

# The UK's high growth firms and their resilience over the Great Recession

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During the last decade High-Growth Firms (HGFs) – sometimes referred to as 'Scale-Ups' – have increasingly become an established feature of the UK business policy landscape. Indeed, HGFs are mentioned in the government's recently published policy document "Building our Industrial Strategy", and are now considered sufficiently important that the Minister for Small Business has taken on the role of "Scale-Up Champion". Whilst we know something of the characteristics of these firms – about their age, size, sector and location – we know relatively little about the dynamics of the HGF population as it evolves over time. For the most part attention is focused simply on the annual count which is not an entirely appropriate measure of HGF activity.

We develop a measurement framework designed to track the population of high-growth firms (HGFs) between 1998 and 2015: the innovation here is the explicit allowance for firms which experience 'repeat' episodes of high growth (HGEs). The relationships between the categories in the measurement framework are used to build a simple 'model' of the evolution of the HGF population. We use ONS data from the 14 birth cohorts of UK firms born between 1998 and 2011, covering the three year growth periods from 1999/02 to 2012/15 to parameterise the model. The model is used to generate a counterfactual path for the UK HGF population over the Great Recession (GR) period, the difference between the observed and the average path provides an estimate of how the HGF population was affected by the downturn and its re-bounce during the recovery phase.

## Key findings

- The average age at which a firm becomes categorised as a HGF – that is, records its first HGE – is about six years.
- Tracking HGFs over their lifetime, we show that almost two-thirds of HGEs recorded during a growth period, and conventionally referred to as HGFs, are actually repeat episodes being recorded by HGFs 'born' some years previously.
- Although there is some variation across cohorts the picture looks pretty consistent: by age 10, 40% of all 10+ firms have experienced at least one HGE.
- With the onset of the Great Recession the number of HGEs declined quite markedly. Initially, there was a fall in HGF births, which was (necessarily) followed by a reduction in repeat episodes (induced by the fall in births).
- However, in the upswing repeat episodes recovered first: existing HGFs recorded an unusually large number of repeat episodes; and this was followed by a return of HGF birth numbers to their pre-Recession level.
- What our analysis of the Great Recession period shows is that there is, apparently, a relatively stable mechanism producing HGEs period by period.

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## Business age and high-growth episodes

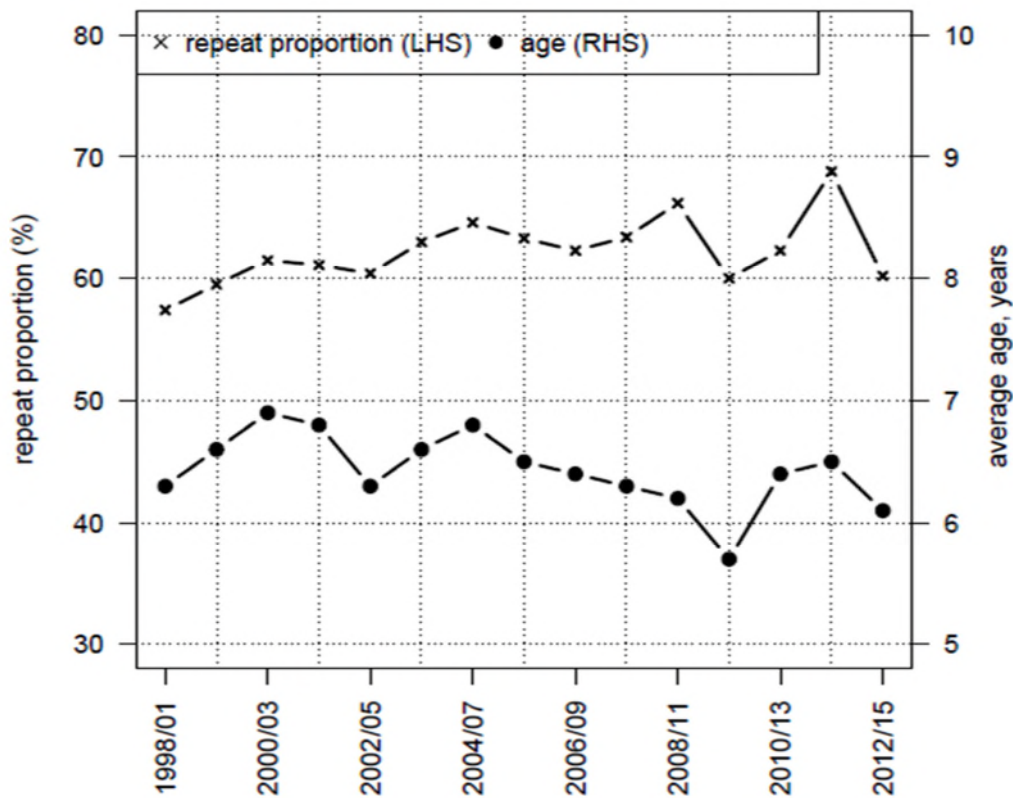
Age has been a subject of (continuing) discussion in the HGF literature, it had been expected that HGFs were typically young firms, but this was not confirmed in this analysis. In the conventional treatment age is measured as the age at the time a growth period's HGF count is recorded. 'Age' is of course is the age at which an HGE has been recorded, but unless it is a firm's first HGE it will simply be the age at which a firm previously categorised as a HGF for the first time has recorded a repeat episode. Clearly, this affects conclusions about the age distribution of HGFs, which is likely to be quite different from the age distribution at which an HGE is recorded.

By age 20 our hypothetical cohort has recorded just over 3,900 births, and half of these HGFs were born before age 5 (as measured from the beginning of the growth period, age 8 at the end). If an HGE is recorded by a firm more than 5 years old it is more likely to be a repeat, and at age 20 it is three times more likely to be a repeat.

In fact, we can compile a more complete picture of the importance of repeats for the growth periods covered here. Figure 1 displays the repeat proportion across the growth periods and we see immediately that with just one (very early) exception it is in the 60% to 70% range. In other words, on average **around two-thirds** of the HGEs recorded by the UK's HGFs in the last decade and a half are repeat episodes. To be sure the proportion fluctuates, and the widest swings occur in and around the GR period, with the largest shares being recorded in 2008/11 and 2011/14. We will look at these GR related phenomena in more detail in the next section.

Figure 1 also displays, plotted against the right hand axis, the average age of HGFs – that is the average age at which a firm records its first HGE – over the growth periods 1998/01 to 2012/15. The average is computed, for each period, by weighting each birth sub cohort by its age, where we use the age at the initial year of the growth period, so for example the first sub-cohort of cohort98, an HGE recorded in 1999/02 is assigned the age 1. For the pre-1998 cohorts we use the same (simulated) data just described in the discussion of the repeat proportion. The most striking feature of the age series is its remarkable constancy – it hardly varies at all – average age is never greater than 7 years, and rarely lower than 6 years. It is also possible to compute the average age at which an episode is recorded – it is just episode-weighted age.

Figure 1: HGE repeat proportion (%) and HGF average age (years), 1998/01 to 2012/15 (Source ONS BSD)<sup>1</sup>



## Policy implications

Currently, as flagged in the Industrial Strategy Green Paper in January 2017, the Scale-up agenda is to have a prominent role in driving local growth, with the focus on the importance of identifying, targeting and supporting more HGFs or scale-ups.

Our analysis provides for the first time a clearer understanding of the dynamics of HGFs over time, and although there is a clear age decay effect, it reveals the importance of HGEs in driving growth in these firms. This is an important consideration in any attempt by policy makers to identify the lead indicators for HGFs, a group of firms which plays such an important role in job creation.

<sup>1</sup> The data used here is from the Jobs version of the Longitudinal Business Structure Database which can be accessed through the Secure Lab. A more detailed account of data construction can be obtained from the authors on request. The use of these data does not imply the endorsement of the data owner or the UK Data Service at the UK Data Archive in relation to the interpretation or analysis of the data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

In practice though, identifying a firm about to have its first HGE may involve quite different lead indicators or triggers than the indicators which might be relevant for firms having a second or third HGE. We might hypothesise that the first episodes of high-growth might be related to strategic decisions to innovate and/or engage in international activity for the first time. Repeat episodes may be stimulated by different factors such as the decision to look for additional debt or equity finance to consolidate and kick-on after an initial burst of high-growth. This will require further research to test such hypotheses.

Moreover, it is important to note from our analysis that firms being categorised as a HGF for the first time in a birth cohort of firms grow faster and make a more substantial contribution to job creation than when they have further HGEs.

**Full paper link:**

<https://www.enterpriseresearch.ac.uk/our-work/publications/>