreneurs does not make use of physical or financial capital (Figure 15). Three out of ten entrepreneurs use solely their private physical capital in their self-employment. This could be things like their private computer or their own car. Even so, the majority of people (62%) apply financial capital in their business. In general, full-time entrepreneurs are more likely to apply financial capital than part-time entrepreneurs. However, in 2014 fewer full-time entrepreneurs made use of financial capital (66%), both compared with the previous year (76%) and with part-time entrepreneurs (59%). This can be attributed to the number of entrepreneurs involved in freelance activities, of whom only half applied financial capital in 2014.

### Start-up capital more important for full-time entrepreneurs

Where entrepreneurs apply financial capital, this is restricted to their own funds in two out of three cases. Overall,

Figure 14: Entrepreneurs' average turnover lower in 2014 than for those in the previous year but they remain optimistic for 2015

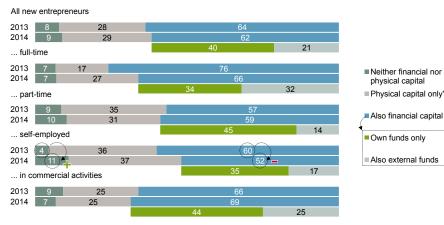


Note: The diagram on the left shows the monthly turnover of start-ups in recent years. The diagram on the right shows the turnover expectations of 2014's entrepreneurs for 2015.

Source: KfW Start-up Monitor.

Figure 15: Finance is the most important resource for start-ups – entrepreneurs' own funds make up the largest part

#### (Proportion of resource usage, percentages)



Note: Figures in the table may include rounding differences

Source: KfW Start-up Monitor.

this means that only one in five people who become self-employed make use of external sources of finance (2014: 21%). This is true of full-time entrepreneurs approximately twice as often (32%) as it is of part-time entrepreneurs (14%). Start-up capital, particularly when it is obtained from external sources, is therefore substantially more important for full-time entrepreneurs.

Not only are full-time entrepreneurs more likely to apply financial resources, they also use larger amounts than part-time entrepreneurs. In 2014, entrepreneurs used an average of EUR 9,100 (2014: EUR 11,000) in their start-up project (Table 4). With an average of EUR 14,800, full-time entrepreneurs in-

vested just under three times as much as part-time entrepreneurs, who invested EUR 4,800. The average funds invested by full-time entrepreneurs fell significantly when compared with the previous year (2013: EUR 22,600), while for part-time entrepreneurs the level remained stable (2013: EUR 4,600). This is chiefly an effect of the sharp rise in the number of full-time entrepreneurs that made do without financial resources.

The proportion of entrepreneurs making do without financial resources has a considerable effect on the average capital invested. While an entrepreneur invested an average of EUR 9,100 in 2014, this figure rises to an average of EUR 15,100 when only entrepreneurs

Table 4: Fall in average capital invested by entrepreneurs but most entrepreneurs that do invest capital invest more

[Euros]	2013		2014		
	Ø	Median	Ø	Median	
All entrepreneurs					
Capital investment	11,000	1,000	9,100	500	
Of which: Own funds	5,500	2,500	4,400	2,500	
External funding	5,500	0	4,700	0	
Entrepreneurs investing capital					
Capital investment	17,500	4,000	15,100	5,000	
Of which: Own funds	8,700	2,500	7,300	2,500	
External funding	8,800	0	7,800	0	
Entrepreneurs using external financing					
Capital investment	35,000	10,000	32,600	15,000	
Of which: Own funds	6,400	1,200	9,500	3,500	
External funding	28,700	5,000	23,200	10,000	

Note: Figures in the table may include rounding differences. Discrepancies may arise between these figures and those presented in previous publications as a result of continuous improvements to the process used to prepare the figures.

Source: KfW Start-up Monitor.

that invested capital are taken into account. If we also leave aside those entrepreneurs that made do with their own funds alone, the average capital invested rises to as much as EUR 32,600.

As in the past two years, roughly half of the capital invested by entrepreneurs in 2014 came from their own funds. The average figure was EUR 4,400, with a corresponding EUR 4,700 coming from external sources such as banks, private investors or family and friends. Full-time entrepreneurs, both as a proportion and in absolute terms, made use of slightly more external capital (EUR 6,700 of own funds vs. EUR 8,000 of external financing) than part-time entrepreneurs (EUR 2,700 vs. EUR 2,100).

The average amount of capital invested by entrepreneurs fell in comparison with the previous year. On average across all entrepreneurs, this reflects the slight increase in the proportion who did not make use of financing and hence made up the broad majority of entrepreneurs. Accordingly, the median capital requirement, i.e. half of entrepreneurs used more than this amount and half used less, fell from EUR 1,000 (2013) to EUR 500 (2014). For entrepreneurs that did make use of (external) financing, the change in the average capital invested has less to do with the wider population than it does with those at the top level. This is because, despite a fall in the average, the median amounts rose from EUR 4,000 to EUR 5,000 for entrepreneurs that invested capital and from EUR 10,000 to EUR 15,000 for entrepreneurs that made use of external funding.

### Microfinance is the dominant source of external capital

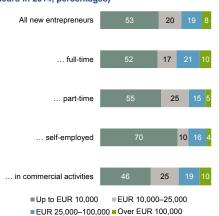
Where entrepreneurs turn to external investors, these contribute a disproportionately hiah amount. Of the EUR 32,600 that such entrepreneurs invest in their business on average, EUR 23,200 comes from external sources of finance. However, even when entrepreneurs access external capital, the majority of it comes from microfinance. In 2014, 53% of the entrepreneurs in this category obtained up to EUR 10,000 from external investors, with a further 20% obtaining between EUR 10,000 **EUR** 25,000 and (Figure 16). There are clear structural differences in this respect between fulltime and part-time entrepreneurs, and between freelancers and those working in the commercial sector. Full-time entrepreneurs used substantially larger amounts of external capital (10% of them used more than EUR 100,000) than their part-time counterparts. In contrast, freelance entrepreneurs made use of a great deal less external capital (70 % of them used no more than EUR 10,000) than entrepreneurs working in the commercial sector.

## Entrepreneurs are more likely to experience financing problems

It is encouraging to note that the vast majority of people becoming self-

Figure 16: Microfinance very prevalent

(Distribution of external financing used by entrepreneurs in 2014, percentages)



Source: KfW Start-up Monitor.

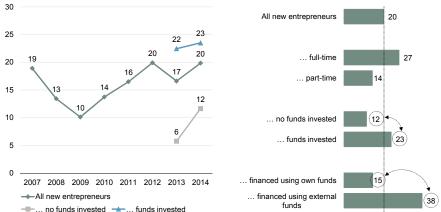
employed – 80% in 2014 – have no problems with financing. This means that they either do not need financing to get their project off the ground, or were able to finance it using their own or external funds without any problems. However, there are three issues that cast a shadow over this good news. The proportion of entrepreneurs experiencing financing difficulties:

- 1. rose when compared with the previous year,
- 2. rose particularly for entrepreneurs that did not invest any funds into their business and
- 3. reached its peak at 20 % again, last seen in 2012 (Figure 17, left-hand side).

Problems with financing consistently affect new entrepreneurs more than those that are already established; because they cannot point to the historic performance of their business and are unable to provide collateral, it is much harder for them to earn the trust of investors. On top of this, most new entrepreneurs need relatively small amounts of finance. Because of the higher associated fixed costs for loan approvals and administration, microfinance, for example, is less attractive to banks than larger loans. which offer a better cost-income ratio. The fact that new entrepreneurs find it harder to access capital can mean that they are unable to obtain financing and hence cannot implement even promising projects.

Figure 17: Entrepreneurs once again experiencing more financing problems

(Proportion of entrepreneurs experiencing financing problems, percentages)



Source: KfW Start-up Monitor.

Problems with financing may be interpreted as a measure of the effort

required from entrepreneurs to convince (potential) investors to support their pro

ject. The more work an entrepreneur has to put in to convince investors – and with increasing volumes this is likely to rise – the more likely he or she is to experience funding problems. Funding problems occur (much) more frequently for entrepreneurs who make use of (external) financing than they do for entrepreneurs who do not invest any capital. As a result, funding problems only actually indicate a failure to obtain external financing for a few entrepreneurs. Compared with the previous year, entrepreneurs using external financing were less likely to experience funding problems. ■

#### A note on the Start-up Monitor

Note: Information provided by those surveyed.

The KfW Start-up Monitor survey has been conducted since 2000. This survey on self-employed start-ups in Germany collects information on new entrepreneurs and their start-up projects as well as on a control group of non-entrepreneurs. New entrepreneurs are defined as people who have entered commercial or freelance self-employment within the last 12 months before the time of the survey, regardless of whether full-time or as a sideline. A self-employed start-up can involve starting a new company, taking over an existing company or acquiring a participation in an existing company.

This report on the KfW Start-up Monitor 2015, "Start-ups on the rise – freelancers in the majority", presents some of the findings in detail. More information from the current survey on the composition of start-up activity, along with the two previous surveys, can be found in the corresponding Tables and Methodology document.

The KfW Start-up Monitor is carried out with the aim of providing an economic analysis of start-up activity. As a scientific dataset, it is available to external researchers for the purposes of empirical research but not for projects that form part of commissioned research. In order to use the dataset, external researchers must be affiliated to a research institution. The dataset may be used by postgraduates and PhD students in their doctoral theses, but not by undergraduates or masters students. An overview of the conditions for using the dataset can be found at

https://www.kfw.de/KfW-Konzern/KfW-Research/Über-KfW-Research/Forschungskooperationen/

<sup>&</sup>lt;sup>1</sup> Federal Statistical Office (2015), detailed gross domestic product results for the fourth quarter of 2014. Press release dated 24 February 2015.

<sup>&</sup>lt;sup>2</sup> Federal Statistical Office (2015), National Accounts, information as at: 29.01.2015, <a href="https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erwerbslosigkeit/Tabellen/EinwohnerErwerbsbeteiligung.html">https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erwerbslosigkeit/Tabellen/EinwohnerErwerbsbeteiligung.html</a>.

<sup>&</sup>lt;sup>3</sup> Kohn, K., Ullrich, K. H. and Spengler (2010): KfW Gründungsmonitor 2010 Lebhafte Gründungsaktivität in der Krise, KfW, Frankfurt, June 2010 (only available in German).

<sup>&</sup>lt;sup>4</sup> Gerstenberger, J., Leifels, A., Metzger, G., Schwartz, M., Zeuner, J., and V. Zimmermann (2015), Demografie im Mittelstand, Alterung der Unternehmer ist nicht nur Nachfolgethema, Fokus Volkswirtschaft Nr. 92, KfW Research, Frankfurt am Main, 23 April 2015 (only available in German).

<sup>&</sup>lt;sup>5</sup> Between 2001 and 2012 the participation rate (the working population – i.e. the sum of those in active employment and jobseekers – between the ages of 15 and 64 as a proportion of the overall population in the same age group) among women rose from 64.9 to 71.6%, while the figure for men rose from 80.1 to 82.2%. Over the same period, the employment rate (people in active employment as a proportion of the working population) among women rose from 58.8 to 67.6% and from 72.7 to 77.1% among men. Source: Bundesagentur für Arbeit (2013): Der Arbeitsmarkt in Deutschland, Frauen und Männer am Arbeitsmarkt im Jahr 2012, Nürnberg 2013 (only available in German).

<sup>&</sup>lt;sup>6</sup> Borger, K. (2015), Spring is in the air for German SMEs, KfW-ifo SME Barometer; April 2015, Frankfurt, 5 May 2015