Statistics in focus

POPULATION AND SOCIAL CONDITIONS

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THEME 3 – 12/2001

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DEMOGRAPHIC CONSEQUENCES FOR THE EU OF THE ACCESSION OF TWELVE CANDIDATE COUNTRIES

On 1 January 2000, the 12 candidate countries with which EU membership negotiations have started* had a combined population of 105.7 million people (Turkey is not covered in this study, for the reasons set out in the box on the final page). At the same time, EU-15 had 376.4 million inhabitants. This means that the enlargement of the EU to include these countries would increase its population by 28%, to a total of about 482 million inhabitants (*Figure 1*). At the same time, its share of world population would increase from 6.2% to 8%.

However, due to a dramatic and continuing population decline in most of these 12 candidate countries, instead of reversing the population decline of the EU expected over the coming decades, their accession would, on the contrary, hasten it.

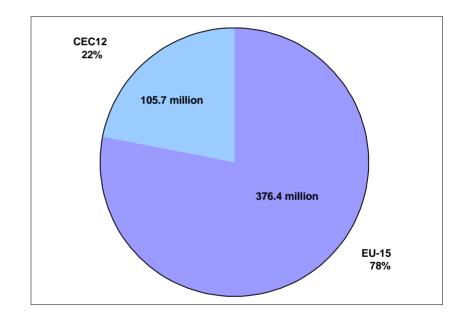


Figure 1 : Eu-15 and CEC12 total populations = 482 million

Large population decline in the ten Central European candidate countries over the last 10 years

During the 1990s, most of the 12 countries experienced unexpected demographic events. Fertility levels dropped drastically, life expectancies went down and significant net outflows were reported. Therefore, population growth has rapidly become negative in this region of Europe: in less than 10 years, these countries have lost 1.3 million people, which is 1.2 % of their 1990 population. Before this very eventful decade, however, population growth was quite high (about +0,6 % per year during the 20 previous years), due to relatively high fertility levels, almost continuously increasing life expectancies and barely any (out) migration.

^{*} Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic and Slovenia.

Not all candidate countries have experienced these trends with the same intensity. Eight out of the twelve countries reported population losses during the 1990s (*Figure 2*).

Deaths outnumbered births in half of the countries and only the Czech Republic, Malta and Cyprus recorded positive crude net migration rates during the period 1990-1999. Especially in Latvia and Estonia, net outflow of people has been significant.

The two Mediterranean island states were the only countries with both higher crude net migration rates and higher crude rates of natural increase than the EU-15.

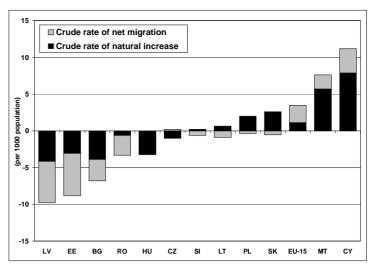


Figure 2 : Average annual crude rate of total population increase and its components, 1990-1999

No sign of recovery in most of the twelve countries in 1999

During 1999, the twelve countries as a whole continued to lose people: their combined population at the end of the year was 151 000 less than at the beginning of the year (compared to an annual average decrease since 1990 of 155 000). In relative terms, population decline amounted to 1.4 per thousand.

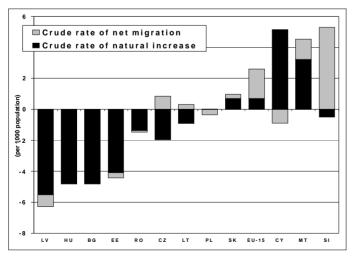
Figure 3 shows however that not all of these countries were confronted with an ongoing population decline in 1999. Cyprus and Malta reported fairly strong population increases (\pm 0.5%), whereas the Slovak Republic and Slovenia are the only Central European countries whose population is still growing. By contrast, fairly big population decreases (\pm 0.5%) are still being registered in Bulgaria, Estonia, Hungary and Latvia. In all of the latter countries, the number of deaths exceeds the number of live births.

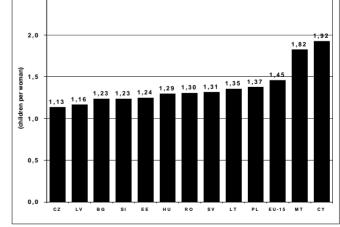
Apart from Slovenia, which reported significant net immigration flows (5.3 per thousand), all the other countries concerned recorded either slight net immigration or slight net emigration during 1999.

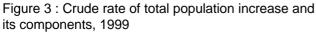
The total fertility rate in the Central European countries under consideration continued to be very low. Extremely low levels are found in the Czech Republic (1.13 children per woman) and Latvia (1.16) (*Figure 4*). In Latvia, however, the first sign of recovery has appeared, since the total fertility rate in 1999 was slightly higher than the 1.09 recorded for 1998. The same applies to Bulgaria and Estonia.

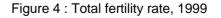
Cyprus and Malta are quite different with respect to reproductive behaviour. Despite a more or less continuous decrease during the 1990s, total fertility rates in both countries are still well above the EU-15 average (1.45).

2,5











The accession of these twelve countries would see the EU's population decline begin several years earlier

The accession of new Member States will considerably increase the total population of the Union. However, far from reversing its expected population decline, it will on the contrary hasten it.

Despite the fact that people are no longer having enough children to replace themselves, the EU population is expected to continue to grow for some years (*Figures 5 and 6*). This is mainly the result of net immigration (*Figure 7*), the relatively high number of potential mothers (itself the result of the baby boom that peaked in the midsixties) and the increasing life expectancies. Soon, however, the steadily declining rate of natural population growth (births less deaths) is expected to become negative (*Figure 8*) and will in the longer run outweigh positive net migration and consequently the total EU population will start to decline. This is projected to happen around the year 2023.

In these twelve countries as a group, both natural increase as well as net migration – and thus total increase - are currently negative. Enlargement of the EU-15 with the twelve countries would therefore advance the onset of population decline. On the basis of the Eurostat assumptions for the Union and the expectations of the UN for the twelve countries considered here, this would mean that the population decline of this group of 27 countries would start around 2015, i.e. some eight years earlier.

The inherent uncertainty of projections should be kept in mind with regard to the significance of the exact effect and timing.

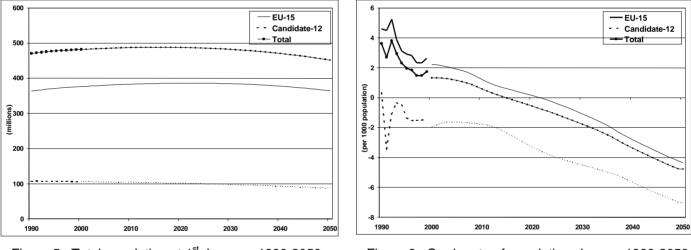
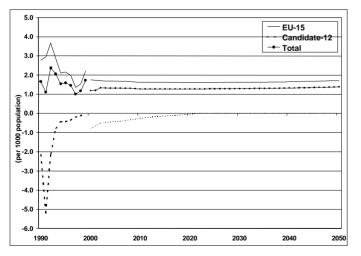


Figure 5 : Total population at 1st January, 1990-2050



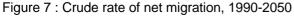
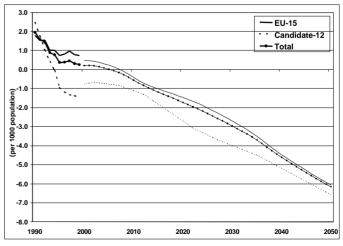
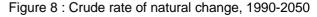


Figure 6 : Crude rate of population change, 1990-2050





Population ageing would be slightly slowed while population dejuvenation would be somewhat stronger

The decline in fertility, which dropped below replacement level in the EU-15 at the beginning of the 1970s, together with the ever-increasing life expectancies, has led to a shift in the age structure towards higher ages. There have never been so many persons above age 65 as now and the number will continue to grow for the time being (*Figure 9*). The 'baby boom' generation's entry into this age group between 2010 and 2030 will accelerate the increase. It is expected to slow down, halt and ultimately decline only when this group reaches the ages with higher mortality, in the early 2040s.

Similar processes operate in the twelve countries concerned. However, unlike in the EU-15, no decline in the elderly population is expected for these countries within the foreseeable future.

Because the number of births will decline, ageing trends will be accentuated in relative terms. For both the EU-15 and the twelve countries, the share of the population above age 65 will most likely increase until the end of the projection period (*Figure 10*). The share of the elderly population in the EU-15 will grow from around 16% in 2000 to about 21% in 2020, perhaps attaining 28% in 2050.

Given that the candidate countries have a younger age structure, the current share of the elderly of 13% now can be expected to rise to 18% only in 2020 and then move rapidly towards EU-15 levels at the end of the forecast period. Enlargement of the European Union with these twelve countries would therefore lead to a slower ageing of the population in the short and medium term.

For all candidate countries considered here, the proportion of the population aged 65 and over is below the EU-15 average and by 2020 only the Czech Republic will posses a more aged population. The speed of ageing will be relatively low in Latvia and high in Malta (*Figure 11*).

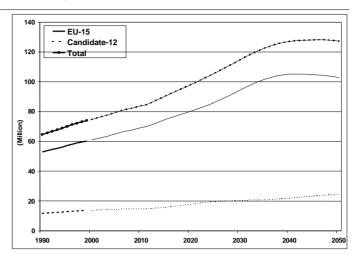


Figure 9 : Population aged 65 and over, 1990-2050

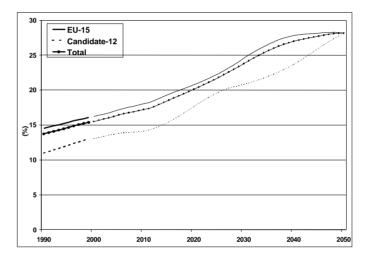


Figure 10 : Percentage of population aged 65 and over, 1990-2050

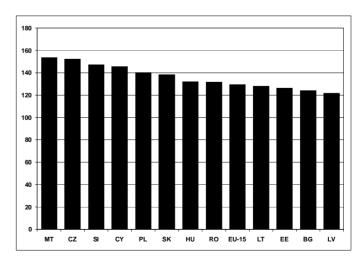


Figure 11 : Percentage of population aged 65 and over, changes 1999-2020 (1999 = 100)



While the number and share of older people will increase, the number and share of young people (0-14 years) is expected to decline (*Figures 12 and 13*). The continuation of low fertility levels below replacement level has led to this process of dejuvenation. In line with the assumptions on which the projections are based, this will continue in the future. Only towards the end of the projection period is it expected to level off. This will be the case in the EU-15 as well as in all the twelve other countries.

The proportion of children in the total population is still higher in most of the twelve countries than in EU-15, but it is declining quite rapidly towards the average levels of the Member States (*Figures 14 and 15*). For the twelve countries as a whole, this proportion should even fall slightly bellow the EU-15 level in the near future. Enlargement of the European Union with these countries would therefore mean that in the medium term, children formed a relatively smaller share of the population than would be the case without enlargement.

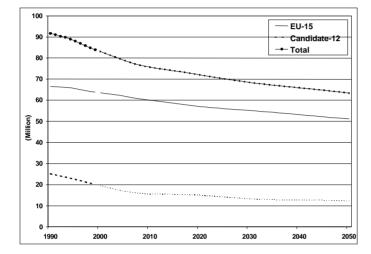


Figure 12 : Population aged under 15 years, 1990-2050

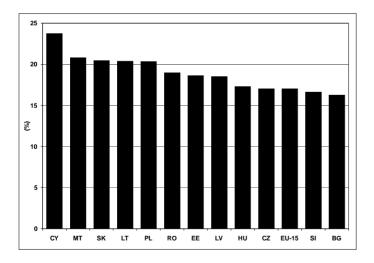


Figure 14 : Percentage of total population aged under 15 years, 1999

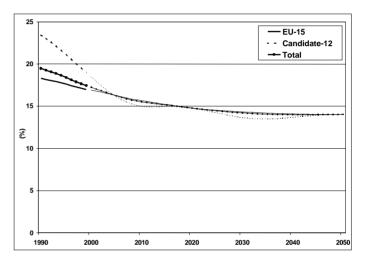


Figure 13 : Percentage of total population aged under 15 years, 1990-2050

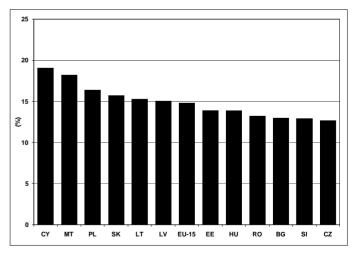


Figure 15 : Percentage of total population aged under 15 years, 2020



In 1999, only Bulgaria and Slovenia had lower shares than the EU-15 average. By 2020, the twelve countries will be more or less evenly spread around the EU-15 average for that year. The decline between 1999 and 2020 is more or less uniform, and faster than EU-15 in all but Malta (*Figure 16*).

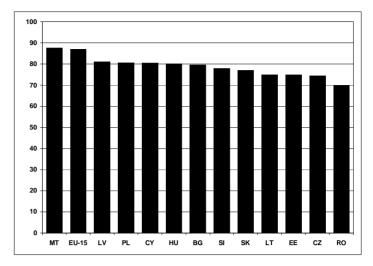


Figure 16 : Percentage of total population aged under 15 years, 1999-2020 (1999 = 100)

The working population is expected to decline at the same rate

The potential labour force, the population aged 15-64, of EU-15 is expected to reach its largest size of about 255 million around 2010 (*Figure 17*). In the candidate countries studied, the number of 15-64 year olds will probably peak a few years earlier.

Because of the combined impact of dejuvenation and the expected future decline of the working age population, the ongoing trend of ageing is obscured in the total dependency ratio (number of 0-14 and 65 and over as a percentage of the population between 15-64). In the EU-15 countries this ratio was more or less stable over the past ten years and will increase slightly in the next few years.

There was, however, an underlying shift from fewer young towards more old dependants. Once the less numerous generations born in the 1980s and 1990s enter the work force, the total dependency ratio will change rapidly for EU-15 (*Figure 18*).

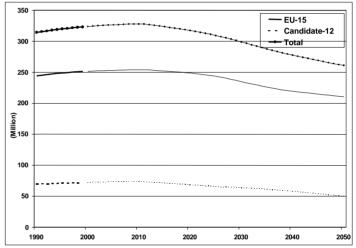
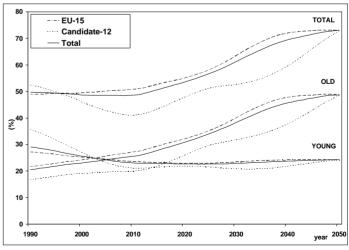
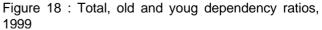


Figure 17 : Population aged 15-64 years, 1990-2050







From around 2010 onwards, the share of the population of working age is expected to decline from around two-thirds to about 58% in 2050 (*Figure 19*).

Trends in the candidate countries considered are somewhat different. Nearly all the candidate countries have a total age dependency ratio that is not only lower than the EU-15 average but also declining faster. This decline will continue for some years (until approximately 2010). Only when the small birth cohorts from the 1990's enter the working ages will there be a rapid increase in the total dependency ratio.

Therefore, although enlargement of the European Union by these twelve candidate countries would in the medium-term lighten the demographic burden on the working population of the Union, it would hardly alter the longer-term decline in this age group.

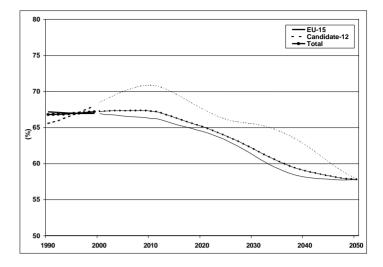


Figure 19 : Percentage of total population aged 15-64 years, 1990-2050

Projection data for the candidate countries studied in this paper are taken from UN sources.

With effect from December 1999, Turkey is also a candidate for accession to the EU.

However, given the unavailability of data, the country's large population (64,8 million on 1st January 2000) and a demographic situation markedly different from the other candidate countries, Turkey was not included in this study.

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