Young SMEs, growth and job creation

New OECD work based on an innovative methodology using firm-level data demonstrates that, among small and medium-sized enterprises (SMEs), young firms play a central role in creating jobs and enhancing growth and innovation. Public policies can help unleash the growth potential of young, innovative firms by enabling them to experiment with new business models and by fostering the reallocation of resources towards the most productive firms. Structural reforms to product, labour and capital markets as well as bankruptcy laws that do not overly penalise failure are essential in this regard.

SMEs are significant sources of employment and job growth...

New data from the OECD’s DynEmp project (see box) across 18 countries and over 10 years show that small and medium sized enterprises (SMEs) employ on average 65% of the workforce and account for 75% of total gross job creation and 75% of the jobs destroyed over the period, though with significant variation across countries (Figure 1).

Figure 1. SMEs account for a large share of employment and job creation and destruction in the economy

Share of employment, contributions to aggregate job creation and destruction by SMEs (less than 250 employees)

Averages over the 2001-2011 period for 18 countries

Note: The graph reports the contribution to total employment, gross job creation, and gross job destruction by SMEs. The period covered is 2001-2011 for Belgium, Canada, Finland, Hungary, the Netherlands, the United Kingdom and the United States; 2001-2010 for Austria, Brazil, Spain, Italy, Luxembourg, Norway and Sweden; 2001-2009 for Canada, Japan and New Zealand; 2001-2007 for France; and 2006-2011 for Portugal. Sectors included are: manufacturing, construction, and non-financial business services. Owing to methodological differences, figures may deviate from officially published national statistics. For Japan data are at the establishment level and are limited to the manufacturing sector. Data for the other countries at the firm level. Data for Canada refer only to organic employment changes and abstract from merger and acquisition activity.

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... but not all SMEs are the same...

While the importance of SMEs is not surprising, the new database allows a closer look at the age profile of SMEs. In most countries, more than 50% of SMEs are older businesses, but there are large differences across countries. Startups and young businesses (firms of 5 years old or less) account for between 10% (Japan) and almost 65% (Brazil) of SMEs.

**Figure 2. Most SMEs are old or mature firms**

Average over 2001-2011, firms below 250 employees

[Bar chart showing the distribution of firms by age group across different countries.]

Note: The graph shows the share of firms by different age groups in the total number of micro and small firms (below 250 employees) in each economy on average over the available years.


While there is a great diversity amongst SMEs in terms of their age, as shown in Figure 2, the size of young businesses is quite similar across countries. More than 99% of young businesses employ less than 250 and more than 97% less than 50 employees.

... and it’s the young ones that create the new jobs.

Young SMEs are the primary source of job creation, over most of the past decade and across the 18 countries analysed (Figure 3). Even though they have only a small weight in the economy – they represent on average 17% of employment – they contribute more than twice as much to job creation (42% of the total) and only to 22% of all job destruction, making them (net) job creators. Conversely, older SMEs are generally net job destroyers. This disproportionate contribution of young firms to employment creation is evident across all economies, sectors, and years considered although with cross-country differences in the magnitude of the phenomenon. Policies to support job creation by SMEs need to distinguish more clearly the respective roles of firm age and firm size, to avoid misleading policy advice.
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**Figure 3. Young firms contribute disproportionately to job creation**

Employment, gross job creation and gross job destruction by young small and medium sized firms, 2001-11

Note: The graph reports the contribution to total employment, gross job creation and job destruction by firms below 5 years of age and with less than 250 employees in average across all available years and countries. Data for Canada refer only to organic employment changes and do not include mergers and acquisitions. See also note to Figure 1.


Start-up rates have fallen …

The disproportionate contribution of young SMEs to employment creation is the result of both the jobs created by the entry of new start-ups, as well as by those jobs resulting from the high growth rates of those young incumbent firms that thrive. However, the database also shows that across all countries, the share of start-ups has been steadily decreasing over the past decade (Figure 4). These results align with recent evidence from the United States that pointed to a significant decline in business dynamism in the US over the past 30 years.
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Figure 4. Start-up rates have declined across countries

Percentage of start-ups in all businesses

Note: The graph reports start-up rates (defined as the fraction of start-ups among all firms) by countries, averaged across the indicated three-year periods. Start-up firms are those firms that are 0 to 2 years old.


… reducing business dynamism and slowing the reallocation of resources.

A decline in start-up rates may reflect a slower rate of creative destruction and reallocation of resources from less to more productive uses in the economy. In fact, the disproportionate contribution of young firms to gross job creation is related to greater experimentation – with new technologies, ideas and business models – in this group of firms. In a dynamic economy, the disproportionate contribution of young firms to job creation is a reflection of the “up-or-out” dynamics typical of this group of firms: they either go “up”, resulting in higher than average rates of post-entry growth, or go “out” (exit the market).

And it’s the growth of young firms and not the size of new firms that explains differences across countries. As can be seen in Figure 5, while there are some differences across countries in the size of start-ups at entry, they are not particularly striking. However, the situation changes when considering older businesses: on average the size of an older manufacturing business in France is half the size than in the United States, even though start-ups in France are larger than in the United States. In some countries, such as Italy, there is only a small difference between the size of start-ups and that of mature firms.
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Figure 5. Starting big does not necessarily mean ending up big

Average size of start-up firms (from 0 to 2 years old) and firms of more than 10 years old

Note: The graph reports the average size of start-up firms (from 0 to 2 years old) and firms more than 10 years old, as the average over the available years. See also note to Figure 1.

Young firms were hit the hardest by the crisis......

Young firms are also more likely to respond more strongly to upturns and downturns in the economy, as shown in Figure 6. In particular, the Great Recession affected the employment growth rate of young firms more severely than older firms, as shown by the larger drop in the growth performance of young businesses during the crisis relative to the average over the period.

Figure 6. The Great Recession hit young firms relatively harder

Net growth rate in differences from the 2001-11 average (%)

Note: Average across all available countries. Net growth rates are calculated as net job creation over total average employment in the biennium.
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….. but continue to create the most jobs.

However, the drop in their growth rate did not change the fact that young firms remained net job creators even during the crisis. Most of the job losses during the crisis took place via contractions in surviving mature businesses rather than via exits of older firms, also reflecting the greater weight of older businesses in the economy (Figure 7).

Figure 7. During the crisis, old firms destroyed more jobs

Contributions to aggregate net job creation by firm age, in %

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Note: Average across all available countries. Contributions are calculated as net job creation by the group over total average employment. See also notes for Figure 1.


Targeting resources to young and innovative firms is important…

The growth of young firms is affected by significant cross-country differences in the degree to which resources flow to their most productive use. A new OECD study using firm-level data finds large differences across countries in the extent to which innovative firms attract the resources that are required to implement new ideas and bring innovations to market. As shown in Figure 8, the extent to which capital flows to patenting firms in the United States is estimated to be more than twice as large as in France and Germany, and four times as large as in Italy. Young firms – which are more likely to experiment with disruptive technologies and business models – are likely to benefit from a conducive business environment that enables resources to flow to them and that enables them to test their ideas in the market. Such experimentation may be particularly important during periods of extensive technological change, when the success of new business models and applications may only become apparent through testing in the market.
**Figure 8. Do resources flow to patenting firms?**

Change in capital stock associated with a 10% change in patent stock, selected OECD countries (2003-2010)

- **Notes:** The darker squares shows the country-specific point estimate of a panel fixed-effect regression at firm level of capital stock on patent stock, while the lighter bands denote the 90% confidence interval.

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…… and public policy has a big role to play.

The work on business dynamics, reallocation and growth points to a range of policies that affect the ability of young firms to experiment and grow over time. Strict product market regulations can limit the entry of firms and reduce their ability to grow over time. Stringent employment protect legislation may limit the ability of firms to adjust to changing market conditions, which is particularly important for young firms that are testing new ideas. Financial markets are important too; more developed financial institutions are associated with larger differences in growth performance between high growth and shrinking firms in industries that are highly dependent on external finance. Lenient bankruptcy regimes might also be associated with higher level of dynamism, as they enable firms to experiment with risky technologies; although bankruptcy codes that provide insufficient safeguards for creditors may reduce the supply of credit, implying that some balance is required.

Some policies may also disproportionately affect specific groups of firms – e.g., high-growth firms or young firms – and thus influence the gaps in growth performance across firms, leading to a more stagnant or more dynamic growth profile of the economy. For example, more generous R&D fiscal incentives are correlated with less dynamism in R&D intensive sectors, suggesting that R&D fiscal incentives may have the unintended consequence of protecting incumbents and slowing down the reallocation of resources towards more innovative entrants. Ensuring a level playing field between incumbents and young firms is therefore an important task for policy.

References


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New data and new analysis for evidence based policy: DynEmp and MultiProd

The Directorate for Science, Technology and Industry (DSTI) of the OECD is leading a number of projects based on distributed microdata analysis. This approach allows collecting confidential information from national sources, such as business registers, making the resulting data non-disclosive and internationally comparable. These data represent a unique source of information for answering policy questions related to employment, productivity, innovation, growth and wage inequality.

DynEmp: new data for cross-country analysis of employment dynamics

The first stage of this work, called DynEmp (Dynamics of Employment), aims at providing cross-country evidence base for the design of efficient policies for employment and growth. The evidence reported in this brief is based on the DynEmp Express database, which contains information on annual gross job creation and gross job destruction for different firm size and age classes across manufacturing, services and construction in 18 countries over 11 years. The second phase of the data collection, currently underway, DynEmp v. 2, will have a more detailed industry breakdown, and will have additional information on high-growth enterprises and employment growth volatility and will also follow the growth performance of a group of young firms over time.

MultiProd: new data for cross-country analysis of productivity performance

A second project – called MultiProd – will extend this work, looking at productivity. The data will allow for a better understanding of the Schumpeterian process of creative destruction across countries, gauge whether resources are efficiently allocated, and ultimately seek to unveil the ingredients of dynamism at the heart of economic growth. Going beyond cross-country differences in aggregate productivity, it will look at frontier firms, and at the gap that exists between the most productive firms and those at the bottom of productivity performance. The aim is to better understand what explains aggregate productivity performance and the policies that affect it – not only across countries but also over time, e.g. before, during and after the Great Recession.

For more information, please see:

www.oecd.org/sti/dynemp.htm

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