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BUSINESS REGISTER AS A SOURCE FOR FUTHER DEVELOPMENT OF BUSINESS DEMOGRAPHY STATISTICS

Eurostat work on Business Demography

Note by the European Commission, Eurostat

I. INTRODUCTION

1. Annex IX of Parliament and Council Regulation 295/2008 of 11 March 2008[1] along with the two Commission Regulations (250/2009[2] and 251/2009[3] of 11 March 2009) provide a legal basis for the annual data collection on business demography and its subject is the "harmonised data collection" covering all employer and non-employer enterprises as it has been conducted for several years on a voluntary basis. This data collection has been one of the sources used for the Structural Indicators, which are collected to monitor the Lisbon Growth and Jobs Strategy. It is considered important to cover the non-employers in the HDC, as they account for roughly one third to half of the whole business population, depending on the country. However, the coverage of these small businesses varies between countries, thus limiting the comparability of results.

[1] Regulation (EC) No 295/2008 of the European Parliament and of the Council of 11 March 2008 concerning structural business statistics (recast) http://www.eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2008:097:SOM:EN:HTML
[2] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:086:0001:0169:EN:PDF
[3] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:086:0170:0228:EN:PDF

2. The second data collection, statistics of 'employer business demography' (EBD), limits the scope to employer businesses, i.e. those that have at least one employee during a given reference period. Eurostat and the Member States agreed to add this data collection to the existing one on a voluntary basis, in response to the OECD's request for data that are more comparable across all OECD countries, particularly for the purpose of the joint OECD-Eurostat Entrepreneurship Indicators Programme (EIP)[4].

3. EU Member States have conducted also the voluntary data collection on high-growth enterprises and gazelles based on the common specifications developed by the OECD. These results are used now as additional performance indicators in the EIP to measure the business dynamics in OECD countries, with a special focus on young enterprises.

4. Business registers are the main source for the business demography data. All the methodological recommendations underlying the data collections on business demography and high-growth enterprises were published in the joint "*Eurostat-OECD Manual on Business Demography Statistics*" in late 2007[5]. The purpose of this joint manual was to harmonize different approaches to business demography statistics with a view to better comparability, particularly between European and other OECD countries.

II. HARMONISED DATA COLLECTION (HDC) VS. "EMPLOYER BUSINESS DEMOGRAPHY" (EBD)

5. The basic difference between those two data collections is that the HDC covers enterprises of all sizes regardless of whether they are employers or not. The lowest size class is '0 employees', i.e. non-employers are recorded in a separate size class. Enterprise births are recorded only once. If an enterprise is born as a non-employer business and becomes an employer later on, it is not recorded again as an 'employer birth' in a higher size class (the numerator of the birth rate); however, it is recorded as an active employer enterprise in this higher size class (the denominator). Therefore it would be misleading simply to drop the size class '0 employees' from this data collection to obtain results that are comparable with countries where business demography data are collected on employers only. The European birth rates would be artificially low. The difference in the 'employer business demography' data collection is precisely that it includes in its birth data businesses that start with no employees, and then take on employees as they expand.' This event has been called 'entry by growth' in this data collection. The mirror event that employers become non-employers but continue their business activity is recorded as well. The death data are corrected with these 'exits by decline'. The first parallel data collection in 2007/2008 has shown that the effect of this methodological difference on the birth and death rates is considerable.

[4] http://www.entrepreneurship-indicators.net, http://www.oecd.org/document/0/0,3343,en_2649_33715_39149504_1_1_1_1,00.html

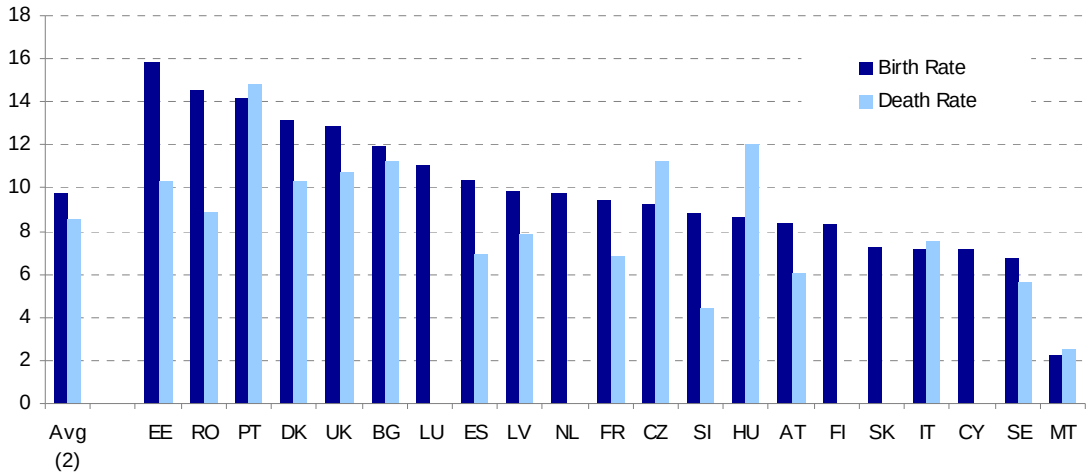
[5] http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-010/EN/KS-RA-07-010-EN.PDF

III. BIRTHS AND DEATHS IN HARMONISED DATA COLLECTION (HDC)

6. The Lisbon Strategy, re-launched in 2005 as the Lisbon Strategy on Growth and Jobs, focuses on sustainable growth as well as on more and better jobs in the EU. Some factors contributing to sustainable growth are higher birth than death rates of enterprises, more employment in newly born firms than in those that go out of business, survival of new firms and increase of employment in them.

7. This year Eurostat published the results on harmonized data collection (HDC) in a "*Statistics in Focus*". The complete datasets are available for download on the Eurostat website.

Figure 1: Enterprise birth and death rates (HDC), Business Economy, 2005 and 2006 (%) (1)



(1) Birth rates for Denmark, Luxembourg, Netherlands, Slovenia, Finland, Slovak Republic; Cyprus and Malta: 2005; Death rates: 2005
(2) Average rates are based on data for Bulgaria, Czech Republic, Estonia, Spain, France, Italy, Latvia, Hungary, Austria, Portugal, Romania, Sweden and the United Kingdom with reference year 2006 for birth rates and 2005 for death rates

Source: Eurostat, (SBS, Business Demography)

8. Enterprise births and deaths presented quite similar composition in terms of enterprise size.

9. At the time of writing the data for 21 countries were available. In 2/3 of those countries, enterprises with no paid employees accounted for the majority of births. In the remaining countries more than 50 per cent of newly born enterprises had between 1 and 4 paid employees. These two size classes combined represent more than 90 per cent of births in all the countries. There is an obvious tendency for enterprises to start very small.

Figure 2: Enterprise births by size class, Business Economy, 2005 and 2006 (%) (1)

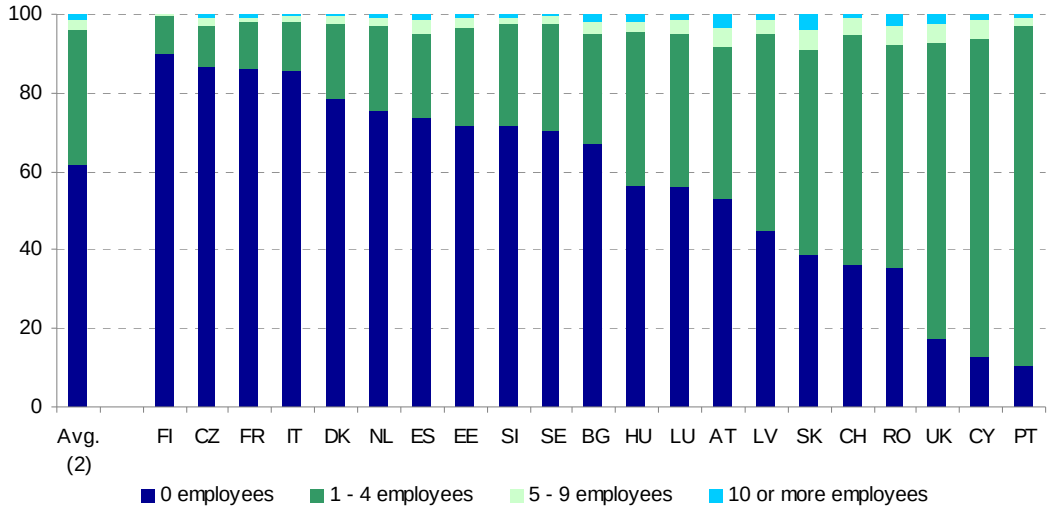
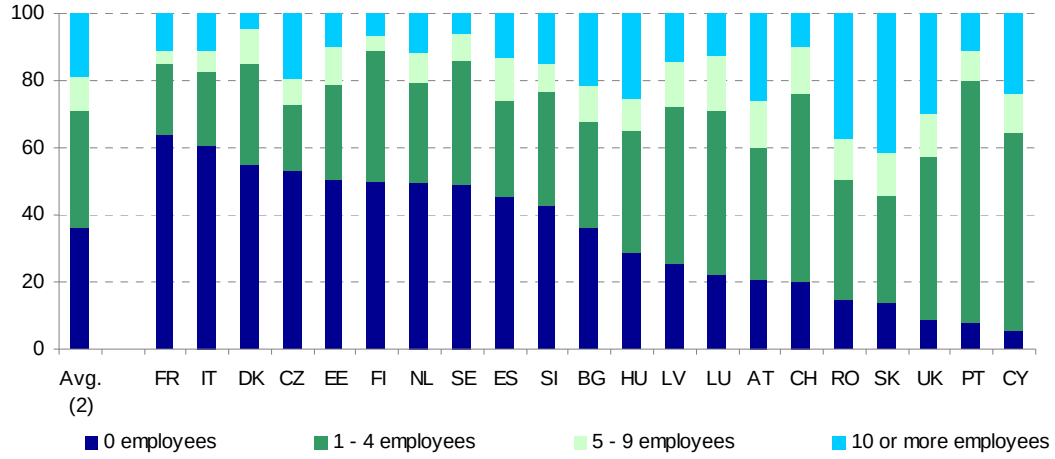


Figure 3: Distribution of persons employed in newly born enterprises by size class, Business Economy, 2005 and 2006 (%) (1)



(1) Denmark, Cyprus, Luxembourg, Netherlands, Slovenia, Slovak Republic, Finland: 2005

(2) Average based on data for those Member States shown in figure above

Source: Eurostat, (SBS, Business Demography)

10. Because of their small size, it is reasonable to expect that the contribution of such small enterprises to employment in enterprise births will be comparatively smaller than their percentage among enterprise births. This assumption is indeed confirmed by the data (shown in Figure 3), which shows the distribution of persons employed (i.e. employees and unpaid workers) in births by employee size class. Enterprises with up to 4 employees contribute between

45.6 per cent (Slovak Republic) and 88.7 per cent (Finland) of employment in newly born enterprises. In five countries enterprises without any paid employees contributed more than 50per cent of employment in enterprise births; the same was true for enterprises with 1 to 4 employees in two countries.

11. Enterprises with 10 or more employees contributed, as expected, a large share of employment in newly born enterprises. This is most prominent in two countries. In the Slovak Republic these enterprises were 3.7 per cent of all births but contributed 41.7 per cent of employment in them; in Romania they stood at 3per cent of births but contributed 37.2 per cent of employment.

12. The large majority of enterprises that die were small, with up to 4 employees. Their share among deaths was more than 90 per cent in all countries with available data. In particular, in 11 countries more than 50 per cent of deaths were of enterprises without paid employees, while in the rest more than 50 per cent of deaths were of enterprises with 1 to 4 employees.

13. Enterprises without or with up to 4 employees represented at national level between 47.6 per cent (France) and 88.6 per cent (Czech Republic) of employment in the enterprises that died. In four countries (Czech Republic, Sweden, Italy and Bulgaria) the enterprises without any paid employees that died took with them more than 50 per cent of the employment in all enterprise deaths; the same applies to enterprises with 1 to 4 employees in one country (Portugal).

14. Enterprises with 10 or more employees also took away a considerable proportion of the jobs lost due to enterprise deaths. Their share in lost employment is between 6.6 per cent (Czech Republic) and 42.7 per cent (Slovenia).

Figure 4: Enterprise deaths by size class, Business Economy, 2005 (%)

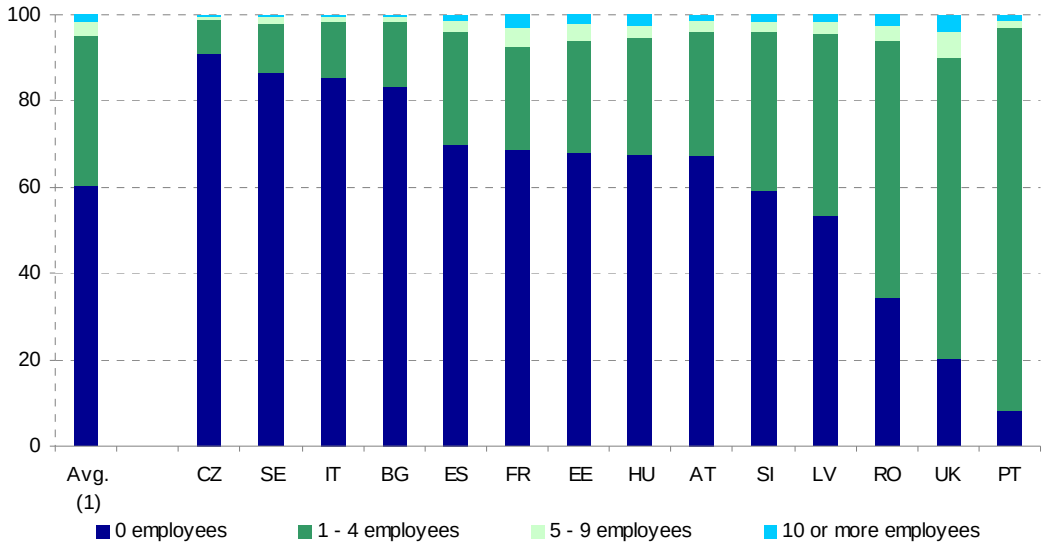
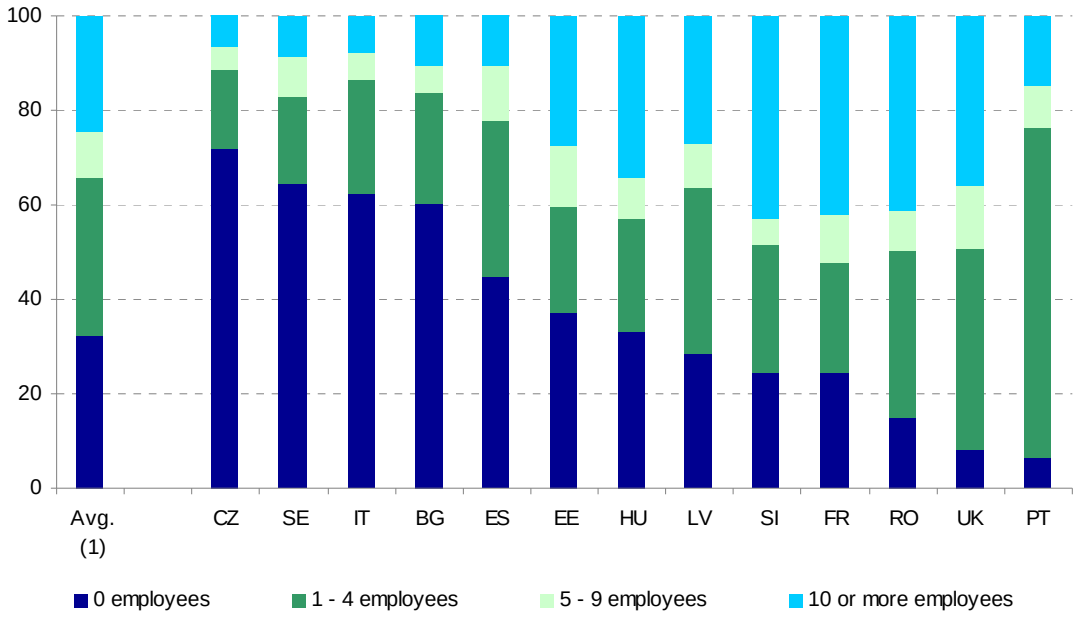


Figure 5: Distribution of persons employed in enterprises that died by size class, Business Economy, 2005 (%)



(1) Average based on data for those Member States shown in figure above

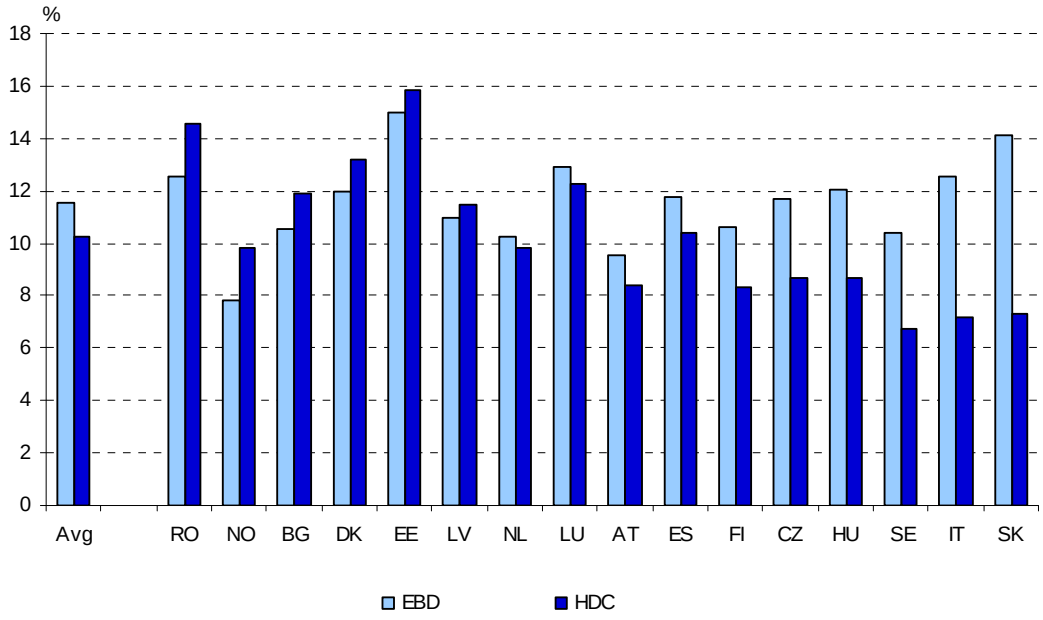
Source: Eurostat, (SBS, Business Demography)

IV. EMPLOYER BUSINESS DEMOGRAPHY – ADDITIONAL AND MORE COMPARABLE DATA

A. Births and deaths

15. At the time of writing the data for 16 countries were available for comparison harmonized data collection and "employers business demography". The average birth rate in "employers' business demography" was higher than in harmonized data collection by 1.2 per cent. Among the countries where the employer birth rates were higher than the ones from the harmonized data collection, the Slovak data showed a particularly high difference. While the employer birth rate was 14.2 per cent, the birth rate from the harmonized data collection reached the level of just 7.3 per cent. At the other end of scale, there were Romanian rates: the employer birth rate (12.6 per cent) which was lower by two percentage points then the birth rate from the harmonized data collection (14.6 per cent).

Figure 6: Comparison of birth rates in harmonized data collection (HDC) and employers business demography (EBD), Business Economy, 2006 (%)



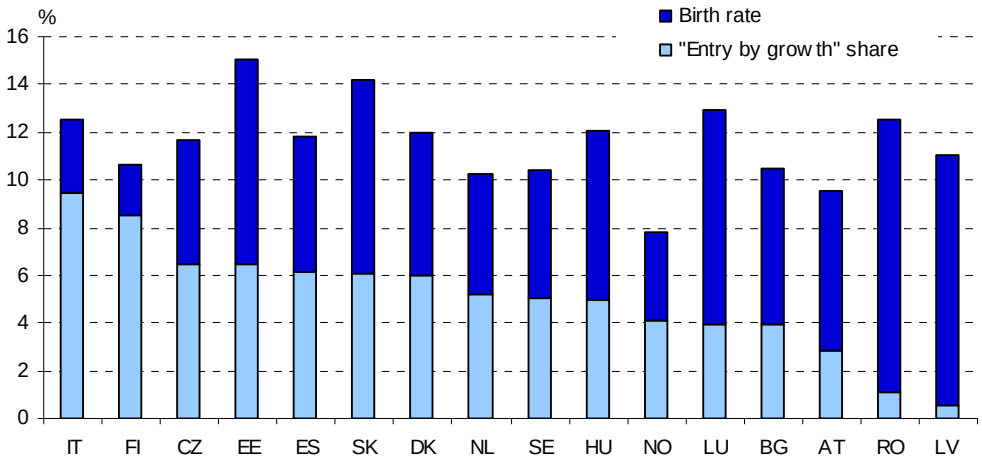
Note. CZ, DK, LV, NL, SK, FI: 2005.

Source: Eurostat, (SBS, Business Demography)

16. Thanks to "employer business demography" as an additional data collection we can consider an interesting category of "entry by growth", which is the group of enterprises that existed before as non-employers but become employers. The “entry by growth share” is assumed to be the share of employer enterprise births that is equal to the difference between these and the births except size class “0 employees” in the harmonised data collection. Employer enterprise births that were not recorded in the harmonised data collection are assumed to be due to “entry by growth”.

17. Taking into account the data available for 16 countries, on the average 44 per cent of the births were due to "entry by growth". This share however varied enormously. While it was within a range of ± 14 percentage points from the average in 12 of the 16 countries, there were some significant outliers. The lowest entry by growth shares were 5.2 per cent in Latvia and 9.0 per cent in Romania. The highest values were recorded in Italy at 75.8 per cent and Finland even at 80.1 per cent.

Figure 7: Birth rates in employers business demography (EBD) and its "entry by growth" share, Business Economy, 2006 (%)



Note. CZ, DK, LV, NL, SK, FI: 2005.

Source: Eurostat, (SBS, Business Demography)

18. The similar calculations based on enterprises' deaths lead to the possibility of analysing the phenomenon of "exit by decline", i.e. the population of employers who become non-employers, but who is still active. At the time of writing, the comparison for 13 countries was possible. There variation in the "exit by decline share" was lower than for "entry by growth share", but still considerable. On the average, the "exit by decline share" was 49.5 per cent. Finland had the highest share (84.2 per cent), followed by the group of three countries (the Czech Republic, Austria and Italy) where around 2/3 of employers' deaths were caused by the "exit by decline". In Spain and the Netherlands the shares were lower than a half, and in six following countries (Norway, Bulgaria, Estonia, Luxembourg, Hungary and Slovakia) were around 1/3. The "exit by decline share" reached the lowest level of 16.5 per cent in Romania.

B. High-growth enterprises

19. As an additional contribution to the data collection on Entrepreneurship Indicators[6], Member States provide Eurostat with data on high-growth enterprises. These figures are based on the definition of high-growth enterprises and gazelles in the Eurostat-OECD Manual on Business Demography Statistics:

> *All enterprises with average annualized growth greater than 20 per cent per annum, over a three year period should be considered as high-growth enterprises. Growth can be measured by the number of employees or by turnover.*[7]

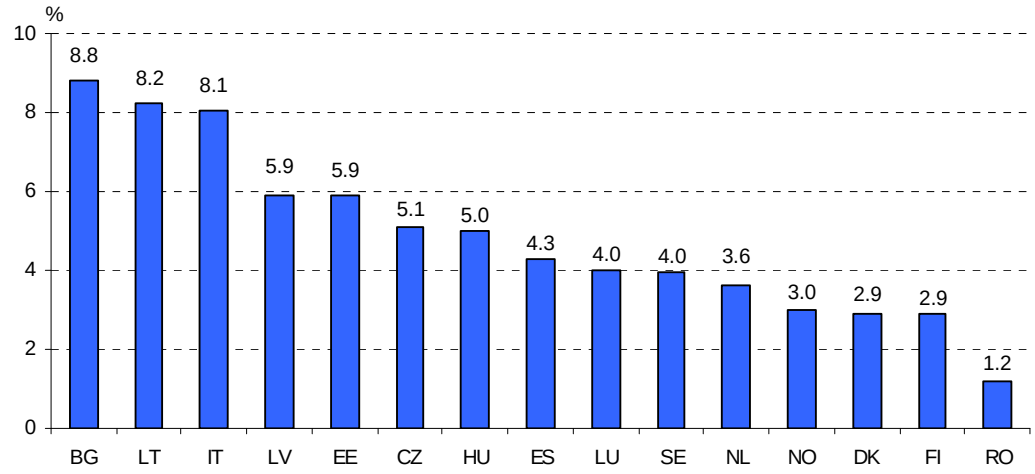
[6] www.entrepreneurship-indicators.net
[7] 'Eurostat-OECD Manual on Business Demography Statistics'
http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-010/EN/KS-RA-07-010-EN.PDF

20. A threshold of 10 employees at the beginning of the observation period has been used for this data collection. Data for 15 Member States on the number of enterprises that had shown high growth from 2003 to 2006 (2002 to 2005) were available at the time of writing. Growth was measured either in employees or in turnover, and as a subset of each dataset, numbers of 'gazelles' were extracted, i.e. high-growth enterprises that were 4 or 5 years old in 2006 (2005). The complete datasets are available for download on the Eurostat website.

21. In Bulgaria, Lithuania and Italy the rate of high-growth enterprises measured in employment exceeded the level of 8 per cent. Bulgaria (2.1 per cent) and Lithuania (1.7 per cent) were also the countries showing the highest rates of "gazelles" measured in employment, followed by Latvia (1.2 per cent). In the following countries this rate did not exceed the level of 1 per cent.

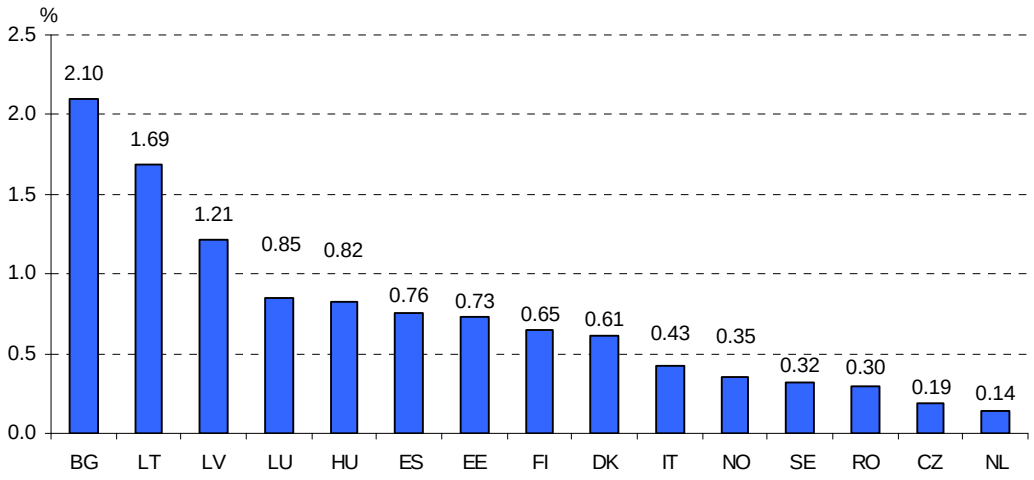
22. The lowest rate of high-growth enterprises measured in employment was observed in Romania (1.2 per cent), and the lowest rates of "gazelles", not exceeding the level of 0.2 per cent were reported by the Czech Republic and the Netherlands.

Figure 8: Rate of high-growth enterprises measured in employment, Business Economy, 2006 (%)



Note. CZ, DK, LV, LT, NL, FI: 2005.

Figure 9: Rate of "gazelles" measured in employment, Business Economy, 2006 (%)



Note. CZ, DK, LV, LT, NL, FI: 2005.

V. ESTIMATION OF RECENT BUSINESS DEMOGRAPHY DATA

23. The business demography data published by Eurostat are not very recent. Their quality is very good but this high level of quality has been achieved, however, at the expense of timeliness. Although, it's worth underlining that the business demography data, based on business registers, are causing no additional burden for the enterprises.

24. Eurostat data are based on a common methodology but as it does not enable to publish more recent data, the possibility to estimate more recent data using other, already available, sources than the harmonized data collection is now investigated.

25. Member States together with Eurostat are considering the possibility of estimation, by country, more recent business demography data (enterprise births, deaths and population) based on sources such as national statistics on business registrations, de-registrations, bankruptcies, sources from chambers of commerce, credit agencies, business associations, etc. The discussion during the 2008 working group meeting on the timeliness of business demography data was followed in March 2009 by Eurostat's report on the possibility to estimate more recent data by using various national sources as their estimators.

26. For seven of the EU Member States, no more data sources have been found. For the other countries, a general availability of "alternative" sources but a different level of their usability and completeness has been observed. Although these results were not always useful for the purpose of estimation more recent data (as they were older than the Eurostat ones), or not always comparable with Eurostat data as they were collected in accordance with a different classification absolutely not comparable with the "European" ones.

VI. CONCLUSIONS

27. The results on European harmonized data collection and 'employer business demography' are showing that the scope and methodology of business demography statistics have a significant impact on results. The aim of the 'employer business demography' data collection is to provide European data that are more comparable particularly with data on the United States, based on the employer business population. On the basis of the EBD data collection the phenomena of enterprises births and deaths can be analyzed in more detailed way.

28. Business demography data collection, based on business registers, causes no additional burden for the enterprises. The quality of the data is very good but this high level of quality has been achieved, however, at the expense of timeliness, so the possibility to estimate more recent data using other, already available, sources is now investigated.
