

B.

ENTREPRENEURIAL PERFORMANCE

Definition

An employer enterprise birth refers to the birth of an enterprise with at least one employee. This population consists of enterprise births with at least one employee in the birth year and of enterprises that existed before the year under consideration but were below the threshold of one employee.

Symmetrically, an employer enterprise death occurs either as the death of an enterprise with at least one employee in the year of death or as an exit by moving below the threshold of one employee.

The employer enterprise birth and death rates are compiled as the number of births and deaths of employer enterprises, respectively, as a percentage of the population of active enterprises with at least one employee.

These indicators are an essential measurement of entrepreneurial activity.

Comparability

“Employer” indicators are found to be more relevant for international comparisons than indicators covering all enterprises, as these are sensitive to the coverage of business registers.

In the EU, in theory, all enterprises should be included on the register and so, again in theory, enterprise births should be comparable. However, this is not the case for non-EU countries. Indeed, even in EU countries, in practice, not all enterprises are included, as all countries operationalise some size threshold or another when a business appears on the business register, meaning that there will be international differences, typically in the coverage of smaller enterprises.

Even employer enterprise birth is not without problems. Many countries have sizeable populations of self-employed. If a particular country creates incentives for the self-employed to become employees of their own company the total numbers of employer enterprise births will increase. While it is arguable that, from an economic and entrepreneurial perspective, little has changed, this can distort comparisons over time and of course across countries.

Overview

Overall birth rates are fairly similar across countries; a surprising observation may be the lower birth rate in the United States than in Europe, as it is generally thought that firm creation is especially high in the United States. High birth rates are observed in Eastern European countries (Romania, Estonia, Lithuania and the Slovak Republic). This may be related to the strong growth of these economies and the corresponding economic restructuring in recent years after accession to the EU.

A second observation is that birth rates in the services sector are higher than in manufacturing industry. This observation is valid for all countries. Birth rates in the services sector are on average 4 to 5% higher than in manufacturing.

The more dynamic character of services is also demonstrated in its higher death rates relative to manufacturing. In contrast with birth rates, there seem to be larger differences in death rates across countries.

On average, birth rates in the services sector are higher than death rates, resulting in a net creation of employer firms. For manufacturing industry, the picture is more mixed; in some countries death rates are higher than birth rates. In Eastern Europe countries birth rates are much higher than death rates, suggesting an important Schumpeterian process of structural change.

Source

- OECD, Structural and Demographic Business Statistics (SDBS), OECD Database.

For further reading**Statistical publication**

- OECD (2006), *Structural and Demographic Business Statistics 1996-2003*, 2006 Edition, OECD, Paris.

Methodological publications

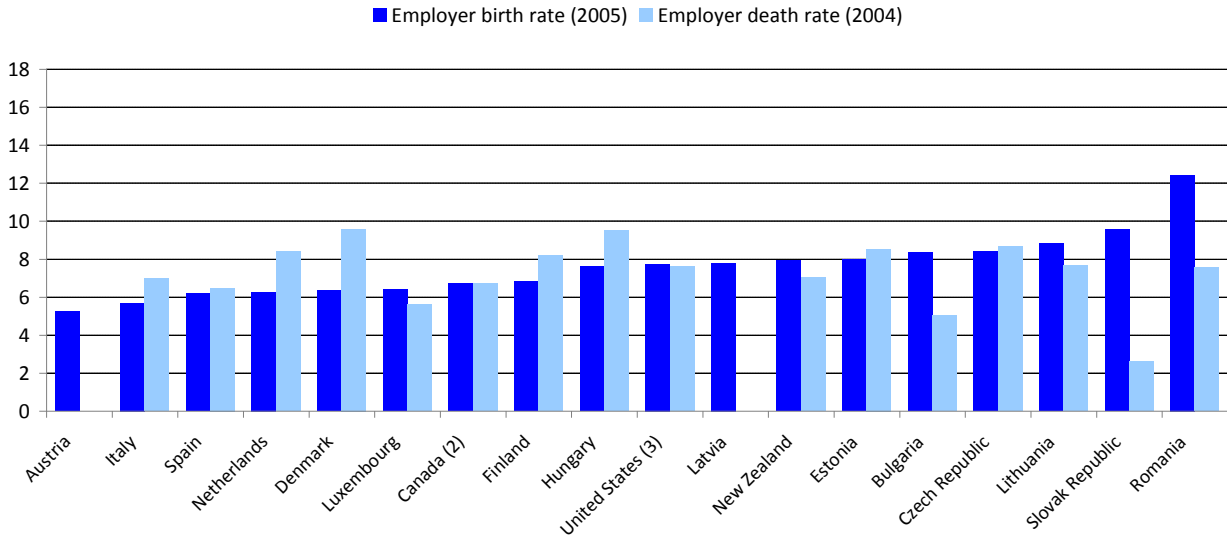
- Eurostat/OECD (2007), *Eurostat-OECD Manual on Business Demography Statistics*, OECD, Paris.
- Ahmad, N. (2006), *A Proposed Framework for Business Demography Statistics*, OECD, Paris

B.5-B.6.

Employer enterprise births and deaths

Employer enterprise birth and death rates in manufacturing¹

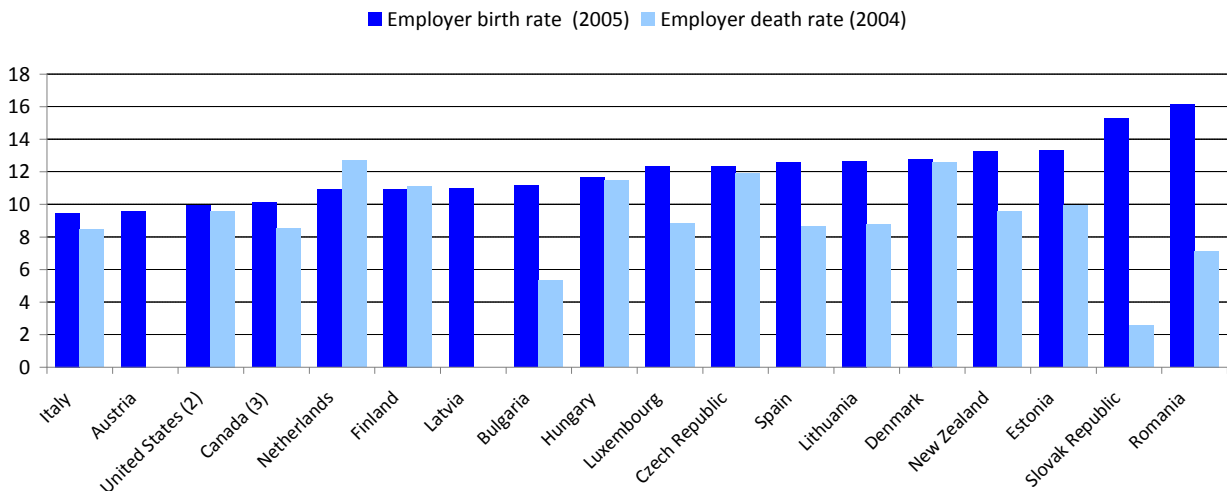
As a percentage of the population of active enterprises with at least one employee



1. Mining and quarrying; Manufacturing; Electricity, gas and water.
2. Employer enterprises with fewer than 250 employees.
3. 2004 for birth rate.

Employer enterprise birth and death rates in services¹

As a percentage of the population of active enterprises with at least one employee



1. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities.
2. 2004 for birth rate.
3. Employer enterprises with fewer than 250 employees.

B.

ENTREPRENEURIAL PERFORMANCE

Definition

The number of n-year survival enterprises for a particular year (t) refers to the number of enterprises with at least one employee for the first time in year (t-n) which had not died in year (t).

An enterprise is also considered to have survived if the linked legal unit(s) has(ve) ceased to be active, but their activity has been taken over by a new legal unit set up specifically to take over the factors of production of that enterprise (survival by take-over).

This definition of survival excludes cases in which enterprises merge or are taken over by an existing enterprise in year (t-n).

The survival of an enterprise is an event that should always be observed between two consecutive years. For instance, an enterprise born in year (t-2) should be considered as having survived to (t) only if it was active also in year (t-1), and so forth.

The **n-year survival rate** for a particular year (t) refers to the number of n-year survival enterprises as a percentage of all enterprises with at least one employee for the first time in year (t-n).

The share of **n-year-old employer firms** for a particular year (t) refers to the number of n-year survival enterprises as a percentage of the total enterprise population in year (t).

Comparability

“Employer” indicators are found to be more relevant for international comparisons than indicators covering all enterprises, as these are sensitive to the coverage of business registers.

Owing to the recent start of the collection of entrepreneurship indicators, only one-year survival rates are presented, *i.e.* survival rates for the cohort of employer firms started in 2004. Further rounds of data collection will allow for further survival rates (one-year, two-year, etc.).

Overview

Survival indicators are important as they give a first indication of the performance of newly born firms. The one-year survival rate shows that a significant number of the new employer firms already exited in the following year: in the Netherlands for example 40% of new firms disappear during the first year after their birth. In other countries, the death rate seems smaller: the one-year survival rate varies between 75 and 90%.

Survival rates seem to be slightly higher in manufacturing, which may be due to the typically higher entry (and exit) costs; the smaller entry and exit costs in the services sector allow more readily for trial and error (*e.g.* active and passive learning, experimentation).

The importance (in terms of number of firms) of the group of one-year old firms is especially significant in the services sector. In Italy, the Czech Republic, Luxembourg, Hungary and Romania, one-year-old firms represent 10% or more of all employer firms active in services industries.

The lesser importance of one-year old firms in manufacturing industry may be related to lower birth rates in these industries and higher survival rates (resulting in more active firms).

Source

- OECD, Structural and Demographic Business Statistics (SDBS), OECD Database.

For further reading**Statistical publication**

- OECD (2006), *Structural and Demographic Business Statistics 1996-2003*, 2006 Edition, OECD, Paris.

Methodological publications

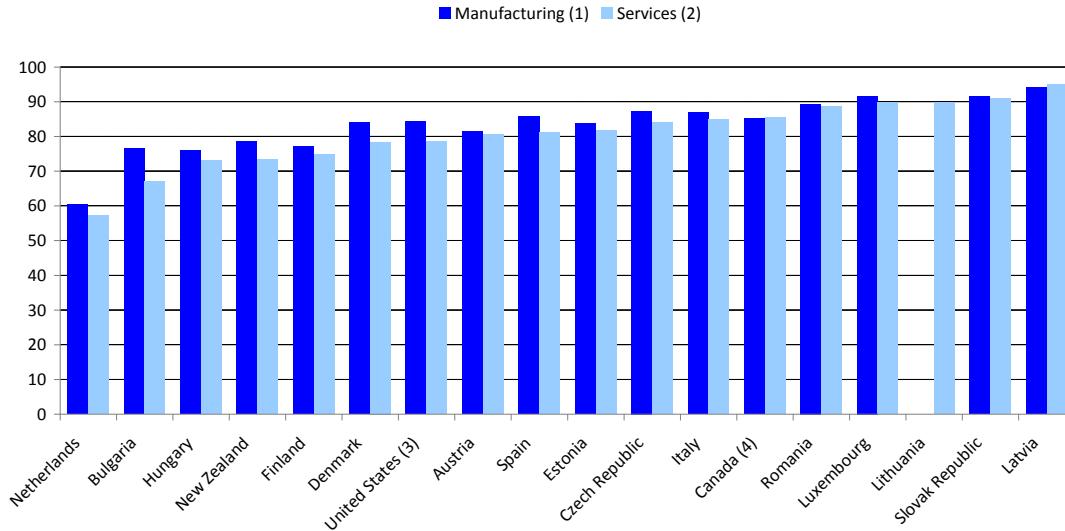
- Eurostat, OECD (2007), *Eurostat-OECD Manual on Business Demography Statistics*, OECD, Paris.
- Ahmad, N. (2006), *A Proposed Framework for Business Demography Statistics*, OECD, Paris.

B.7-B.8

Survival rates and share of enterprises by age (one year)

One-year survival rate, 2005

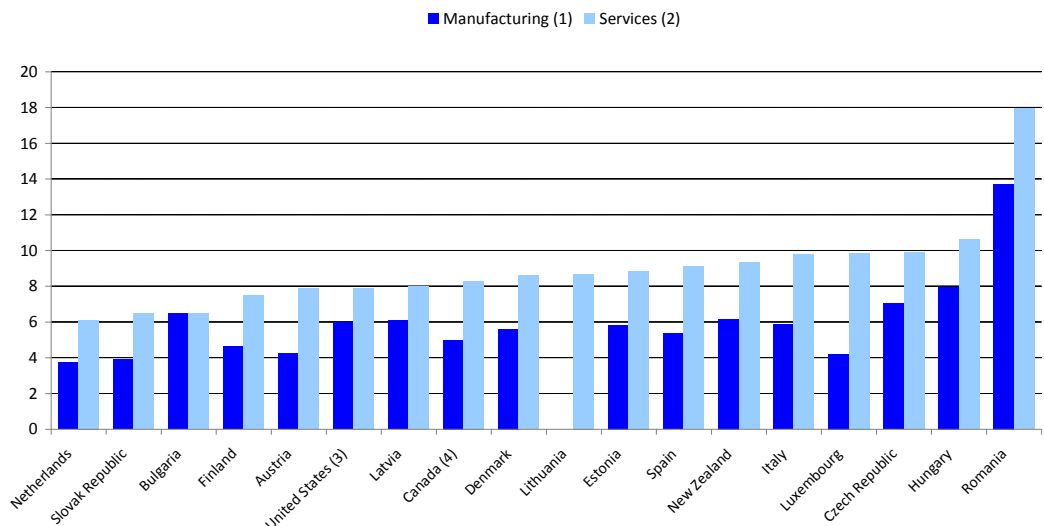
As a percentage of the 2004 population of employer enterprise births



1. Mining and quarrying; Manufacturing; Electricity, gas and water (ISIC Rev.3 10-41).
2. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities (ISIC Rev.3 50-74).
3. Two-year survival rate.
4. Employer enterprises with fewer than 250 employees.

Share of one-year-old employer enterprises, 2005

As a percentage of the total population of employer enterprises



1. Mining and quarrying; Manufacturing; Electricity, gas and water (ISIC Rev.3 10-41).
2. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities (ISIC Rev.3 50-74).
3. Share of two-year-old employer enterprises.
4. Employer enterprises with fewer than 250 employees.

B.

ENTREPRENEURIAL PERFORMANCE

Definition

High-growth enterprises as measured by employment (or by turnover) are all enterprises with average annualised growth in employees (or in turnover) greater than 20% a year, over a three-year period, and with ten or more employees at the beginning of the observation period.

The share of high-growth enterprises is compiled as the number of high-growth enterprises as a percentage of the population of enterprises with ten or more employees.

Comparability

A size threshold (ten employees) was set to avoid having the growth of small enterprises distort the picture. On the other hand, the size threshold had to be low enough to avoid excluding too many enterprises.

The size threshold of ten or more employees holds for both the turnover and employment measures. The advantage is that the initial population is the same, regardless of whether growth is measured in employment or turnover. Moreover, it would be difficult to apply a consistent turnover threshold across all countries.

Overview

High-growth enterprises have recently received a lot of attention in some countries (*e.g.* Denmark), since high birth rates do not always result in higher growth at the aggregate level. Previous research has shown that a large share of newly born enterprises experience major difficulties for attaining higher levels of growth after their first years of establishment.

Enterprises appear to grow faster in terms of turnover than of employment, as witnessed by the significantly higher shares of high-growth enterprises for which high growth is defined in terms of turnover. The share of high-growth enterprises whose high growth is defined in terms of turnover averages around 10% across countries, while the share of high-growth enterprises defined in terms of employment is below 5% except in Latvia, Bulgaria and the Czech Republic.

Another observation is that high growth in manufacturing industries is due more to turnover than to employment. In the services sector also, high growth is more prominent in turnover than in employment but the difference is much smaller.

High-growth enterprises seem to be somewhat more important in Eastern Europe; this again is probably related to these countries' rapid economic growth and suggests the existence of different entrepreneurial regimes across countries. In Romania, however, the very low shares of high-growth enterprises contrast with the country's very high birth rates. This suggests that many new enterprises are created but do not necessarily grow strongly afterwards (or stay below the ten employees threshold).

Source

- OECD, Structural and Demographic Business Statistics (SDBS), OECD Database.

For further reading**Analytical publications**

- Ahmad, N. and D. Rude Petersen (2007), *High-Growth Enterprises and Gazelles – Preliminary and Summary Sensitivity Analysis*, OECD-FORA, Paris.
- Hoffmann, A. and M. Junge (2006), "Comparing the Number of High-growth Entrepreneurs across 17 Countries", FORA Working Paper.

Statistical publication

- OECD (2006), *Structural and Demographic Business Statistics 1996-2003*, 2006 Edition, OECD, Paris.

Methodological publications

- Ahmad, N. and E. Gonnard, (2007), "High-growth Enterprises and Gazelles", paper prepared for the International Consortium on Entrepreneurship (ICE), Copenhagen, Denmark.
- Eurostat, OECD (2007), *Eurostat-OECD Manual on Business Demography Statistics*, OECD, Paris.
- Ahmad, N. (2006), *A Proposed Framework for Business Demography Statistics*, OECD, Paris.

Web site

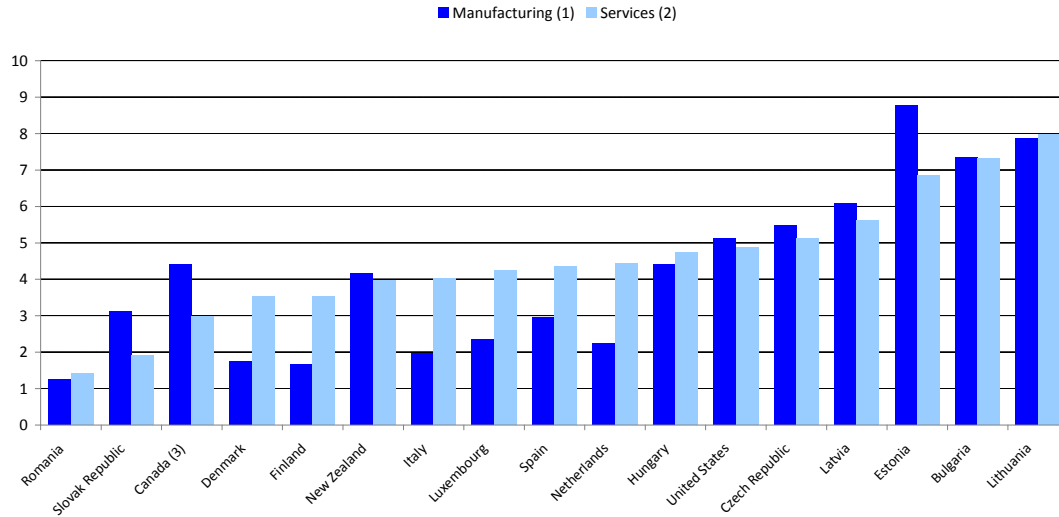
- The OECD Entrepreneurship Indicators Programme: Workshop on the Measurement of High-growth Enterprises, 19 November 2007, Paris, www.oecd.org/document/31/0,3343,en_2649_34233_39151327_1_1_1_100.html.

B.9-B.10

High-growth enterprises

Share of high-growth enterprises (employment definition), 2005

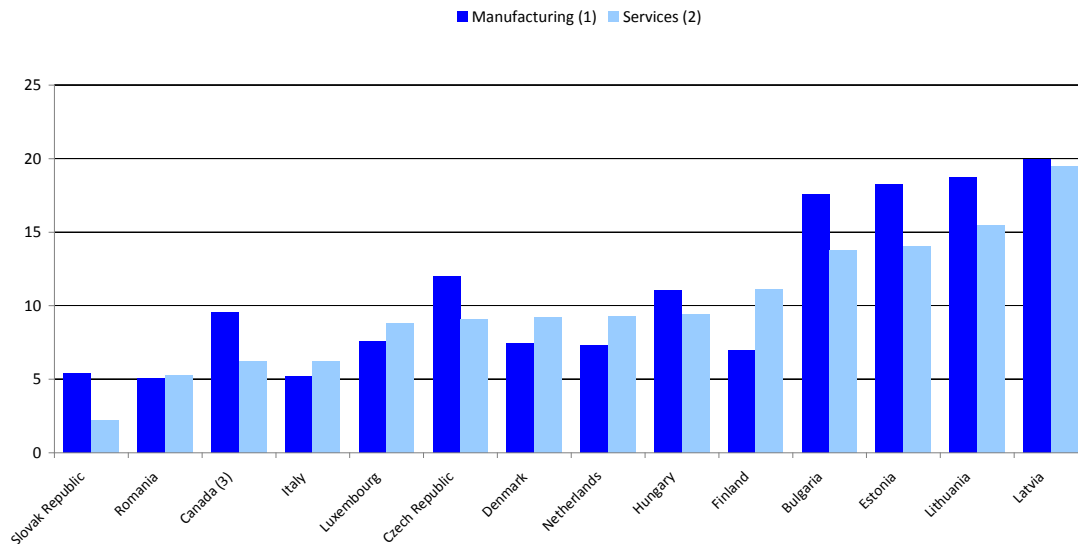
As a percentage of all enterprises with ten employees or more



1. Mining and quarrying; Manufacturing; Electricity, gas and water (ISIC Rev.3 10-41).
2. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities (ISIC Rev.3 50-74).
3. Employer enterprises with fewer than 250 employees.

Share of high-growth enterprises (turnover definition), 2005

As a percentage of all enterprises with ten employees or more



1. Mining and quarrying; Manufacturing; Electricity, gas and water (ISIC Rev.3 10-41).
2. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities (ISIC Rev.3 50-74).
3. Employer enterprises with fewer than 250 employees.

B.

ENTREPRENEURIAL PERFORMANCE

Definition

Gazelle enterprises are a subset of high-growth enterprises; they are the high-growth enterprises born five years or less before the end of the three-year observation period.

In other words, measured in terms of employment (or of turnover) gazelles are enterprises which have been employers for a period of up to five years, with average annualised growth in employees (or in turnover) greater than 20% a year over a three-year period and with ten or more employees at the beginning of the observation period.

As in the case of high-growth enterprises generally, the share of gazelles is compiled as the number of gazelles as a percentage of the population of enterprises with ten or more employees.

Comparability

A size threshold (ten employees) was set to avoid having the growth of small enterprises distort the picture. On the other hand, the size threshold had to be low enough to avoid excluding too many enterprises.

The size threshold of ten or more employees holds for both the turnover and employment measures. The advantage is that the initial population is the same, regardless of whether growth is measured in employment or turnover. Moreover, it would be difficult to apply a consistent turnover threshold across all countries.

Overview

The number of young high-growth firms (gazelles) is quite small, an observation that is valid for all countries. Except for Latvia, Lithuania and Bulgaria, the share of gazelles is less than 1% in manufacturing and services when high growth is measured in terms of employment and less than 2% when measured in terms of turnover.

On average, the group of gazelles represents some 15 to 20% of the larger group of high-growth enterprises. The lesser importance of gazelles (especially in terms of employment) may cast some doubt on assertions that gazelles are responsible for the majority of job creation in various countries.

More detailed analysis is however needed to identify the contributions of high-growth enterprises in general and gazelles in particular to aggregate employment growth in national economies. It should be noted that the indicators presented show only the importance of gazelles in the number of enterprises.

Compared to high-growth enterprises, the importance of gazelles appears more heterogeneous across countries. Nevertheless, several observations about high-growth enterprises also hold for gazelles.

First, gazelles are more important when high growth is defined in terms of turnover rather than employment.

Second, high growth in young manufacturing firms is more likely to occur in terms of turnover, while in services high growth in gazelles occurs in terms both of employment and turnover.

Third, gazelles are more prominent in Eastern European countries characterised by strong economic growth. Romania again seems to be an exception.

Source

- OECD, Structural and Demographic Business Statistics (SDBS), OECD Database.

For further reading**Analytical publications**

- Ahmad, N. and D. Rude Petersen (2007), *High-growth Enterprises and Gazelles – Preliminary and Summary Sensitivity Analysis*, OECD-FORA, Paris.
- Hoffmann, A. and M. Junge (2006), “Comparing the Number of High-growth Entrepreneurs across 17 Countries”, FORA Working Paper.

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- Ahmad, N. and E. Gonnard, (2007), “High-growth Enterprises and Gazelles”, paper prepared for the International Consortium on Entrepreneurship (ICE), Copenhagen, Denmark.
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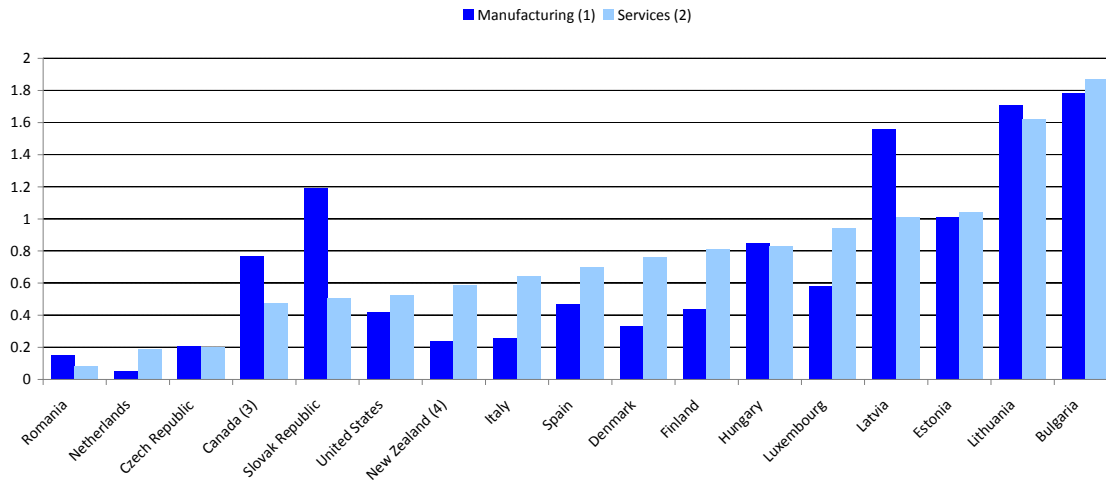
- The OECD Entrepreneurship Indicators Programme: Workshop on the Measurement of High-growth Enterprises, 19 November 2007, Paris, www.oecd.org/document/31/0,3343,en_2649_34233_39151327_1_1_1_1,00.html.

B.11-B.12

Gazelles

Share of gazelles (employment definition), 2005

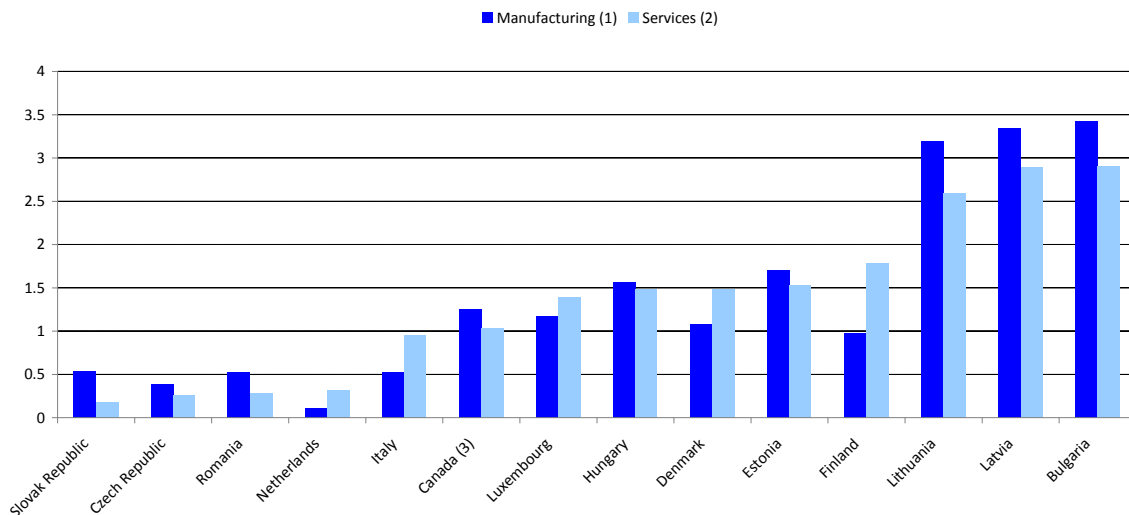
As a percentage of all enterprises with ten employees or more



1. Mining and quarrying; Manufacturing; Electricity, gas and water (ISIC Rev.3 10-41).
2. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities (ISIC Rev.3 50-74).
3. 2006. Employer enterprises with fewer than 250 employees.
4. 2007.

Share of gazelles (turnover definition), 2005

As a percentage of all enterprises with ten employees or more



1. Mining and quarrying; Manufacturing; Electricity, gas and water (ISIC Rev.3 10-41).
2. Wholesale and retail trade; Hotels and restaurants; Transport, storage and communications; Financial intermediation; Real estate, renting and business activities (ISIC Rev.3 50-74).
3. 2006. Employer enterprises with fewer than 250 employees.