

## Employment dynamics: the ‘DynEmp’ project

What role do small and young firms play in employment creation? What policies should governments adopt to harness the potential of small and young firms and encourage employment and productivity growth?

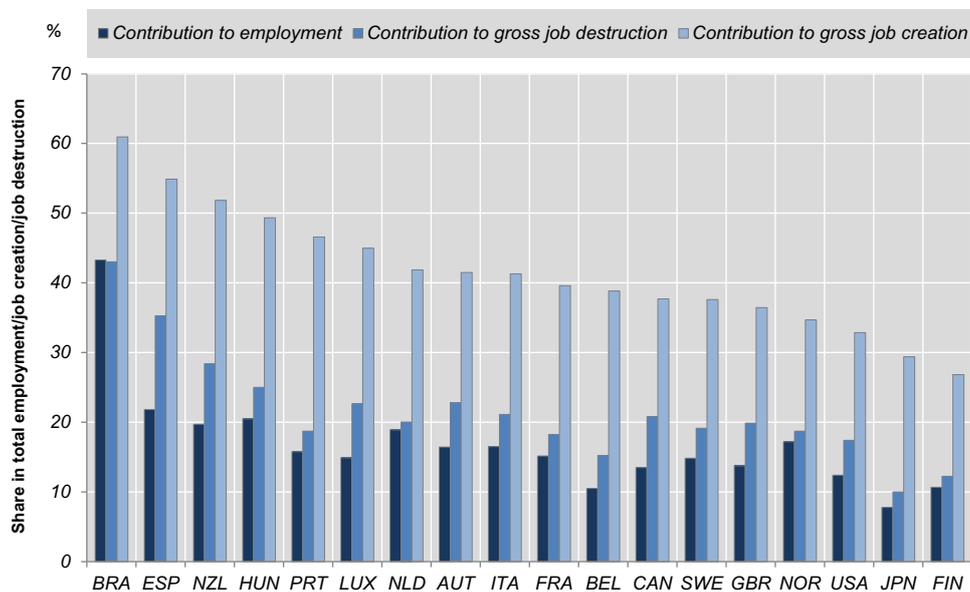
These are some of the critical questions that ‘DynEmp’, an innovative project focusing on employment dynamics, led by the OECD Directorate for Science, Technology and Innovation, seeks to answer. By aggregating confidential firm-level data from national business registers, DynEmp provides **new empirical evidence on the role of creative destruction, start-ups and young firms.**

### Young firms play an important role in job creation

In its first phase, the DynEmp project assembled a new database which presents a detailed portrait of the business structure and dynamics of **17 OECD countries and Brazil**, covering the years between 2001 and 2011.

#### Young firms contribute disproportionately to job creation

Employment, gross job creation and gross job destruction by young firms below 250 employees, 2001-11



Source: Criscuolo, Gal and Menon (2014), “The Dynamics of Employment Growth: New Evidence from 18 Countries”, OECD Science, Technology and Industry Policy Papers no. 14, OECD Publishing, <http://dx.doi.org/10.1787/5jz417hj6hq6-en>.

### Main findings:

- The weight of small firms in terms of employment varies widely from country to country. The age profile of small firms also differs, as **in some countries small firms are systematically older.**
- This has significant implications on growth, given that among small and medium-sized enterprises (SMEs), young firms play a central role in creating jobs. Across all countries and years, **young firms account for an average of 17% of employment but create 42% of jobs** (see graph).

- **The financial crisis hit young firms** relatively harder, but older businesses, which account for a larger weight in the economy, destroyed more jobs.
- The crisis also sharpened the **decline in start-up rates**, intensifying a trend that was already evident in many countries.
- **Policies** aimed at supporting job creation by SMEs need to distinguish more clearly between the respective roles of firm age and firm size. Ensuring a level playing field between incumbents and young firms is also an important task for policymakers.

### Towards a broader and deeper evidence base

In a second phase - *DynEmp v.2*, an expanded network of **more than 20 member and non-member economies** will now contribute to the project. In addition, the new database will be disaggregated at the **2-digit (detailed sectoral) industry** level. It will include:

- Average characteristics, for example in terms of age, growth rate, or size, of firms across the entire spectrum of job-creation performance - including shrinking, stable, growing, and high-growth firms – and across countries and years.
- More statistics on employment growth rates across firms of different sizes and ages.
- What happens to start-ups over time: the ‘post-entry’ employment growth patterns of cohorts of start-ups over different time spans.
- Updated information on the concrete effects of the financial crisis.
- The evidence base to assess how national policies and framework conditions can affect employment creation by different group of firms.

### Preliminary results:

- High growth firms are small and young in all economies. However, there are large differences in their average employment growth rate.
- Growth rates of high-growth firms are positively associated with the churning rate (the share of entering and exiting firms in a given sector). Higher growth rates of expanding firms are associated with higher net job destruction rates of shrinking firms. These two facts are a reflection of the **creative destruction** process.
- Differences across countries in this regard are likely to depend on the extent to which innovative firms are able to experiment with new business models, succeed and grow or fail and exit.
- Around 50% of small start-ups exit after three years. However, those that survive double their initial employment over the same interval, more than compensating the job losses due to failures. After the third year, significant cross-country differences emerge in the capacity to further support the scaling-up process of successful new firms.

### Further reading

C. Criscuolo, P. N. Gal and C. Menon, “The Dynamics of Employment Growth: New Evidence from 18 Countries”, *OECD Science, Technology and Industry Policy Papers* no. 14, OECD Publishing, <http://dx.doi.org/10.1787/5jz417hj6hg6-en>.

C. Criscuolo, P. N. Gal and C. Menon, “DynEmp: A Stata® Routine for Distributed Micro-data Analysis of Business Dynamics”. *OECD Science, Technology and Industry Working Papers* no. 2014/2, OECD Publishing, forthcoming.

For more information, please see: [www.oecd.org/sti/dynemp.htm](http://www.oecd.org/sti/dynemp.htm)

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