

Focus on Economics

No. 85, 23rd March 2015

Ageing of German SME owners is putting a dampener on investment

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Demographic change has reached small and medium-sized enterprises. SME owners in Germany are getting older fast. More than 1.3 million business owners are already aged 55 or older.

At the same time, there is a shortage of future entrepreneurs. Not enough young entrepreneurs are filling the void. The SME sector is at risk of ageing fast and all segments are caught in this demographic trap.

One problem is that ageing is hampering new investment. The willingness to invest drops sharply with the age of the business owner. This is not a new trend but rather a structural problem that is expected to worsen.

Business managers, not pensioners

Demographic change in Germany has left its mark on SMEs. More than 1.3 million SME owners are aged 55 or older (Figure 1). This means that more than one third of all business managers have reached an age at which economically active people consider retirement.

In addition, the ageing process is faster in the SME sector than in other groups of the population.¹ From 2002 to 2013, the share of business owners over 55 rose from 20 to 36% and their average age increased from 45 to 51 years during the same period. By comparison, the share of people in the total population aged over 55 increased by only four percentage points, from 34 to 38%, during the same period.

Figure 1: Age of SME owners (2002–2013)

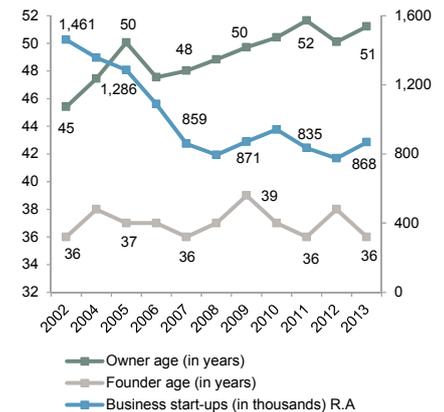
Proportions of enterprises per age group in per cent – boxes on the right: total number of owners in the corresponding age groups (combination of two age groups each)



Note: Extrapolated to the number of companies. The count includes only those enterprises that were newly entered in the dataset in the respective survey year. Regular survey participants were excluded because the age of the owner increased by definition. No data is available on the age of business owners for the year 2003.

Source: KfW SME Panel 2003–2014

Figure 2: Business start-ups, age of business founders and owners (2002–2013)



Note: See Figure 1 for notes on ages of business owners. The age of business founders is between 18 and 64 years.

Sources: KfW Start-up Monitor 2003–2014, KfW SME panel 2003–2014.

Lack of young entrepreneurs

At the same time, increasingly fewer young entrepreneurs are coming up through the ranks (Figure 2). It is true that roughly three quarters of all business founders are below the age of 45 (2013: 74%) and thus relatively young overall, according to the KfW Start-up Monitor². A glance at the average age of business founders confirms this (2013: 36 years). Nonetheless, the total number of business founders has dropped sharply since the turn of the millennium from more than 1.5 million a year (2001) to 0.8 million (2013). This is reflected in the SME sector, where the share of business owners below the age of 40 has more than halved since 2002 from 28 to only 12% in 2013.

Even though an increase in the number of business founders was reported recently, its effects on the age structure of the owners of SMEs are not yet noticeable. The KfW SME Panel³ shows that the SME sector is ageing, thus slowing down investment.

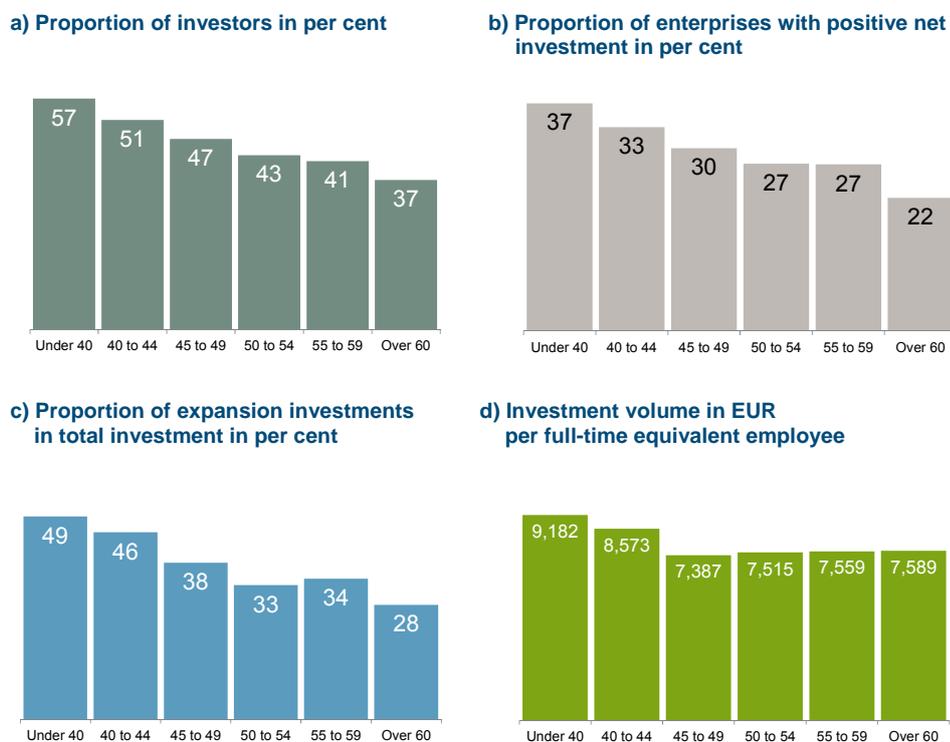
Larger SMEs in manufacturing industries are caught in the demographic trap

Rapid ageing affects every segment of the SME sector (Table). Only in the construction industry is the age structure balanced. In all other segments, the share of older business owners clearly dominated in 2013. Across the SME sector overall, the balance is +11 percentage points (proportion of 55-year-olds minus the proportion of under 45-year-olds) – see also Figure 1.

The two manufacturing sub-sectors⁴ and larger SMEs with 50 and more employees stand out in this comparison. Here the overhang of older business managers is +23 (R&D-intensive manufacturing), +27 (other manufacturing) and +24 (large SMEs) percentage points. This shows that these segments are currently stuck even deeper in the demographic trap. This is also evidenced by the SME owners' mean age, which is 54 years in the segment of 'other manufacturing' – a very high age indeed.

Figure 3: Key investment parameters by age of SME owner

The figure shows the mean value for each age group from the extrapolated individual values for the years 2004 to 2013



Note: Net investment means overall investments of an enterprise minus total depreciation. The 100% missing details on the types of investments are composed of replacement acquisitions and other investments.

Source: KfW SME Panel 2005–2014

Table: Age of business owner by segment (2013)

| | Younger (< 45 years) | Older (≥55 years) | Age ^a |
|--------------------------------------|----------------------|-------------------|------------------|
| <i>By industry</i> | | | |
| R&D-intensive manufacturing industry | 9 % | 32 % | 53 |
| Other manufacturing industry | 18 % | 45 % | 54 |
| Construction | 29 % | 29 % | 48 |
| Knowledge-intensive services | 22 % | 37 % | 53 |
| Other services | 26 % | 38 % | 51 |
| <i>By employees</i> | | | |
| Fewer than 5 | 25 % | 36 % | 51 |
| 5 to 9 | 24 % | 37 % | 51 |
| 10 to 49 | 23 % | 39 % | 52 |
| 50 and more | 16 % | 40 % | 53 |
| <i>By region</i> | | | |
| Western German states | 24 % | 36 % | 51 |
| Eastern German states | 28 % | 37 % | 50 |
| <i>By occupational groups</i> | | | |
| Liberal professions | 24 % | 33 % | 50 |
| Crafts | 28 % | 37 % | 50 |
| Other occupational groups | 22 % | 38 % | 52 |

Note: ^a Average age of business owner of relevant segment in years. Only those enterprises were counted that were newly included in the survey year 2014.

Source: KfW SME Panel 2014

Investments: older entrepreneurs are wearing down their capital stock

As a general rule, the willingness to invest is closely linked to the individual business owner, particularly in owner-managed SMEs – the smaller the enterprise, the higher the personal influence.⁵ In what way does a business owners' increasing age shape their investment behaviour?

The data clearly shows:

(1) The propensity to invest decreases with the age of the business owner (Figure 3a). The correlation is clear and the difference between age groups is obvious. Between 2004 and 2013 the average annual difference in investor shares between the lowest and the highest age group was 20 percentage points. Whilst 57% of SMEs with younger owners invested in their business, the propensity to invest was only 37% in enterprises with older owners. By comparison, over a long-term average around 46% of SMEs invest in their business every year.

(2) This structural ‘demographic gap’ in investment behaviour has remained constant over time. Across the whole survey period of the KfW SME Panel, entrepreneurs over 60 years old never invested more often than entrepreneurs younger than 40 years. The maximum gap was 30 percentage points (in 2007).

(3) Investments by older business owners primarily serve to maintain existing capital stock. Investment in capacity expansion plays a minor role (Figure 3c). Projects that are fraught with risk or tie up capital (such as expanding foreign activities or acquiring a further production line) are deferred. It is a known fact that this pattern hampers new investment overall. When a business invests in capacity expansion, overall investment is around four times higher than in the case of replacement alone.⁶

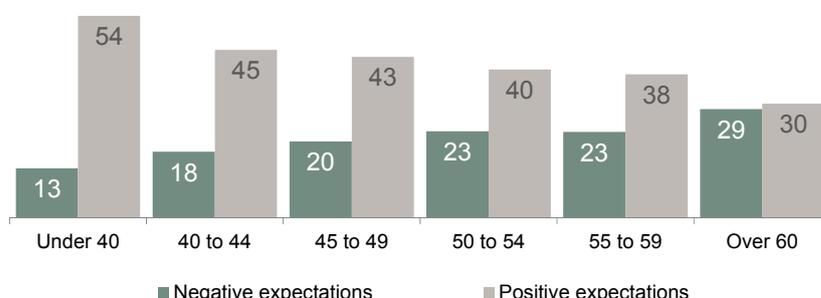
(4) The low propensity to invest has consequences for enterprises’ assets (Figure 3b). In almost eight out of ten SMEs with older owners, the loss in value of capital stock (depreciation) exceeded the volume of new investment. Between 2004 and 2013, an average of only 22% of older business owners made positive net investments every year. Here again, the correlation is obvious: the older the owner, the more likely their assets will erode as a result of negative net investment. This too is not a recent trend, as the proportion of SMEs with positive net investment has remained on a nearly constant level of just over 20% in enterprises with owners over 60 years old since 2004.

Older entrepreneurs could invest more, generating high leverage

Older entrepreneurs invest less often, they invest less in capacity expansion and their new investment often does not cover depreciation. However, when they did invest, their average project size between 2004 and 2013 was almost EUR 7,600 per employee (Figure 3d), just short of the long-term average of around EUR 8,300 for the whole SME sector.⁷ On average, enterprises with younger owners carry out significantly bigger investment projects. This is plausible because they usually have to set up their business structures first (e.g. IT infrastructure, office equipment, vehicle

Figure 4: Business expectations in the period of 2009–2013 by age of business owner

Figures in per cent; the figure shows the mean values from the extrapolated individual values for the years 2009 to 2013



Note: The business expectations indicator is composed of enterprises’ expectations for turnover and earnings, which are surveyed separately by the KfW SME Panel. Details are contained in endnote 8.

Source: KfW SME Panel 2010–2014

fleet, production facilities).

Short-term planning horizon provides limited incentives

Older business owners are reluctant to invest. Why? A major reason the propensity to invest declines with age lies in the owners’ planning horizon. From the perspective of an investor, investments must yield returns. But if the business owner is approaching retirement age, many investments have an excessively long amortisation period from the business owner’s point of view. The returns are uncertain or too low, which reduces the incentive. This applies even more to longer-term investments into the future – that is those that tie up funds but make the business more competitive in return (Figure 3c).

The business expectations voiced by the entrepreneurs can be a strong indication of this uncertainty.⁸ Indeed, Figure 4 shows that older business owners are significantly more pessimistic than younger ones.

In the group of over 60-year-olds, the share of owners with negative expectations actually exceeds the share of owners with positive expectations. In this context, it is a known fact that a strong correlation exists between a positive outlook for the future and the propensity to invest.⁹

This pattern has already been demonstrated for innovation activity.¹⁰ While business owners introduce product innovations in order to seize sales opportuni-

ties regardless of their age, they refrain from process innovations more frequently with increasing age – again the result of reduced incentives from unacceptably long amortisation periods.

Summary and outlook

The SME sector is ageing faster than the rest of the population – in the short term, the trend towards faster ageing of business owners is marked out by the future demographic development. Today the post-war baby boomer generation is 45 to 55 years old. Their exit from the workforce from around the year 2025 will leave a gap. This gap will be hard to fill for the generations moving up.

Continuous replenishment with young entrepreneurs would be necessary to offset the progressive ageing of small and medium-sized business owners. However, current start-up activity provides little hope given the low numbers of business founders.

The demographic trend has an adverse effect on business owners’ propensity to invest. The reason is that older investors can hardly expect to reap significant or even full returns on their investments during the time they are still the owners.

Nevertheless, what is also evidenced is that to the extent investment takes place, it is sufficient in volume – what is insufficient is the number of older business owners investing. The volume is not lacking, just the willingness.

If there was a way to sustainably encourage older business owners’ propen-

sity to invest, this would have positive impacts on the overall investment volume in SMEs.

One possibility would be for the old owner to be given a share of the return generated by an investment made in the late stage of ownership after they leave the business. That could be an incentive for them to still make investments that are, in principle, worthwhile. An important condition of this approach is to clarify the succession to the exiting owner in good time. This may be a way to reduce the investment backlog caused by advanced age. KfW Research is issuing a special publication on the increasingly relevant topic of SME ownership succession planning in April 2015. ■

The database: the KfW SME Panel

The *KfW SME Panel* (KfW-Mittelstandspanel) has been conducted since 2003 as a recurring postal survey of small and medium-sized enterprises in Germany. The basic population used for the KfW SME Panel includes all private-sector companies from all industries with annual turnovers of up to EUR 500 million.

The KfW SME Panel sample is designed in such a way that it can generate representative, reliable and very precise statements. With a database of up to 15,000 companies per year, the KfW SME Panel is the **only representative survey of the German SME sector** and thus the most important source of data on issues relevant to the SME sector.

Information on the age of the business owner is collected only in the year of first inclusion in the dataset. This question is not posed repeatedly to the relevant enterprises in the following years. In order to still be able to present meaningful and, in particular, reliable results even though the number of cases is lower than the overall dataset, the analyses in this article are usually based on a summary of various waves of the KfW SME Panel. The most recent survey (12th wave) was conducted in the period from 1st February 2014 to 30th May 2014.

¹ Gerstenberger, J. and M. Schwartz (2014), *Mittelstand altert im Zeitraffer*, Economics in Brief No. 63, KfW Economic Research, Frankfurt am Main (in German only).

² Metzger, G. (2014), *KfW Start-up Monitor 2014: Revival in start-up activity – impulse from the sideline*, KfW Economic Research, Frankfurt am Main.

³ For the current edition see Schwartz, M. (2014), *KfW SME Panel 2014: SMEs feeling the impact of weak growth in Europe, and bracing for harder times ahead*, KfW Economic Research, Frankfurt am Main. For more detailed information on relevant SME indicators see also the *Volume of tables relating to the KfW SME Panel 2014*, available at: <https://www.kfw.de/KfW-Konzern/KfW-Research/KfW-Mittelstandspanel.html> (in German only)

⁴ Industries were broken down in accordance with the NIW/ISI list of research-intensive industries and services, which follows the Federal Statistical Office's 'Classification of Economic Activities (WZ 2008)'. A rough definition was used. According to this rough definition, research and development-intensive (R&D-intensive) manufacturing refers to those sectors of manufacturing whose average R&D intensity (ratio of R&D expenses to turnover) is higher than 3.5%. Research-intensive services are service industries that either feature an above-average proportion of university graduates (e.g. law firms, auditing services, tax accountants, market and opinion research firms, management and public relations consulting and advertising firms) or are heavily technology-orientated (e.g. telecommunications services, data processing, R&D service providers, architecture and engineering firms).

⁵ Cf. Figure 15 in Schwartz, M. (2013), *KfW SME Panel 2013: Solid overall impression, despite sand in the works*, KfW Economic Research, Frankfurt am Main.

⁶ Gerstenberger, J. and M. Schwartz (2014), *Unsicherheit kostet mittelständische Investitionen: Sichere Rahmenbedingungen nötig*, Focus on Economics No. 66, KfW Economic Research, Frankfurt am Main (in German only).

⁷ See Table 8 in the *Volume of tables relating to the KfW SME Panel 2014*, available at: <https://www.kfw.de/KfW-Konzern/KfW-Research/KfW-Mittelstandspanel.html> (in German only).

⁸ In order to assess the entrepreneurs' expectations, two indicators can be formed on the basis of the SME Panel: turnover and earnings expectations. These are surveyed for the respective next three years and can express the following three levels of expectation: falling turnover/earnings compared with the survey year (-1 = negative expectations), unchanged earnings/turnover (0 = neutral expectations), increasing earnings/turnover (1 = positive expectations). The two indicators were subsequently combined into one indicator of business expectations. The following categories were defined for this purpose: 'pessimists': $-2 \leq (\text{turnover expectations} + \text{earnings expectations}) \leq -1$ / 'neutral' $(\text{turnover expectations} + \text{earnings expectations}) = 0$ / 'optimists': $1 \leq (\text{turnover expectations} + \text{earnings expectations}) \leq 2$.

⁹ Gerstenberger, J. and M. Schwartz (2014), *Unsicherheit kostet mittelständische Investitionen: Sichere Rahmenbedingungen nötig*, Focus on Economics No. 66, KfW Economic Research, Frankfurt am Main (in German only).

¹⁰ Zimmermann, V. (2013), *Have the old still got what it takes? Differences in the innovative output of young and old entrepreneurs*, Focus on Economics No. 33, KfW Economic Research, Frankfurt am Main.