Department of
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Northern Ireland's High Growth Firms: Update Bulletin 1

Same Difference? The Impact of Changing the Measure of High Growth
September 2014

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Innovation,
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SUMMARY

Recently published research applied the Organisation for Economic Cooperation and Development (OECD) measure of High Growth, defined as any business experiencing an annualised 20% growth in either employment or turnover over a 3-year period compared to a baseline year, to businesses in the Northern Ireland economy between 1998 and 2013[1].

In brief, that research established that High Growth businesses in NI over the period were relatively evenly spread throughout the economy and represented a very important, though over time, a declining contributor of employment and turnover to the NI economy. The research generated a number of additional questions one of which was the suitability or appropriateness of using a 20% High Growth rate and the potential impact of utilising higher or lower High Growth rates.

Additional analytical work was completed looking at the impact of a range of 'plausible' High Growth rates (5%, 10%, 15%, 20%, 25%, and 30%) on both the number and characteristics of High Growth businesses between 1998 and 2013. In brief, and for both businesses employing 10 or more and for businesses employing between 1 and 9 as two distinct categories of businesses:

- A High Growth rate of 20% appears to be an optimal measure for High Growth being: stretching as a measure of business growth yet achievable; representing a broadly central estimate based on the six 'plausible' growth rates examined; and generating sufficient numbers in a NI context for analyses.

- The trends over time in the number of businesses identified as experiencing High Growth as measured by the range of High Growth rates examined appears both similar to each other and reflective of the broader economic cycle over the period.

- Examining the business characteristic composition (industrial sector, business size, legal status, and turnover) of those businesses identified as experiencing High Growth for each separate growth rate in three distinct periods (1998-01, 2004-07, and 2010-13), indicated that the composition of High Growth businesses identified by each growth rate were very similar. On that basis, business growth over the period could be viewed as a continuum with higher or lower growth rates simply capturing a higher or lower number of businesses whose characteristics were broadly similar.

- These findings add further supportive evidence to the original High Growth research finding that High Growth in businesses throughout the economy appears to be spread evenly. On that basis, any attempt to understand the drivers of High Growth for any given individual business or groups of businesses would likely be better informed through a combination of bespoke qualitative and quantitative approaches.

[1] For further information including methodology, see "Measuring Northern Ireland's High Growth Firms: 1998-2013" (June 2014): http://www.detini.gov.uk/index/what-we-do/deti-stats-index/economic-research/measuring-nis-high-growth-firms.htm

BACKGROUND

Recently published research into Northern Ireland's High Growth Businesses between 1998 and 2013 applied the Organisation for Economic Cooperation and Development (OECD) measure of High Growth representing any business employing 10 or more which experienced an annualised 20% growth in either employment or turnover over a 3-year period compared to a baseline year.

Utilising the Inter Departmental Business Register (IDBR) a database was constructed covering the years 1998 to 2013 from which it was possible to identify, within a given period, the number of High Growth businesses employing 10 or more. This analysis was also extended to businesses employing less than 10. On that basis, 12 distinct observation time periods were constructed ranging from 1998-01 to 2010-13 (excluding 1999-02 as data was unavailable for 1999).

In brief, that research concluded that taking the longer view between 1998–2001 and 2010–2013, the contribution of High Growth businesses to the NI economy remains important on the basis that, in each period examined, a relatively small number of businesses accounted for a disproportionate share of business employment and turnover. The longer term view between 1998–2001 and 2010–2013, also indicated that the scale and impact of High Growth Firms employing 10 or more in the NI economy had broadly declined over time. In terms of the High Growth measure itself, increase in business turnover was the main driver underpinning the identification of a business as experiencing High Growth.

No strong business predictors or correlates of growth emerged from the analyses conducted although some subtle and nuanced differences emerged. However, none of the business characteristics examined within the IDBR appeared to provide strong candidates which would enable effective targeting of businesses to support and encourage High Growth.

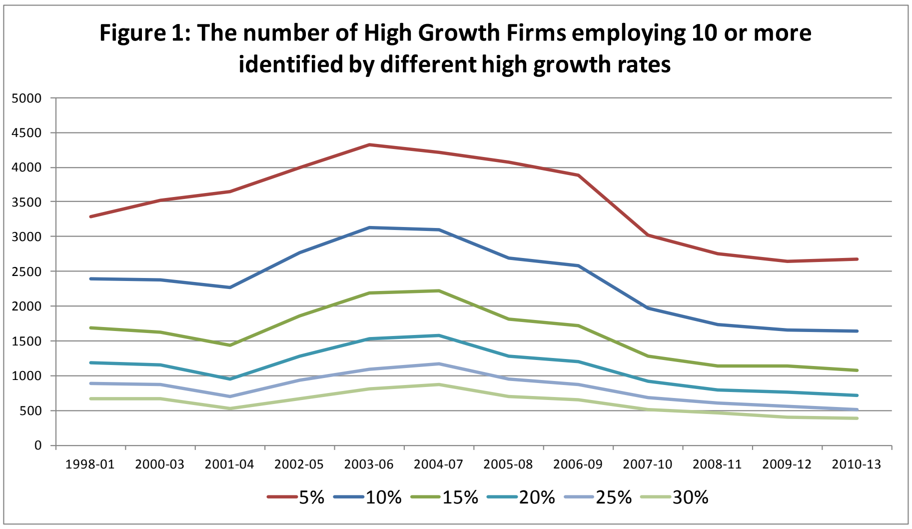
The research raised a number of additional questions including the appropriateness of the size of the OECD measure (20%) of High Growth given the finding that, over time, growth became increasingly spread throughout the economy at a level below that of the High Growth measure.

ANALYTICS

Using the database created for the original High Growth research, the number of businesses for each period between 1998-01 and 2010-13 who experienced High Growth were identified for a range of different 'plausible' growth rates (5%, 10%, 15%, 20%, 25%, and 30%). In addition, for three discrete periods (1998-01, 2004-07, and 2010-13), and for each group of High Growth businesses identified by the different growth rates, their composition in terms of industrial sector, business employment size, legal status, and financial turnover were examined.

High Growth Rates and businesses identified

Figure 1 illustrates the number of businesses employing 10 or more within each time period identified as experiencing High Growth under a range of High Growth rates. The number of High Growth businesses identified was greatest for the 5% growth rate, followed by the 10% rate, 15%, 20%, 25%, and 30% rates.



Irrespective of the specific growth rate, the trends over time were similar between each and mirrored the broader economic cycle over the 1998-2013 period.

When the average for the businesses identified by each growth rate for each period was calculated, the average number of High Growth businesses identified by this range of growth rates most closely mirrored the number of businesses identified by the OECD 20% High Growth rate.

On that basis then, the 20% growth rate within the OECD High Growth definition appears, certainly for the NI economy over the period, to be an optimal measure for High Growth being: stretching as a measure of business growth yet achievable; representing a broadly central estimate based on the six 'plausible' growth rates examined; and generating sufficient numbers in a NI context for analyses.

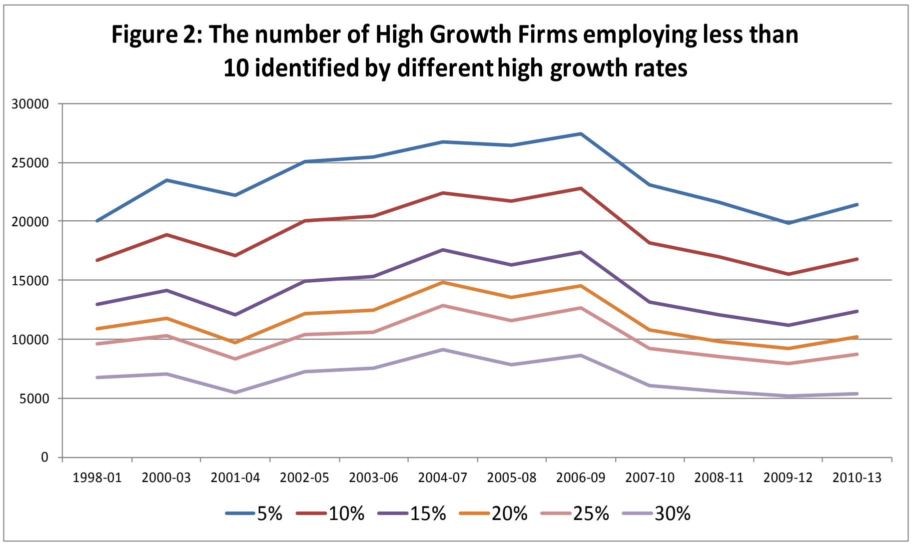


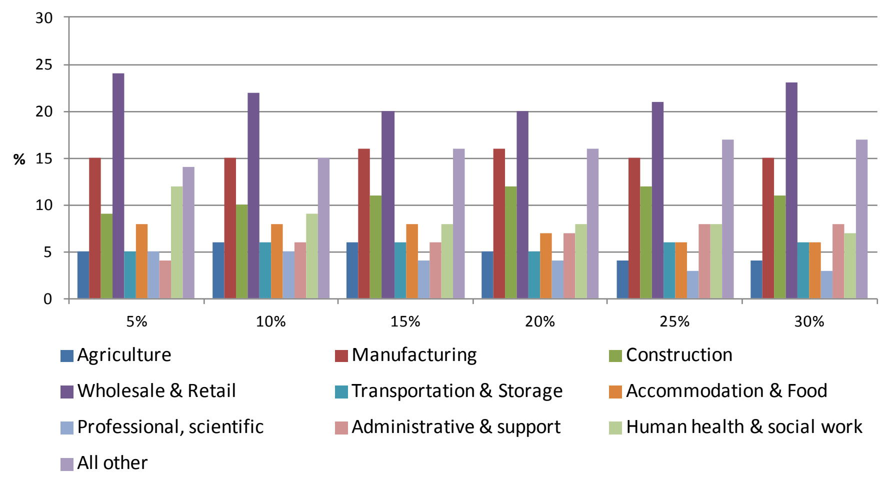
Figure 2 illustrates the number of businesses who employ less than 10 within over the period identified as experiencing High Growth by each of the different growth rates.

As for High Growth businesses employing 10 or more, the number of small High Growth businesses identified by each growth rate was greatest for the 5% growth rate, followed by the 10% rate, 15%, 20%, 25%, and 30% rates with each displaying similar trends over time. Again, calculating an average number of High Growth businesses from each of the separate growth rates produced values which most closely aligned to those of the 20% rate indicating that the 20% High Growth rate also represents an optimal measure of High Growth for smaller businesses.

Growth rates and business characteristics

For three discrete time periods (1998-01, 2004-07, and 2010-13), the composition of High Growth businesses were compared in terms of their industrial sector, business size, legal status, and value of turnover for each of the separate growth rates.

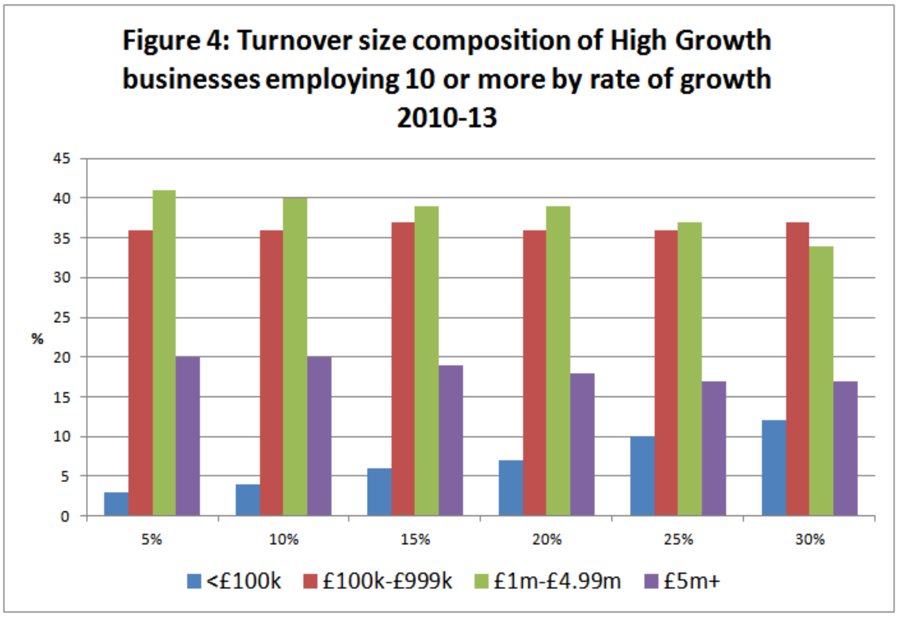
Figure 3: Industrial Sector composition of High Growth businesses employing 10 or more by different growth rates 2010-13



Using the 2010-13 period for illustration, Figure 3 indicates that the Industrial Sector composition of High Growth businesses identified by each separate growth rate differed little, with similar outcomes for both 2004-07 and 1998-01. Similar findings were found for other characteristics including business size and the legal status of High Growth businesses and broadly for the value of businesses turnover.

Similar results for those businesses employing 10 or more were found with businesses employing less than 10.

For both High Growth businesses employing 10 or more and those employing less than 10, and particularly for the 2010-13 period, there was some indication of an association of the level of turnover of High Growth businesses with the size of the growth rate (Figure 4). In



short[2], as the high growth rate is increased, the concentration of businesses in the lowest turnover group of High Growth businesses increases with a decrease in the concentration of High Growth businesses in the highest turnover bands.

However, this ‘relationship’ is more accurately a reflection of the nature of the High Growth measure. It is arguably easier for businesses with a lower level of turnover in the baseline year, to generate the increase in turnover required to be identified as a High Growth business particularly at higher growth rates. The inverse ‘relationship’ would be true for businesses within the highest turnover band in the baseline period.

[2] In the original report published in September 2014, the graph in Figure 4 was a misplaced graph and this has now been corrected (April 2017).

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