Industry, trade and services

Author: Hartmut SCHRÖR

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Enterprise births, survivals and deaths – employment effects

The 'Lisbon strategy' was re-launched in 2005 with a particular focus on growth and jobs. Newly born enterprises can be seen as a key element in this respect as they are often described as stimulating economic growth and thus providing a stimulus for employment creation.

This publication focuses on the employment effects of changes in the EU's business demography by describing the latest trends in terms of enterprise births (creation), deaths (discontinuation) and survival.

Main features

There were approximately 2 million jobs created in newly born enterprises across the business economies of 15 Member States ([1]) in 2005.

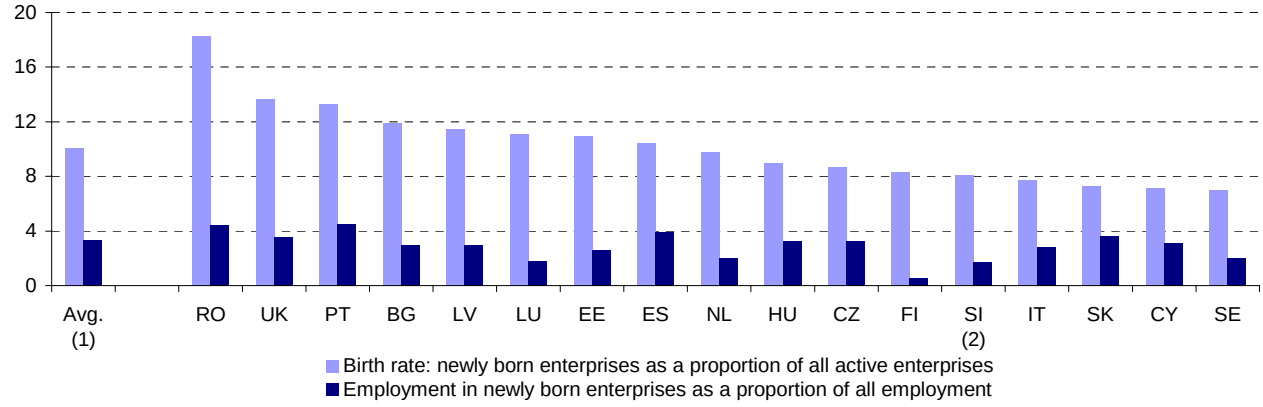
([1]) *Based on available data for Belgium, Estonia, Spain, Italy, Lithuania, Luxembourg, Hungary, the Netherlands, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.*

Enterprises born in 2005 represented about 10 % of all active enterprises. Enterprise birth rates ranged from a high of 18.3 % in Romania to a low of 7.0 % in Sweden, averaging 10.1 % across those countries for which data are presented in Figure 1 (below).

Employment in newly born enterprises tends to offset employment losses as a result of enterprise deaths. The new jobs created in newly born enterprises in 2005 represented some 3.3 % of the total business economy workforce across those countries for which data are available in Figure 1. The impact of newly born enterprises in terms of their contribution to employment ranged from a high of 4.5 % of the workforce in Portugal and Romania, down to just 0.6 % in Finland.

About half of all those enterprises born in 2000 survived to 2005. Those that survived tended to create additional net employment with each year of survival. In a number of Member States, in particular Finland and Romania, the employment expansion among surviving enterprises more than offset employment losses among those enterprises that died.

Figure 1: Impact of enterprise births on the stock of enterprises and employment, business economy, 2005 (%)



(1) Based on available data for Bulgaria, the Czech Republic, Estonia, Spain, Italy, Cyprus, Latvia, Luxembourg, Hungary, the Netherlands, Portugal, Romania, Slovenia (2004), Slovakia, Finland, Sweden and the United Kingdom.
(2) 2004.

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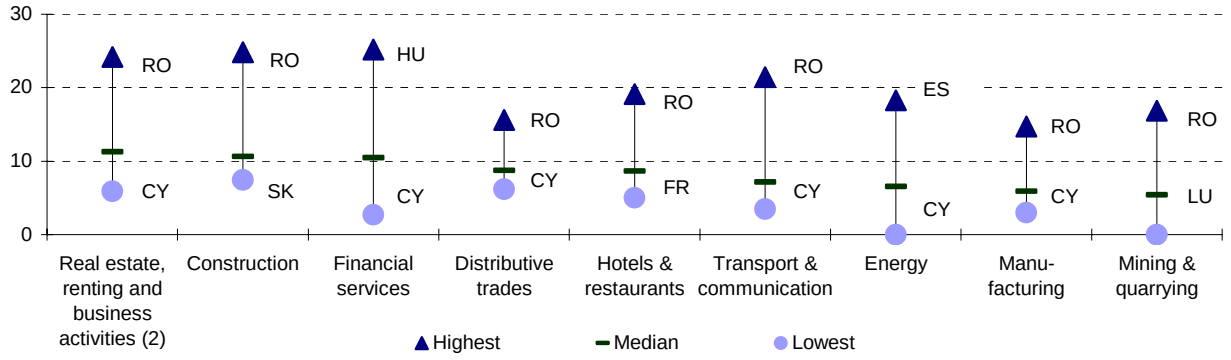
Impact of demographic events on the business population

Among the 15 Member States for which a complete set of data are available, 1.4 million enterprises were created in the business economy (NACE Sections C to K) in 2005, of which almost two thirds (63.4 %) were born in Italy, Spain and the United Kingdom. Relative to the size of the active enterprise population, there were stark differences in enterprise birth rates among the Member States and across the various activities of the EU's business economy – see Figure 2. In general, the highest enterprise birth rates in 2005 tended to be in Romania, which was preparing for accession to the EU at the time and had relatively recently returned to a market economy. In contrast the lowest birth rates tended to be in Cyprus.

Differences in birth rates were relatively wide within the services sector, particularly for financial services (NACE Section J) and real estate, renting and business activities (NACE Section K, excluding Class 74.15). They were widest, however, for electricity, gas and water activities (NACE Section E) – termed hereafter as energy. In contrast, the range of birth rates was narrowest for wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods (NACE Section G) – hereafter termed distributive trades – and for manufacturing (NACE Section D).

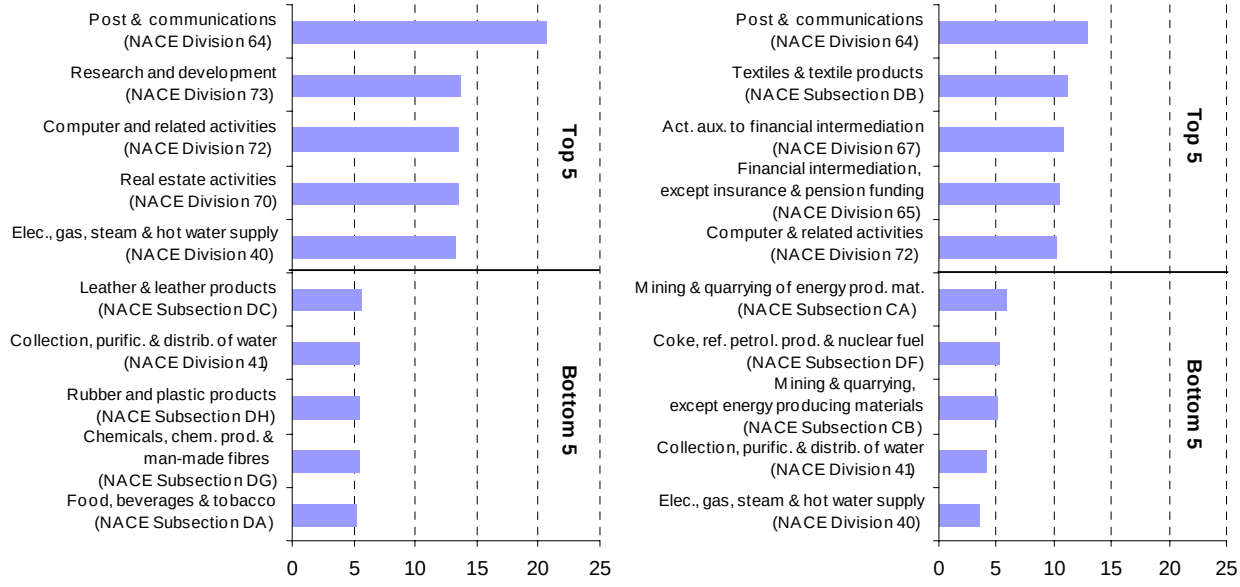
Figure 2: Highest, lowest & median enterprise birth rates, 2005 (%) (1)



(1) Bulgaria (2004 for transport and communication and financial services), France (excluding financial services) and Slovenia (2004).
(2) Excluding NACE Class 74.15.

The highest birth and death rates in 2005 tended to be among service activities (for example, post and tele-communications – see Figure 3), with relatively low rates for most industrial activities. This apparent correlation perhaps reflects the relatively low barriers to entry and exit for a number of services and correspondingly higher barriers for many industrial activities. The death rate among textile and textile product enterprises was notable in the light of increased global competition, particularly from China.

Figure 3: Enterprise birth rates (left) and death rates (right), business economy, 2005 (%) (1)

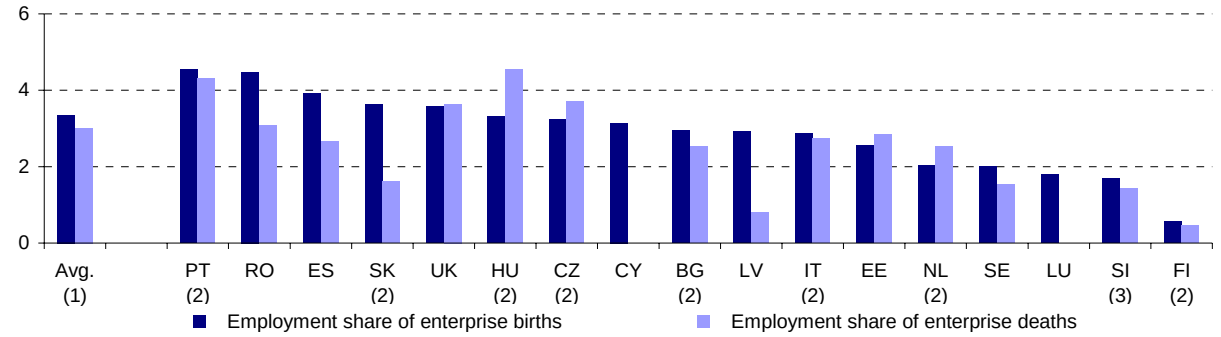


(1) Averages based on available data for: Bulgaria (2004), the Czech Republic (2004), Estonia, Spain, France, Italy (2004), Latvia, Hungary (2004), the Netherlands (2004), Portugal (2004), Romania, Slovakia (2004), Finland (2004), Sweden and the United Kingdom.

Across the Member States for which data are available, newly born enterprises accounted for an average of about 3.3 % of total employment among all active enterprises in the business economy in 2005. This share rose to as high as 4.5 % in Portugal and Romania.

On average, employment in newly born enterprises offset employment losses from enterprises that had died in 2005 – see Figure 4. This was most clearly the case in Romania, Spain, Slovakia (2004) and Latvia, where considerable net employment gains were recorded. In contrast, job losses from enterprise deaths represented a higher proportion of total employment than the number of new jobs created through enterprise births in Hungary (2004), the Czech Republic (2004), Estonia and the Netherlands (2004).

Figure 4: Employment shares of enterprise births and deaths in total employment, business economy, 2005 (%)

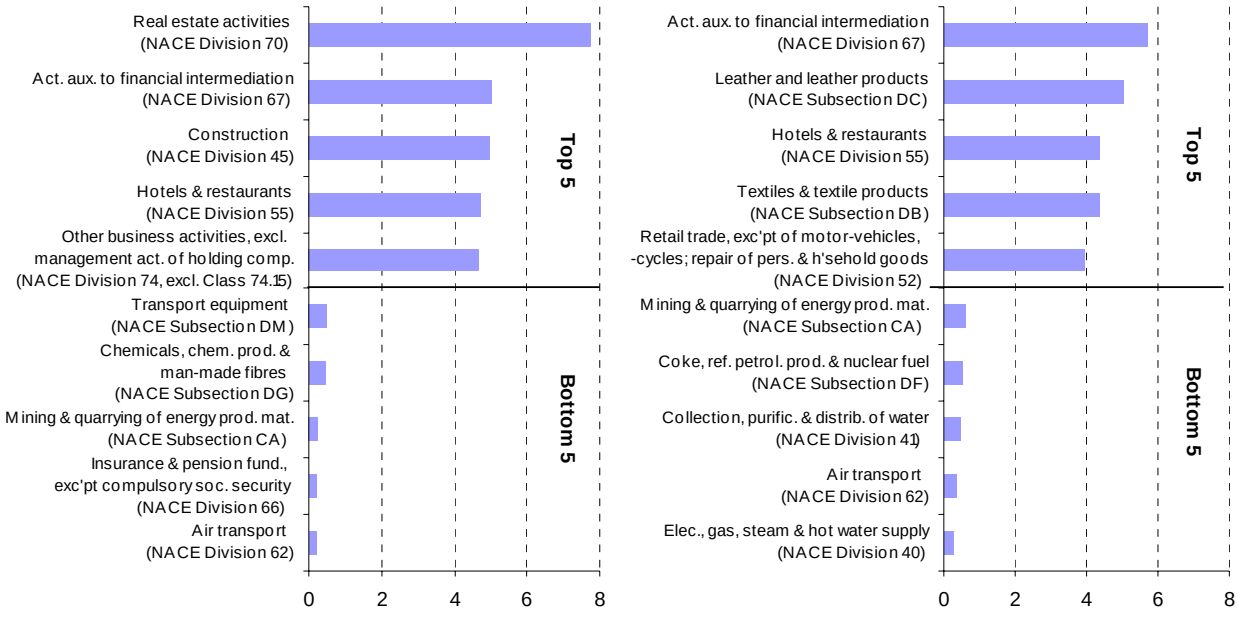


(1) Based on available data: 2004 for Bulgaria, the Czech Republic, Italy, Luxembourg, Hungary, the Netherlands, Portugal, Slovakia and Finland; 2005 for Estonia, Spain, Latvia, Romania, Sweden and the United Kingdom.
(2) 2004 for death rates. (3) 2004.

In part reflecting the disparities in rates of enterprise creation, employment within newly born service enterprises tended to represent a higher share of total employment than was the case for industrial enterprises. From the aggregated data available, real estate, construction and other business activities reported the highest proportions of employment among newly born enterprises (see Figure 5) and, perhaps more interestingly, among the highest ratios of jobs created by newly born enterprises in relation to jobs lost due to the death of enterprises.

However, for a majority of activities the employment loss as a result of enterprise deaths outweighed the gains attributed to enterprise births – as was the case, for example, for enterprises within activities auxiliary to financial intermediation, where the highest rate of employment losses resulting from enterprise deaths was recorded.

Figure 5: Employment shares of enterprise births (left) and deaths (right) in total employment, 2005 (%) (1)



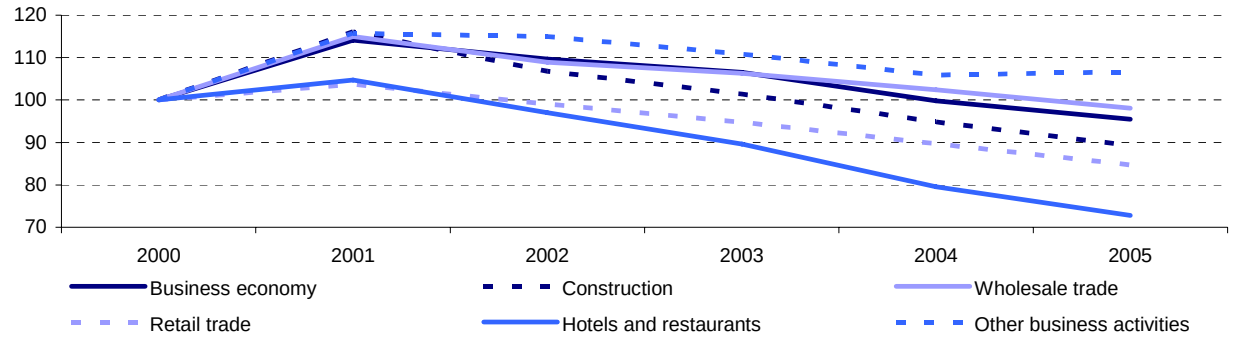
(1) Averages based on available data. Belgium, Denmark, Germany, Ireland, Greece, Lithuania, Luxembourg, Malta, Austria, Poland and Slovenia, not available.

Newly-born enterprises – employment impact of survival and death

Among the ten Member States for which data are available, only about half (51.0 %) of all those enterprises born in the business economy in 2000 survived to 2005. Net employment losses among those enterprises that failed to survive represented 43.7 % of the jobs that had been created in 2000.

It is important to note that as well as employment creation in subsequent years for those surviving enterprises born in 2000, there are also changes in employment levels (positive and negative) among the remainder of the enterprise population. These changes are generally considerably larger than the changes registered among a single cohort of newly born enterprises from one year to the next.

Figure 6: Evolution of employment in surviving enterprises across selected activities with a relatively high overall level of employment, 2000-2005 (2000 = 100) (1)



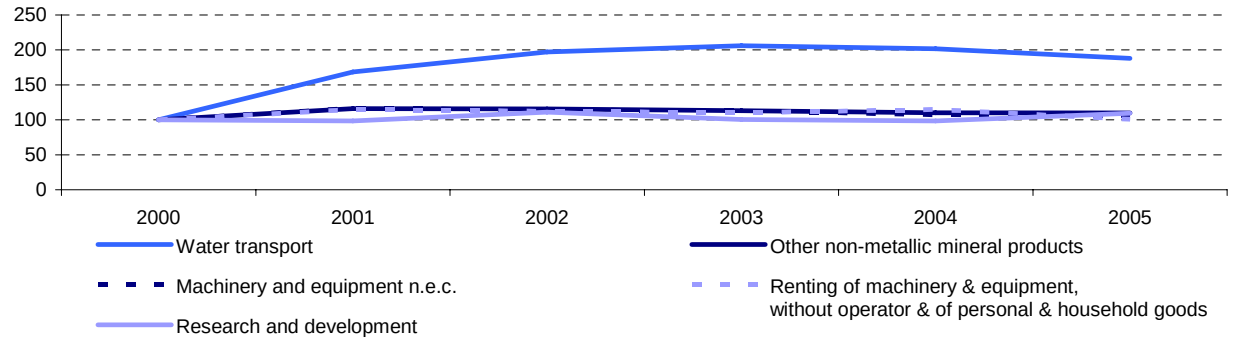
(1) Based on available data for Spain, Italy, Luxembourg, Hungary, the Netherlands, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom

Figure 6 shows the evolution of employment among enterprises born in 2000 and surviving to 2005 across a range of economic activities characterised by high employment levels. The number of persons employed among surviving enterprises rose for each activity in 2001 before subsequently falling back. Despite a considerable number of enterprise deaths, the overall level of employment among the cohort of enterprises born in 2000 and surviving to 2005 within other business activities remained some 7 % above the initial level of employment recorded for all newly born enterprises in this activity in 2000.

For wholesale trade, there was almost no net change in the number of persons employed when comparing employment creation in 2000 with the net result five years later among those enterprises that survived. For the remaining three activities, however, employment levels among surviving enterprises in 2005 were lower than the initial levels of employment created among all newly born enterprises in 2000; although it is important to note that the jobs that remained still represent a net increase in employment when compared with the situation before the creation of this cohort of enterprises.

Among selected activities with a low overall level of employment (see Figure 7), net employment gains were also realised in the first year among surviving enterprises. This pattern tended to continue in subsequent years, as each activity reported that those enterprises that survived employed more persons than the initial employment levels among all newly born enterprises in 2000.

Figure 7: Evolution of employment in surviving enterprises across selected activities with a relatively low overall level of employment, 2000-2005 (2000 = 100) (1)



(1) Based on available data for Spain, Italy, Luxembourg (except machinery and equipment n.e.c. and the renting of machinery and equipment), Hungary, the Netherlands, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.

Figure 8 shows the evolution of employment among the 13 Member States for which data are available for the period 2000-2005. The graphs provide an overview of how the employment created by newly born enterprises in 2000 evolved within each business economy over the following five years, with respect to the employment created in 2000.

Slovenia retained the highest proportion (70.0 %) of initial employment within enterprises that survived to 2005 – as only three out of every ten jobs that were created in 2000 were lost due to enterprise deaths in the subsequent five years. In contrast, almost half (49.5 %) of the jobs created in Hungary in 2000 were lost as a result of enterprises born in 2000 dying by the year 2005. These differences could reflect a number of factors, from the composition and importance of different activities within each business economy, to labour laws on hiring and firing, or market specific barriers to entry and exit.

The net change in employment across all enterprises in the business economy that survived from their birth in 2000 through to 2005 can be broadly categorised into two groups of countries.

In the first group, covering Latvia, Luxembourg, Romania, Slovakia and Finland, and to a lesser extent Estonia, Italy and Slovenia, net employment growth among surviving enterprises outweighed the employment losses that resulted from enterprises failing to survive. In the case of Finland, employment grew among surviving enterprises at a particularly rapid pace, although it should be noted that newly born enterprises in Finland were particularly small in terms of their average size. Nevertheless, the average number of persons employed within the cohort of surviving enterprises born in 2000 more than doubled between 2000 and 2005. A similar picture could be observed for Romania, where the initial employment share of enterprises born in 2000 and surviving to 2005 stood at about 60 %. However, with a rapid increase in the number of persons employed among surviving enterprises, the net result was a considerable overall gain in persons employed, with the average number of persons employed by a newly born enterprise in 2000 rising from about three to ten persons by 2005.

In the second group of countries, covering Spain, Hungary, the Netherlands, Sweden and the United Kingdom, net employment growth among those enterprises that survived between 2000 and 2005 was insufficient to balance the employment losses recorded among enterprises that had died by 2005. Nevertheless; employment generally grew among those enterprises that survived. For example, in the United Kingdom the average number of persons employed among newly born enterprises in 2000 was seen to almost double from an initial three persons when compared with the average number of persons employed among those enterprises born in 2000 and surviving to 2005.

In the majority of countries the initial gains in employment in the first year of survival were the most marked – although Estonia, Latvia, Romania, Slovenia, Slovakia and Finland were not characterised by a tailing-off of employment as in the remainder of the Member States for which data are available.

Hungary and the Netherlands stood apart from the other Member States, insofar as their employment levels fell immediately as of the first year of survival (2001), and never recovered, such that the largest impact of newly born enterprises on the national labour market in terms of job creation was in the year of birth.

Figure 8: Employment changes among enterprises born in 2000 and surviving through to 2005, business economy (2000 = 100)

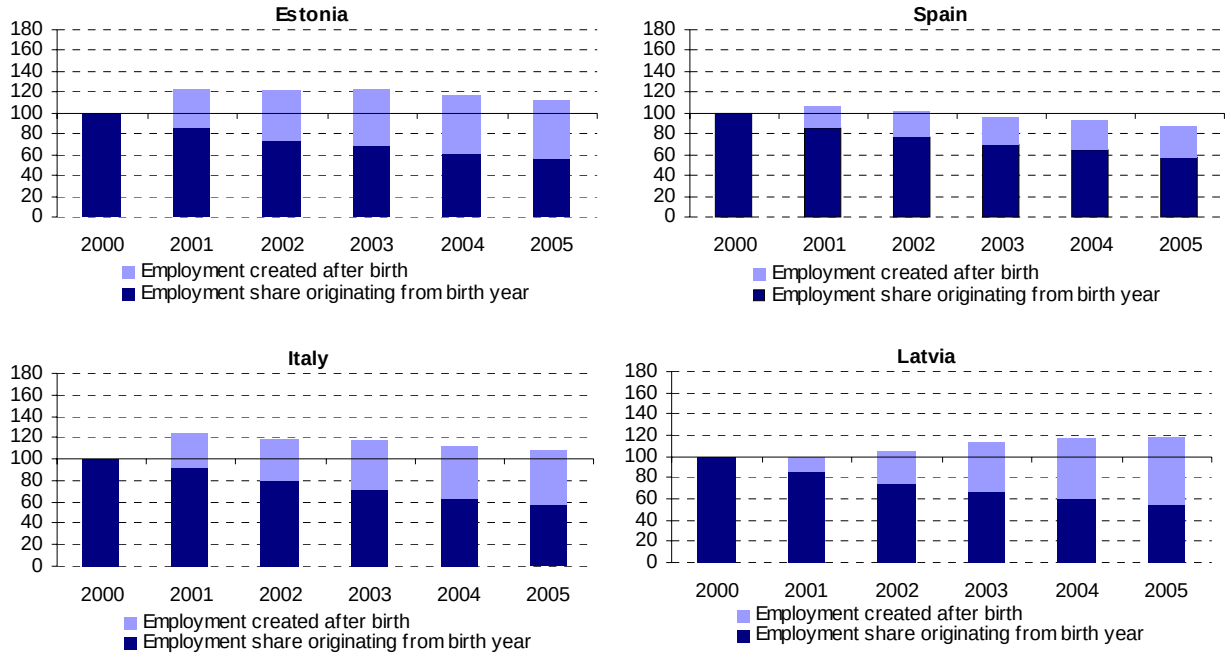
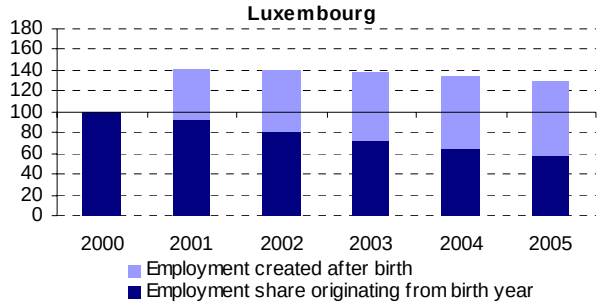
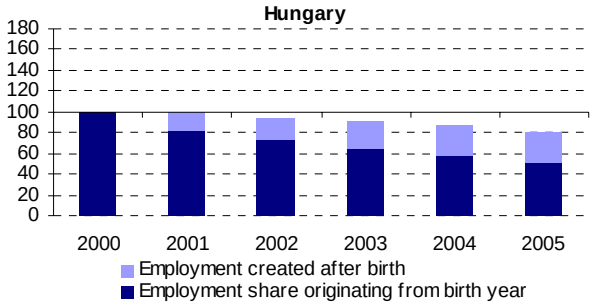
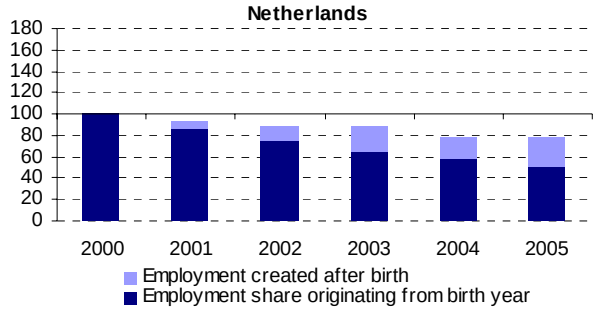
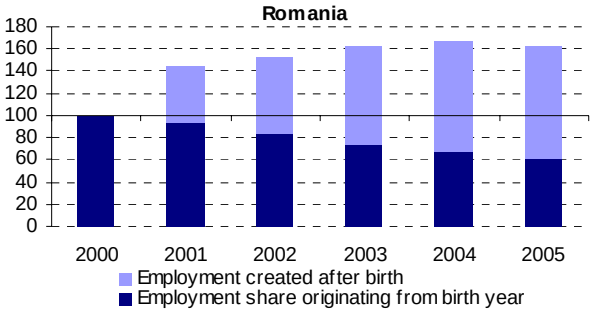


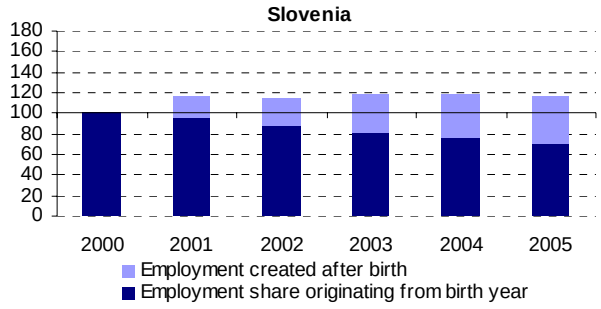
Figure 8: Employment changes among enterprises born in 2000 and surviving through to 2005, business economy (2000 = 100) (continued)

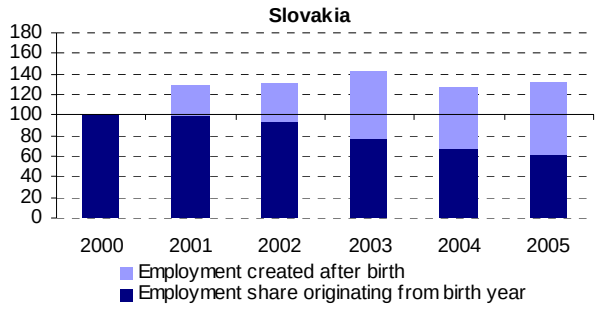


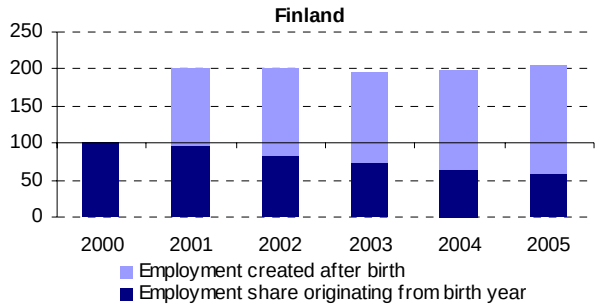


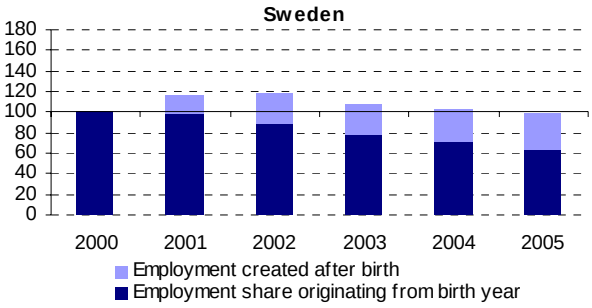


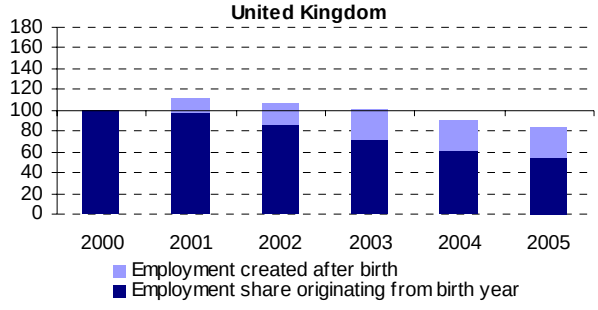












METHODOLOGICAL NOTES

Legal basis
The collection of basic data on business demography was foreseen in the structural business statistics Regulation (Council Regulation (EC, EURATOM) No 58/97 of 20 December 1996 concerning structural business statistics). Annex IX of the recast Regulation on Structural Business Statistics amending and consolidating Council Regulation (EC, EURATOM) No 58/97 of 20 December 1996 is the new legal basis for business demography statistics. Basic variables such as counts of enterprise births and deaths have already been defined in Commission Regulation (EC).

Data source
The main source of data for this development action is the statistical business registers that the National Statistical Institutes maintain. The use of the statistical business registers makes it possible to identify demographic events at the level of each individual unit.

Coverage of countries
Tables and graphs in this publication show a varying coverage of countries. The availability of data by country depends on the year in which they joined the harmonised data collection, the availability of survival data from earlier years and the continuity of participation in the data collection.

Definitions
Within the business demography context, an active unit is defined as one with any turnover and/or employment in the period from 1 January to 31 December in a given year.

A **birth** amounts to the creation of a combination of production factors with the restriction that no other enterprises are involved in the event. Births do not include entries into the population due to mergers, break-ups, split-off or restructuring of a set of enterprises. Births do not include entries into a sub-population resulting only from a change of activity. A birth occurs when an enterprise starts from scratch and actually starts activity. An enterprise creation can be considered enterprise birth if new production factors, in particular new jobs, are created. If a dormant unit is reactivated within two years, this event is not considered a birth.

A **death** amounts to the dissolution of a combination of production factors with the restriction that no other enterprises are involved in the event. Deaths do not include exits from the population due to mergers, take-overs, break-ups or restructuring of a set of enterprises. Deaths do not include exits from a sub-population resulting only from a change of activity. An enterprise is included in the count of deaths only if it is not reactivated within two years.

In the business demography context, **survival** occurs if an enterprise is active in terms of employment and/or turnover in the year of birth and the following year(s). Two types of survival can be distinguished:

1) an enterprise born in year t is considered to have survived in year t+1 if it is active in any part of year t+1 (= survival without changes);
2) an enterprise is also considered to have survived if the linked legal unit(s) have 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).

The **number of persons employed** is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams).

Employment indicators for Denmark, the Netherlands and Finland are provided in full-time equivalents (FTEs) and as such may show values that are lower than the corresponding data for the other Member States, especially for activities where the proportion of part-time work is high.

Statistical unit
The type of statistical unit used for this project on business demography is the enterprise. This unit is defined in the statistical units Regulation (Council Regulation (EEC) No 696/93 of 15 March 1993 as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources.

Economic activities - NACE
NACE is a hierarchical classification of economic activities. Business demography indicators have been produced in this project for activities within NACE Rev. 1 Sections C to K and M to O, excluding Class 74.15. Sections C to K are referred to as the business economy, Sections C to E are referred to as industry, Section F is referred to as construction and Sections G to K are referred to as services. No data are collected for management activities of holding companies (Class 74.15) which is excluded from all higher aggregates (Group 74.1, Division 74, Section K, services, and the business economy total). From reference year 2003 onwards, NACE Rev. 1.1 has been used.

Section C: mining and quarrying
Section D: manufacturing
Section E: electricity, gas and water
Section F: construction
Section G: distributive trades
Section H: hotels and restaurants
Section I: transport and communication
Section J: financial intermediation
Section K (excl. 74.15): real estate, renting and business activities

Coverage of units
No threshold in terms of the size of units has been set for this project. The coverage in general is very good, though differences in national administrative sources affect coverage of the smallest units (those with no paid employees). In many countries VAT registers are one of the principal sources for maintaining the statistical business register, and the thresholds for VAT registration may have an impact on the coverage of the business demography data. The VAT threshold in Estonia is about EUR 16 000. Up to 2002, coverage of sole proprietorships is limited to those with 20 or more persons employed. In Latvia, natural persons performing economic activity on the basis of licenses and patents and peasant farms were included only from 2002 onwards for populations of active enterprises and of enterprise births. The exceptionally high birth rate of 2002 in Latvia is due to the first inclusion of these natural persons. In Lithuania, VAT data were used for 2002, only when there was no information on turnover from other statistical sources. However, only those enterprises having more than about EUR 28 985 have to pay VAT. In Portugal the VAT threshold, for all reference years, is EUR 9 976. Sole proprietorships were not covered in Portugal from 2001 to 2003. The relatively high threshold for value added tax (VAT) in the United Kingdom may explain some of the differences, though, as in other countries, the impact of the VAT threshold is reduced by voluntary registrations and the use of additional sources.

Abbreviations
'Avg.' is used to represent an average based on countries with available data.

Further information

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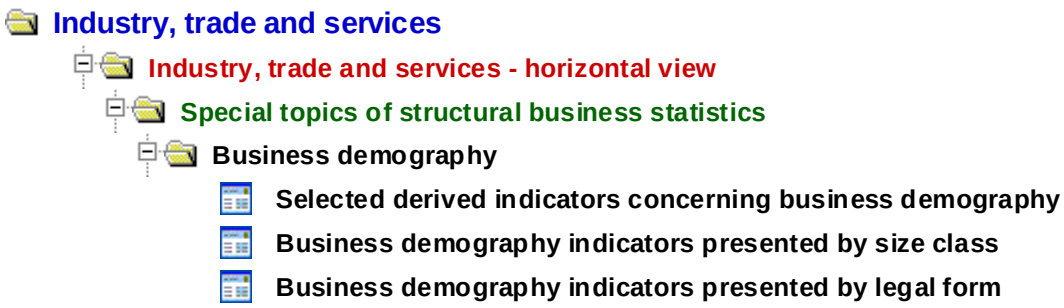

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