

# ERC Insight

February 2014

# Moving on from the 'Vital 6%'

High-Growth Firms (HGFs) represent only a small minority -the 'Vital 6%' - of the UK business population yet they have a disproportionate impact on job creation and innovation. We re-visit the discussion launched by the 2009 NESTA reports, which identified the 6% figure and, using more recent data and a wider range of definitions, confirm the headline conclusion for job creation: that is, a small number of job creating firms (mostly small firms) are responsible for a significant amount of net job creation in the UK. If we adopt our preferred analytical framework of tracking the growth performance of cohorts of start-ups this conclusion still holds – an even smaller number of job creating firms are responsible for a significant amount of job creation.

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Since the publication of the NESTA reports in 2009<sup>1</sup> their 'Vital 6%' figure has played a prominent role in policy discussions on the drivers of growth in the UK economy and on how policy interventions might increase the number of HGFs. This small group of firms were seen as responsible for a disproportionate share of net job creation and as key drivers of innovation.

Work in the Enterprise Research Centre (ERC)<sup>2</sup> has updated this analysis and revisited the OECD High-Growth Firm (HGF) definition to provide an alternative approach to identifying the group of fast growing firms which contribute disproportionately to job creation<sup>3</sup>. This note sets out new evidence to aid the current discussion of new policy initiatives to encourage small business development.

#### **OECD HGF Metric – a Reminder**

The OECD HGF metric has a very precise definition<sup>4</sup> but its policy relevance seems somewhat debateable. If we are measuring growth over a three year period for example, the first step requires that we consider only firms which, are born before the beginning of the three year period and are alive at its end. This



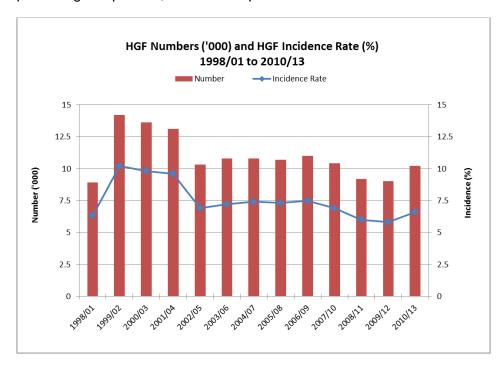
implies that in each period we will have a 'balanced panel' of firms – the same firms are always present (often referred to as 'continuing firms').

An HGF is a firm in this balanced panel with at least 10 employees at the beginning of the period and which records an annual average growth of 20% in employment<sup>5</sup> over the three year period. Finally, we define the HGF incidence rate<sup>6</sup> as the number of HGFs divided by the number of firms (in the balanced panel) with 10+ employees. Starting with 1998, we have data on 13 overlapping 3-year periods: from 1998/2001 to 2007/2013.

#### Prevalence Rates of HGFs in the UK

The first published calculations for the UK found that HGFs represented around 6% of all UK private sector firms (in the balanced panel) employing ten or more people (11,530 firms in 2008), so an even smaller proportion of all firms. Using a slightly improved version<sup>7</sup> of our UK longitudinal business demography dataset (which is constructed from the ONS' Business Structure Database (BSD)<sup>8</sup>) we have now updated this analysis and extended it to cover the period of the recent economic downturn since 2008<sup>9</sup> and up to 2013. The results for the number of HGFs and the HGF incidence rate are plotted in Figure 1.

In summary, the incidence rate of HGFs averaged 7.2% over the period between 2002-05 and 2007-10 and then dipped to an average of 5.9% in the period of economic downturn before 'bouncing back' to 6.6% in 2010-13. So, in broad terms, the 'vital 6%' construct survived the most severe post-war economic shock. There were 10,172 HGFs in 2010-13, one thousand more than in the preceding two periods, and back to pre-2008 levels.



Source: ONS BSD (1998-2013)

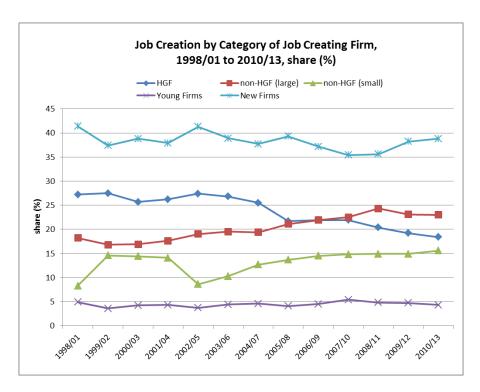


#### **HGFs and Job Creation**

In the earlier work published by NESTA we observed that HGFs generated a majority of jobs created over a three year period by continuing businesses employing ten or more people<sup>10</sup>, and that observation, that HGFs create around half of net new jobs, seems now to be treated as a 'stylised fact' in policy discussions. Whilst it may have been useful, originally, in underlining the importance of a small group of firms<sup>11</sup> to the job creation debate it tells only part of the story. In particular, the choice of denominator for this calculation is (obviously) of considerable importance. Notice first of all we are comparing job creation by HGFs with that by all other continuing firms with more than 10 employees. A more 'natural' comparison would be with all other continuing firms with more than 10 employees which **create jobs**, because, of course, a very large proportion of 10+ continuing firms **do not create jobs**. Secondly, it seems equally natural to extend the denominator of the job creation calculation to include all firms alive at the end of the three year period and which have created jobs.

Unsurprisingly, when we extend the denominator of the job creation calculation in this, entirely natural, way the importance of HGFs relative to other job creating firms shrinks quite considerably. As we can see from Figure 2, the HGF contribution to job creation averaged around 27% from 1998/2001 to 2004/07, it then dropped in the periods 2005/08 to 2007/10 to 22%. Since 2007/10 the contribution has dropped even further, to below a fifth (averaging 19.3%) by 2010/13 it was down to 18.4% in the most recent period to 2010/13 – its lowest ever recorded share. On Figure 2 HGFs are being distinguished from four other categories of job creating firms: two from the 'balanced panel', differing in size at the beginning of the three year period, non-HGFs starting the period with less than 10 employees (non-HGF small) and non-HGFs starting with more than 10 employees (non-HGF large); firms born in the first year of the period (young); and firms born during the three year period (new)<sup>12</sup>.





Source: ONS BSD (1998-2013)

In brief, over the most recent 2010-13 period, HGFs (as defined by the OECD) accounted for about 1% of all job creating firms but 18% of the jobs created by job creating firms. In absolute terms the 10,172 HGFs added 839,352 jobs between 2010 and 2013 of the 4.6 million added between the same years by all job creating firms – in the periods up to 2005-08 the comparable HGF figure was more than one million. Although HGFs continue to make a significant contribution to job creation over a three year period, HGFs do appear to have become less important.

### An Alternative 'Vital 6%'

We are not convinced that the OECD HGF definition provides a useful metric to inform policy discussions, and wish to suggest a different approach to measuring the contribution of rapidly growing firms to job creation. Here we step away from growth rates as the central concern (the preoccupation of the OECD HGF metric) towards 'growth trajectories' - our shorthand term for the dynamics of job creation over a firm's life – which better captures the interplay between growth and survival.

Focusing on a 15-year horizon (1998-2013) we find that just 11% of start-up firms born in 1998 survive until 2013. They had about 390 thousand employees in 2013, up from about 160 thousand at birth. Although, taken together, the survivors have added about 230 thousand jobs this is a 'net' figure: some firms will have added jobs; some shed jobs; others will have exactly the same number as they had at birth<sup>13</sup>.



In fact, about 60% of the surviving firms are job creators and the bulk of these job creators (like the bulk of firms) were born very small, with less than five employees and most of them remain very small and create very few jobs. But within the class of very small firm start-ups (those. with less than 5 employees in 1998) there is a very small group (6% of them: 1,248 firms) which are extraordinary prolific job creators (EPJCs): between them accounting for 90 thousands added jobs, about 40% of job creation by all 15 year survivors. It is this group of firms that require further analysis as we seek to understand the process of small business growth. For policy discussion purposes we need to abandon our reliance on an OECD HGF metric – it is an arbitrary definition and does not satisfactorily reflect the episodic nature of the growth process in rapidly growing small firms.

## Summary

What is clear from the evidence is that there are a very small number of firms in the UK which can be classified as HGFs using the OECD definition. Further, the HGF prevalence rates have remained largely unchanged although there has been a fall in their contribution to job creation. More importantly, the overall conclusion remains unchanged – there are a very small number of firms (HGFs) that account for a significant amount of job creation in the UK. Our preferred approach, which tracks the growth performance of cohorts of start-ups reaches a similar conclusion, but avoids the intricacies of the HGF definition and the attendant difficulties in interpreting the job creation record. EPJCs are most certainly an easy to identify small group of firms which make a hugely disproportionate contribution to job creation, and that, after all, was the rationale for having distinguished HGFs in the first place. Having identified this group of small firms we are now undertaking further analysis to understand in more detail the key drivers of their growth and will be using a range of ONS business surveys to explore such issues as the role of innovation, exporting as well the relative importance of organic growth and growth by acquisition.

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Anyadike-Danes, M., Bonner, K., Hart, M. & Mason, C. (2009) Measuring business growth: high growth firms and their contribution to employment in the UK. London: NESTA; NESTA (2009) The Vital 6 per cent: How high-growth innovative businesses generate prosperity and jobs, NESTA, London.

<sup>&</sup>lt;sup>2</sup> ERC Research Theme 6: Firm Dynamics, Job Creation and Productivity in the UK. www.enterpriseresearch.co.uk.

<sup>&</sup>lt;sup>3</sup> Anyadike, M; Hart, M and Du, J (2013) Firm Dynamics and Job Creation in the UK, ERC White Paper No. 6 (April)

<sup>&</sup>lt;sup>4</sup> See EUROSTAT-OECD [2007, Chapter 8].

<sup>&</sup>lt;sup>5</sup> Alternatively, an annual average growth of 20% in turnover over the period can be used as the criterion.

<sup>&</sup>lt;sup>6</sup> We use the term 'incidence' here by analogy with epidemiology, to serve as a reminder that HGF status is time-dependent – in the present framework a firm which is an HGF in one three year period may, or may not, be an HGF in some other period.

<sup>&</sup>lt;sup>7</sup> The newer version of the dataset has, amongst other improvements, a better algorithm for determining births and deaths and produces smaller numbers of HGFs and slightly higher estimates of the incidence rate.

<sup>&</sup>lt;sup>8</sup> The statistical data used here is from the Office of National Statistics (ONS) and is Crown copyright and reproduced with the permission of the controller of HMSO and Queens Printer for Scotland. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. The analysis upon which this report is based uses research datasets which may not exactly reproduce National Statistics aggregates.

<sup>&</sup>lt;sup>9</sup> Anyadike-Danes, M Bonner, K and Hart, M (2013) Exploring the incidence and spatial distribution of high growth firms in the UK and their contribution to job creation, NESTA Working Paper 13/05, Chapter 3.

Anyadike-Danes, M., Bonner, K., Hart, M. & Mason, C. (2009) Measuring business growth: high growth firms and their contribution to employment in the UK. London: NESTA; NESTA (2009) The Vital 6 per cent: How high-growth innovative businesses generate prosperity and jobs, NESTA, London.

<sup>&</sup>lt;sup>11</sup> Not only are HGFs a small group, but they are predominantly small firms: about 80% have less than 50 employees, and most of the rest are medium-sized, only 5% have more than 250 employees.

For a full discussion of these categories over the periods up to 2007/10 see: Anyadike-Danes, M Bonner, K and Hart, M (2013) Exploring the incidence and spatial distribution of high growth firms in the UK and their contribution to job creation, NESTA Working Paper 13/05, Chapter 3.

<sup>&</sup>lt;sup>13</sup> Anyadike-Danes, M and Hart M. (2013) "Extraordinarily prolific job creating firms: the OECD high growth firm metric in perspective", conference paper, RENT XXVII - RESEARCH IN ENTREPRENEURSHIP AND SMALL BUSINESS, Vilnius, November (available on request).