

# POPULATION AGEING IN CENTRAL AND EASTERN EUROPE AS AN OUTCOME OF THE SOCIO-ECONOMIC TRANSITION TO CAPITALISM<sup>1</sup>

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## Abstract

The aim of this article is to find an explanation for the extraordinarily rapid demographic change in Central and Eastern Europe (CEE) during the 1990s. It will be argued that population ageing in CEE is an unintended side effect of the socio-economic transition from 'communist' to 'capitalist' societies. An unprecedented drop in fertility in combination with the emigration of many young people and improvements in life expectancy has resulted in an extraordinarily rapid ageing of the CEE populations. First, evidence for the interaction between socio-economic crisis and demographic change will be presented based on a literature review and Eurostat data. Clear evidence for rapid population ageing in CEE will be provided and how three demographic factors – mortality, fertility and migration – are driving this ageing process. Finally, implications of this joint transition and ageing process for the CEE societies and their people will be discussed.

**Keywords:** Demographic change, population ageing, fertility, mortality, migration, Central and Eastern Europe

## Introduction: Central and Eastern Europe's Transition from Socialist to Ageing Societies

In its broadest definition, Central and Eastern Europe (CEE) would include Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, East Germany<sup>2</sup>, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia (European part), Serbia, Slovakia, Slovenia, and the Ukraine. The focus of this article, however, will be on the CEE countries that joined the European Union (EU) since 2004, as well as the EU candidate and potential candidate countries from South-Eastern Europe (Albania, Bosnia-Herzegovina, Croatia, Macedonia, Montenegro, and Serbia).

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<sup>1</sup> This article is based on previous presentations given on three occasions: the James Martin School of the 21<sup>st</sup> Century Seminar Series at the Oxford Institute of Ageing "Implications of Population Ageing in Central and Eastern Europe" in Oxford, February 2006; the Launch Conference of the "Central and Eastern European Language Based Area Studies" (CEELBAS) Research Programme at University College London (UCL), April 2007; and the International ESRC Workshop "The Drivers of Population Ageing in Central and Eastern Europe" at the Oxford Institute of Ageing, September 2007. The author would like to thank all participants of these three events for their contributions that inspired this article.

<sup>2</sup> East Germany – the former GDR – shares with the other CEE countries a similar post-war history of life under communist rule as well as similar contemporary demographic trends.

For almost twenty years now, Central and Eastern Europe (CEE) has been undergoing the transition from 'state-socialist' societies with planned economies to 'free' societies with market-oriented economies. The re-organisation of social institutions during this transition period, that still has not come to an end yet, has been accompanied with dramatic changes of people's lives. Following the collapse of 'communism', they found themselves unprepared for the changes about to happen. Not only did they have to adjust their beliefs and their expectations about almost every single aspect of life; they also found themselves ill prepared for succeeding in a new, unfamiliar society, with qualifications suddenly worth little. Many were exposed to hardship previously unknown to most of them (e.g. unemployment, poverty, social exclusion, limited access to health care depending on financial circumstances). The people of CEE had difficulties coping in this new environment – and, as a consequence, they also changed their behaviour in regard to other aspects of life. This included decisions about having children or not, as well as the decision of leaving their country of origin altogether, temporarily or for good.

The objective of this article is to describe the unintended aggregate outcomes of these individual decisions at the macro level of society that have become manifested in the population structure of these countries, resulting in rapid population ageing all across Central and Eastern Europe. It will explain how the CEE societies have been moving from 'Red to Grey', to quote the title of a recent publication by the World Bank (Chawla, Betcherman & Banerji 2007). It will be argued that this development is extraordinary in its rapidness, occurring over a very short period in historical terms.

Until today, little attention has been paid to the causes of this fertility decline (Caldwell & Schindlmayr 2003). The present article will argue that population ageing in Central and Eastern Europe is an (unintended) outcome of the socio-economic insecurity following the economic crisis accompanying the transformation of the CEE planned economies to market economies. Hence, the central research question this paper addresses is: *Is there a causal relationship between socio-economic crisis and population ageing? More specifically, does socio-economic crisis result in lower fertility rates, a greater likelihood of emigration of the younger generation and a slower increase in life expectancy?* Relevant Eurostat statistics will be used to find an answer to this question.

The article is structured in the following way: It begins with a review of literature and European statistics on the relationship between socio-economic crisis and demographic change. This is followed by the presentation of recent demographic trends in CEE. More specifically, we will look at the development of mortality, fertility and migration patterns – the three factors known as the 'drivers' of population ageing and what effect they have on the population structure in CEE. Concluding, implications of population ageing for the CEE societies will be discussed and some policy recommendations to cope with these changes will be made.

## **The Relationship between Socio-economic Crisis and Demographic Change**

All CEE societies experienced socio-economic crises at some or even several points during the past twenty years. In the subsequent section, the debate on the link between socio-economic crisis and demographic change will be reviewed to support the argument raised in the central research question above. There has been quite a bit of research on the interrelationship between population and economic growth, with demography being the independent and economic growth being the dependent variable (Bloom, Canning & Sevilla 2003). Less effort was dedicated to the question if socio-economic factors can cause demographic change, or conversely, demographic change can be the outcome of socio-economic transitions.

Some papers can be found in the context of developmental studies, such as Lesthaeghe's proposition that changing aspirations about the number of children occurred in response to difficult economic circumstances and subsequently declining returns to investments in children's education (Lesthaeghe 1989). A study conducted in Cameroon based on event-history data concluded that the fertility decline in that region was caused by economic crisis (Eloundou-Enyegue, Stokes & Cornwell 2000). Teitelbaum & Winter (1985) deduced that the economic crisis of the 1970s had encouraged the emergence and persistence of low-fertility attitudes in the United States. Hobcraft (1996) came to the same supposition in an attempt to explain falling fertility levels in the UK during the 1970s, arguing that the economic crisis and the subsequent victory of neo-liberal ideology had resulted in greater job insecurity and less social protection, which in combination effectively discouraged women to have children.

Linking demographic change in Central and Eastern Europe during the 1990s with the socio-economic transformation process is not an entirely new thought – several studies from the region (see, for example, Holzer & Kowalska 1997; Kamaras 1999; Philipov 2001; Rychtarikova & Kraus 2001), as well as others with a research interest in the region (e.g. Caldwell & Schindlmayr 2003; Standing 1996;

Witte & Wagner 1995) came to the same conclusion. Walberg et al. (1998) argue based on a study in the European part of the Russian Federation that the sharp decline in life expectancy since 1990 was a result of the social and economic transition process, exacerbated by a lack of social cohesion (growing income inequality, large increases in crime rates).

Others challenged this claim arguing that there was no hard evidence of a substantial and prolonged economic crisis all across CEE (see, for example, Maddison 2001). Furthermore, Maddison (2001) pointed out that there was quite a lot variation between the countries of Central and Eastern Europe: while some were really going through a prolonged spell of economic slowdown, others sported economic growth rates way beyond those common in Western Europe. Eurostat provides the statistical evidence to substantiate that claim. For example, the Czech Republic had a lower unemployment rate than the EU15 average during the mid/late 1990s, whereas Latvia, for instance, experienced much higher unemployment rates (Eurostat 2004: table 43, p. 94). But there is also some 'hard evidence' of the economic decline in the region. Thus, Latvia suffered a massive drop in volume growth of GDP in the early 1990s – as much as a third compared with the previous year in 1992 alone (Eurostat 2004: table 1, p. 10). Other CEE countries, including the Czech Republic, saw their GDP decline at some point during the 1990s as well.

However, what the observers of 'hard economic facts' fail to understand is that individual adaptation strategies, such as postponing births or childlessness, are based on *perceived* economic insecurity. Thus, the explosion of consumer prices in the 1990s had a far more devastating effect than a decline in GDP. Shedding light to comprehending often traumatic transition experiences, Standing (1996) pointed out that people in CEE lost the three main pillars of economic security the previous system was based upon early in the transformation process: (1) guaranteed employment from completion of full-time education to retirement, (2) social protection by means of stable low prices through government subsidies, and (3) various enterprise based in-kind social benefits (housing, public childcare, healthcare, etc.). The IMF's and the World Bank's 'shock therapy' approach for 'previously overprotected populations' quickly removed these foundations, together with the comprehensive pro-natalist family policy measures various CEE governments had implemented during the 1980s to boost fertility levels, which the labour-intensive economies of the 'communist' world relied on. These measures included all-day public childcare, affordable housing, interest-free financial assistance for young families, holiday facilities, as well as the constitutional protection of the rights of illegitimate children (Caldwell & Schindlmayr 2003 #29). Ostner (1997) estimated that the East German government covered as much as 80 per cent of the total costs of children.

This section showed that there is evidence of a link between socio-economic crisis and demographic change in the literature and that this can be proven for CEE as well. How did the socio-economic transformation process impact on demographic development?

### The Drivers of Population Ageing in Central and Eastern Europe

Historically, Southern and Eastern Europe has lagged behind Western and Central Europe in demographic terms. The first demographic transition occurred much later than in the West. Particularly noticeably was the late decline in fertility, which only happened by the end of the 19<sup>th</sup> century – more than a century later than in France, half a century later than in the rest of Western Europe and even trailing the Central European 'laggards' Austria, Germany and the Czech Republic (Chesnais 1992). Nevertheless, fertility began to fall again even sooner than in the West – allegedly due to the legalisation of abortion in the 1950s (according to Da Vanco & Grammich (2001), 7 out of 10 Russian pregnancies ended in abortion).

There are three causal factors or 'drivers' of population ageing: mortality, fertility and migration. More specifically, demographic ageing is the outcome of the combined effects of rising life expectancy (mortality), resulting in a growing share of older people, and declining birth rates (fertility), resulting in decreasing share of younger people. This societal ageing process is often aggravated by a substantial emigration of younger people, thus contributing to the declining share of younger people in the population.

**Drivers of population ageing I: Mortality.** The subsequent figures show the development of the life expectancy at birth for men (figure 1) and women (figure 2) since 1960 for all CEE countries for which Eurostat provides data<sup>1</sup>. The EU15 average (dark black line) was provided as a yardstick for comparing CEE with the old EU member states. Since 1960, male life expectancy at birth increased by

<sup>1</sup> The Serbian data presented here still includes Montenegro.

nearly ten years from about 67 years (1960) to 77 years (2004) in the EU15 in line with dramatic improvements in healthcare technology. How does Central and Eastern Europe compare?

Surprisingly from today's perspective, by 1960 life expectancy for men in some CEE countries was higher than in the EU15 – namely in Bulgaria, the Czech Republic and Slovakia (all 68 years). In contrast, today all men living in CEE can expect to live shorter lives than their Western European contemporaries. Overall, CEE has seen improvements in male life expectancy over the past one or two decades, but all CEE countries lag behind the EU15 average in this respect and have seen slower increases in male life expectancy. The exception of the rule is the Czech Republic, which was catching up more quickly during the 1990s before gains in male life expectancy slowed down again. By 2005, Slovenian men (73.5 years) came closest to Western European standards. Others are less fortunate, with those living in the former Soviet republics Estonia, Latvia and Lithuania only reaching 66 years.

Particularly dramatic is the situation in Russia (not included in figure 1) that witnessed a considerable decline in life expectancy for men between 1970 and 2000 – a development unprecedented in human history at times of peace and in the absence of any major plagues, only rivalled by similar trends in the neighbouring former Soviet republics Belarus, Moldova and the Ukraine. Between 1970 and 2000 male life expectancy at birth in Russia fell from 64 to 59 years (!), which since then only slightly recovered. Recent research identified unhealthy life-styles (namely excessive alcohol consumption) (Bloom, Canning & Sevilla 2003; Leon et al. 1997; Shkolnikov & Valin 1995; Walberg et al. 1998) resulting in the high prevalence of cardiovascular diseases and circulatory problems, growing income and health inequalities, and poor nutrition (Marmot 2007) as main causal factors for this occurrence. The demise of the Russian health care system following the collapse of the Soviet Union certainly added to the problems, which saw the return of tuberculosis and a by European standards unprecedented spread of HIV/AIDS.

Furthermore, the post-communist mortality crisis in Russia is characterised by a number of anomalies. First of all, mortality is particularly high among Russian men of working-age (Bloom, Canning & Sevilla 2003; Zohoori et al. 1998). Secondly, well-educated Russian men are less likely to survive until an age of 65 years than those with elementary education (Marmot 2007). This is most likely to be an income rather than an education effect. Normally, one would expect a positive correlation between education and life expectancy – not so in post-communist Russia!

More risky life-styles are commonly associated with men. If that was the main causal factor, CEE women should compare more favourably with their Western European contemporaries than men. Figure 2 below shows the female life expectancy at birth for CEE compared with the EU15 average.

In analogy to the development of the male life expectancy at birth, women in CEE can expect to live shorter lives than their Western European contemporaries. However, the difference between CEE and the old EU member states is not nearly as pronounced as it was the case with men and there appears to be less variation. The EU15 average female life expectancy at birth was 82 years in 2004 – up from 73 years in 1960. Again, Slovenia comes closest with a female life expectancy at birth of almost 81 years. In contrast, Romania (75.5), Macedonia, Bulgaria, and Lithuania (76) have the lowest female life expectancy, which is however still a lot better than in Russia where women can only expect to live 74 years.

Striking is the rapid increase of the life expectancy for Macedonian women by 14 years since 1960, from 62 to 76 years in 2004, in line with massive improvements of health care and sanitation. It is also worth mentioning that Czech women had a higher life expectancy at birth in 1960 than the EU15 average, with the Baltic states Latvia, Lithuania and Estonia, as well as Bulgaria coming close too. At the beginning of the 21<sup>st</sup> century this picture has changed, with the Czech Republic, Poland and Croatia following Slovenia's lead as coming closest to EU15 level.

**Drivers of population ageing II: Fertility.** When the prospect of ageing societies first entered the stage of academic and political mainstream debate – arguably, in some CEE countries that point has yet to come (Hoff, 2006a) – rising life expectancies were seen as the main driving force behind demographic change. However, according to Chesnais “Pronounced ageing can only be brought about by rapid fertility decline...” (Chesnais 1992: 290). In recent years, academics with a research interest in ageing started to remember that the increasing share of older people in societies or populations resulting in their ‘ageing’ could be caused by two factors rather than just one. Today, we have become increasingly aware of the crucial importance of the other factor in the equation – fertility. If the share of younger people in any given society declines, that of older people increases as a consequence. The following figure 3 summarises fertility trends in Central and Eastern Europe since 1960 and compares them with the EU15 average, using total fertility rates as an indicator.

Overall, the CEE countries seem to be following the lead of the old EU member states: birth rates have drastically fallen since the 1960s. In contrast, Fratczak (2004) argues that the fertility decline today common all across Europe originates in CEE. Looking at the development over the past

decades in a bit more detail, the Western pattern of a slight decrease in the number of births per woman during the 1960s, followed by a steep fall in the 1970s, declining further during the 1980s and 1990s, and since the turn of the millennium remaining stable just above 1.5 births per woman, is not mirrored by fertility trends in CEE.

Whereas birth rates fell below replacement level of 2.1 births per woman<sup>1</sup> in the EU15 countries during the 1970s already, the majority of CEE only experienced that after 1990. Croatia was the only country that saw its fertility levels fall below replacement level as early as 1970, with Hungary and Bosnia-Herzegovina following in the early 1980s and Slovenia, the Czech Republic and Bulgaria in the mid/late 1980s. All other CEE countries only experienced below-replacement level fertility during the 1990s (Estonia, Latvia, Lithuania, Macedonia, Poland, Romania, Serbia-Montenegro, and Slovakia). Albania has been a high-fertility country, with birth rates comparable to developing countries (total fertility rate of 6.85 in 1960 and 5.16 in 1970), only very recently dropping to replacement level (Gjonca 2007).

Figure 1: Male life expectancy at birth 1960-2004\*

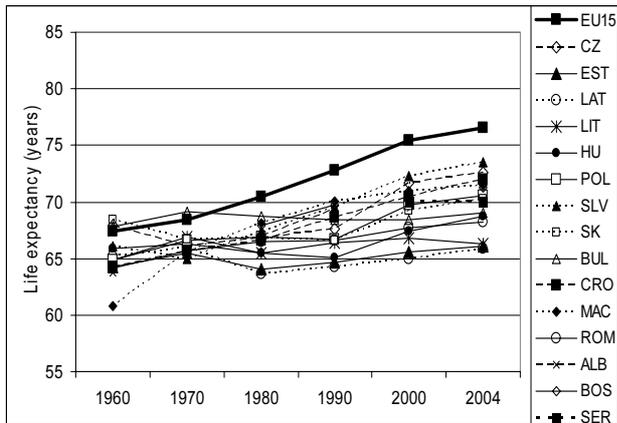
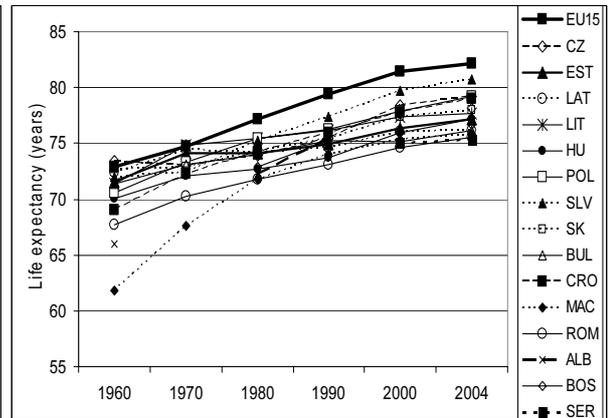


Figure 2: Female life expectancy at birth 1960-2004\*



Source: Eurostat 2006, table E-4, p. 88.

Source: Eurostat 2006, table E-5, p. 89.

Figure 3: Total fertility rates 1960-2004\*

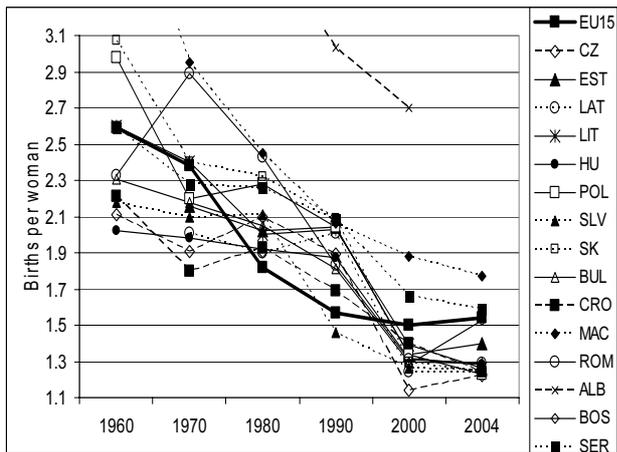
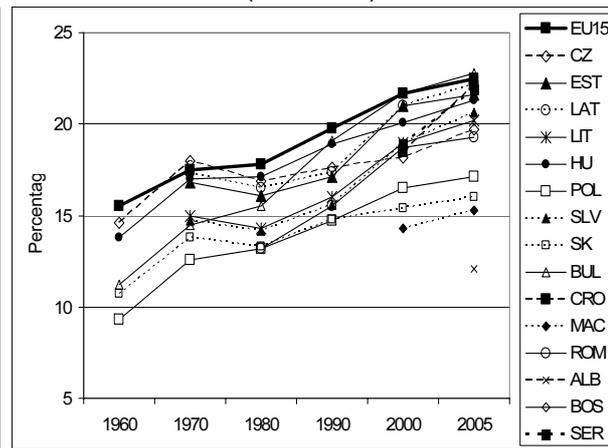


Figure 4: Percentage of people aged 60 years and older (1960-2005)



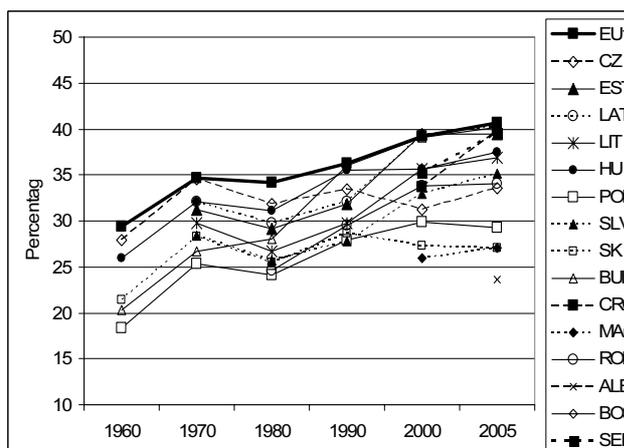
Source: Eurostat 2006, table D-4, p. 76.

Source: Eurostat 2006: table C-5, p. 60.

\* The most recent data available for Albania, Bosnia-Herzegovina, Estonia, Serbia-Montenegro is from 2003.

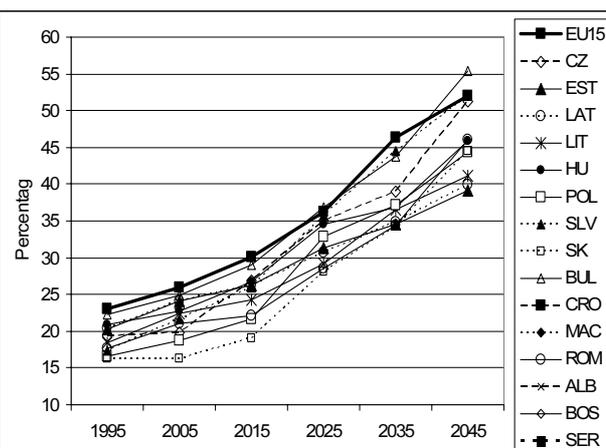
<sup>1</sup> The so-called 'replacement level' of 2.1 births per woman is equivalent to the number of births required to counterbalance the natural loss due to the death of both parents plus a residual of 0.1 taking into account premature deaths during childhood, adolescence and adulthood.

**Figure 5:** Past development of the old-age dependency ratio - population aged 60+ as percentage of population aged 20-59 (1960-2005)



Source: Eurostat 2006: table C-8, p. 63

**Figure 6:** Projected old-age dependency ratio – population aged 65+ as percentage of population aged 15-64 (1995-2045)



Source: Eurostat 2005

Comparing the overall fertility trends between CEE and the EU15 over the years, it is striking to see that fertility rates in most CEE countries were below Western European levels during the 1960s. By 1990, this situation had reversed and all CEE countries except Slovenia had higher fertility rates than the EU15 average. However, Central and Eastern Europe witnessed a historically unprecedented, very rapid fall in fertility during the 1990s, caused by economic uncertainty during the socio-economic transition to market-oriented societies. In all but four countries (Albania, Macedonia, Serbia-Montenegro, and Slovenia) birth rates fell dramatically, from levels between 1.7-2.1 to an extremely low level of 1.1-1.4 births per woman – well below Western European levels that are already regarded as relatively low. This change was particularly pronounced in Slovakia, Lithuania, the Czech Republic, Poland, and Estonia (in descending order of sharpest fall) where the total fertility rate fell by 0.7-0.8 within a decade.

This radical decline in fertility in CEE during the 1990s is unique in history. Japan is the only other developed society that experienced an equally rapid fertility decline. After the Second World War, Japanese fertility fell by half within just eight years (1949-1957) (Chesnais 1992). In the wake of this extraordinarily rapid fertility drop, Central and Eastern Europe represent the majority of very-low-fertility countries worldwide and also include the three lowest-fertility countries in the world: Armenia, the Czech Republic, and Ukraine, all with total fertility rates of 1.1 (Caldwell & Schindlmayr 2003).

**Drivers of population ageing III: Migration patterns.** In contrast to mortality and fertility, there is no direct causal relationship between migration and population ageing. Whether or not migration contributes to population ageing depends on the interaction of two factors: (1) the nature of migration (emigration or immigration) and (2) the age structure of the migrant population. How do they interact? A double combination of both factors (see table 1 below) has the potential to either speed up or to slow down population ageing. Whereas the emigration of many young people (A) or the mass immigration of older people (D) would accelerate population ageing, an emigration of many older people (B) or an immigration of many younger people (C) would result in a slow-down of population ageing.

Table 1: Interaction between emigration/immigration and age structure

	Emigration	Immigration
Young migrants	A	B
Older migrants	C	D

Examples for each of these scenarios can be found in Europe's present or recent past. Western European policy makers and some demographers were hoping to counteract the ageing of their populations by 'importing' young workers to solve their demographic problems (situation B). As we know

today that turned out to be illusionary, given the extraordinarily high numbers required for levelling out the effect of the growing share of older people. For example, the expert commission of the Fifth Ageing Report for the German government estimated that Germany alone would need a net immigration (balance between total immigration and emigration) of half a million immigrants per year to have enough workers for continued economic growth – and even this enormous number would merely postpone the impact by 20 years and not solve the problem (BMFSFJ 2005).

On the other hand, we witness the growing popularity of the mild climate of the Mediterranean coast among Northern, Western and Central European pensioners (so-called 'sun bird migrants'), with many of them setting up a second home in Southern France, Spain or other Southern European countries. By doing that, they 'relieve' their home countries of significant numbers of older people<sup>1</sup> (situation C) – at the same time increasing the share of older people in Southern Europe (situation D). These flows of older migrants, however, have been temporary so far – most of them return to their countries of origin once they begin experiencing health problems that the sophisticated welfare states of Northern and Central Europe are much better equipped to deal with and once they need the regular support of their families (source). Situation A with a particularly rapid population ageing due to many young people leaving their home countries is the dilemma currently faced by Central and Eastern Europe.

What is the actual situation in CEE in regard to migration? First, a word of caution: migration statistics are notoriously imprecise, with national and European official statistics in many cases only measuring permanent changes of residence. Neither temporary, nor illegal migration can be registered this way. Since all citizens of the European Union are free to move to other EU member states, it is virtually impossible knowing for sure how many people actually emigrated from or immigrated to a particular country. As a consequence, official statistics grossly underreport actual movements, whereas their actual numbers are otherwise the objects of wild speculation. According to recent British news reports, for example, some 800,000-1,000,000 people from CEE entered the United Kingdom alone since EU enlargement in 2004 (BBC 2008) – a figure that may look plausible, but cannot be proven.

What is certain, though, is that the migration balance for the new member states is negative. Eurostat estimates that emigration from these countries exceeded immigration by 1.7 million people over the period of 1960-2004 (Eurostat 2006). The majority of CEE countries (Albania, Bulgaria, Croatia, Estonia, Latvia, Lithuania, Macedonia, Poland, Romania, and Slovakia) have seen emigration exceeding immigration during the 1990s (Eurostat 2006, table F-1, p. 97). Lithuania and Poland have been the main sending countries since the breakdown of communism (Eurostat 2006, table F-3, p. 99).

However, migration trends in CEE are extremely dynamic, with unexpected changes occurring within very few years. Thus, a number of CEE countries have now become targets of immigration, with people from poorer parts of CEE, as well as other parts of the world coming in. As Fraczak (2007) pointed out using the Polish example: migration dynamics change so rapidly that a former migrant sending country can turn into a migrant receiving country within a period of five years. Hungary and the Czech Republic have seen a positive migration balance since the early/mid 1990s due to significant immigration throughout the 1990s and early 2000s. More recently Slovenia is also sporting positive net migration since it became a major target of immigration since 2000. Latvia is another example for the rapidly changing nature of migration patterns in CEE: while it lost a significant part of its population during the 1990s, only few people have left the country since the year 2000 (Eurostat 2006, table F-1, p. 97 and table F-3, p. 99). Especially after accession to the European Union many CEE countries have become popular immigration destinations elsewhere in the world. Moreover, one must not underestimate the specific dynamics of migration of the indigenous population in CEE. Using the example of Romania, Nemenyi (2007) pointed out that nearly half (45 per cent) of all migrants left Romania for a short period only after which they returned, 29 per cent left for a longer period and only 23 per cent left for good.

To estimate the likely impact on the ageing societies of CEE it is necessary to consider the age structure of the emigrants/immigrants. Eurostat provides this information for the following CEE countries: Croatia, the Czech Republic, Hungary, Latvia, Lithuania, Slovenia, and Slovakia (see Eurostat 2006, table F-6, p. 102 (immigration) and table F-7, p. 103 (emigration)). The vast majority of emigrants from these countries are of working age, most of them aged 25-39 years old. Only very few older people aged 65 years or older emigrate abroad from these countries. Immigrants are slightly older, predominantly representing the 25-39 and 40-64 years age categories.

Concluding the section on the drivers of population ageing we find that (except Russia and some other former Soviet republics) CEE witnessed a continuous increase in life expectancy since the collapse of communism. Characteristic of recent demographic change in the region is a dramatic drop

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<sup>1</sup> though most of them remain registered in their countries of origin

in fertility during the 1990s. Furthermore, most CEE countries have seen many of their young leaving their countries for a better future elsewhere. In the meantime, however, some countries turned into immigration societies themselves. In the next section we will explore if these still quite recent changes already left their mark in the population structures of CEE countries.

### **Effects on the Population Structure – Evidence of Population Ageing in Central and Eastern Europe**

In the previous section, we discussed the mortality, fertility and migration dynamics in CEE over the past decades. We argued that these drivers of current demographic change would result in population ageing – but we have not shown that yet. This will be done in this section, using two common indicators of population ageing: (a) the share of older people in the population and (b) the old-age dependency ratio.

**Share of older people in the population.** The proportion of older people in European societies has grown since the 1960s. Older people's (defined as those aged 60 years and older) share of the populations in the EU15 increased from 15.5 per cent in 1960 to 22.5 per cent in 2005 (see figure 4). How does CEE compare with that?

Generally speaking, the course of development in CEE reflects the pattern of the EU15: a steeper increase during the 1960s was followed by a much slower growth in the 1970s and a continuous rise since then. However, if we look more closely, we will notice a steeper upward slope in several of the CEE countries during the 1990s (Bulgaria, Estonia, Latvia, Lithuania, Slovakia, Slovenia) and the first part of the 2000s (Serbia-Montenegro). By 2005, the share of older people in Bulgaria was even higher than that in the EU15. In the remaining CEE countries, the share of older people continued to rise, albeit at a lower rate. In short, CEE has experienced the ageing of its populations since the collapse of communism – and nearly half of the countries observed have witnessed a more rapid ageing process than Western European societies.

**Old-age dependency ratio.** In this section, we will consider another measure of population ageing, which has become very popular in recent years since it represents the burden (to be) faced by public pension and health care systems due to population ageing – the old-age dependency ratio. The old-age dependency ratio expresses the number of older people in relation to the number of people of working age. In other words, it indicates how many older people are dependent (in a pay-as-you-go pension system) on the social insurance payments or (in a tax funded pension system) on taxes paid by the younger generations currently in employment, or conversely, how many older people each person of working age has to support. Figure 5 shows the development of the old-age dependency ratio over the past 45 years. It shows that the old-age dependency ratio in the EU15 has very rapidly increased during the 1960s, followed by a slight decrease during the 1970s and a continuous rise since then, mirroring the rise of older people's share of the population.

Development in CEE was following that course initially. However, we see dramatic rises in the old-age dependency ratio in various CEE countries during the 1990s, with growth rates between 7-8 per cent in Estonia, Latvia and Lithuania and 3-4 per cent in Bulgaria, Romania and Slovenia. Bulgaria was the forerunner of this development in CEE, with an 8 per cent increase during the 1980s already. Croatia and Serbia-Montenegro were catching up in the first half of the 2000s, with growth rates between 4 (Serbia-Montenegro) and 6 per cent (Croatia). On the other hand, the Czech Republic and Slovakia witnessed a slight reduction in their old-age dependency ratios during the 1990s. Today, Bulgaria, Croatia, Estonia, and Latvia nearly match EU15 levels, with Hungary and Lithuania following closely. In contrast, Albania, Macedonia, Poland, and Slovakia still have old-age dependency ratios below 30 per cent indicating a less severe problem for public finances and services.

We can conclude two things from that: (1) the dramatic demographic change since the 1990s has already resulted in a very rapid population ageing in CEE, with the implications for public finances already felt; and (2) there has been quite a bit of variation across the region – not all CEE countries are affected in the same way.

Next, we will have an outlook into the future of the ageing CEE societies, using a projection of the old-age dependency ratio over the next 40 years (see figure 6). One should note, however, that this projection is using a measure different from the one used in figure 6. In line with the growing recognition to regard somebody as old only when s/he reaches an age of 65 years, the projection uses the share of people aged 65+ (rather than 60+ in figure 5). Why Eurostat set this in relation to the 15-64 years olds rather than the 20-64 years olds can only be speculated about. Using this measure obviously results in significantly lower dependency ratios than in figure 5. Thus, we are in the position to compare trends – but figure 6 is not the continuation of figure 5.

Figure 6 shows a continuous rise of the old-age dependency ratio over the next four decades, both in the EU15 where it is projected to double within that period and in CEE. The development in CEE is mirroring that trend, though following at a slightly lower level. Some countries, however, will experience steeper rises than others, with Bulgaria projected to surpass EU15 level by 2045 and the Czech Republic and Slovenia matching it. Poland, which at the moment still has a relatively young population, will witness a steep rise in the old-age dependency ratio between 2015 and 2025. What is really worrying is that this projection is not science fiction or wild speculation – it is largely based on demographic data available at present. Many future parents of the 2020s and 2030s are already born.

Summarising the findings of this section on the structural changes in the CEE populations due to the effect of the drivers of demographic change, we can conclude that since 1990 CEE has experienced a more rapid ageing of its populations than Western Europe. However, there is considerable cross-national variation in the region – stating overall trends for CEE can therefore be misleading in some cases. Finally, the demographic trends in CEE will follow a pattern very similar to that in the EU15 over the next decades.

### Conclusions: Implications of Population Ageing in Central and Eastern Europe

The aim of this article was to find an explanation for the extraordinarily rapid demographic change in Central and Eastern Europe (CEE) during the 1990s. It was argued that population ageing in Central and Eastern Europe is an unintended side effect of the socio-economic transition from 'communist' to 'capitalist' societies. More specifically, it was shown that population ageing in CEE is the aggregate outcome of individual decisions in response to perceived growing socio-economic insecurity. An unprecedented drop in fertility in combination with the emigration of many young people and improvements in life expectancy have resulted in rapid ageing of the CEE populations, partly at an even more rapid pace than in Western Europe.

In detail, evidence for the interaction between socio-economic crisis and demographic change was presented by making reference to the relevant literature and by using European statistics on socio-economic development. Clear evidence for a change in the population structures of the CEE countries representing rapid ageing of their societies was found. It was demonstrated how three demographic factors – mortality, fertility and migration – are driving this ageing process. However, there is considerable cross-national variation in the region, with some countries experiencing a more rapid ageing process than others.

What are the implications of this development? A comparison with Western Europe (defined as the EU15 plus Iceland, Norway, Switzerland) is very illuminating. Western Europe is ageing too – but in contrast to Central and Eastern Europe its societies became affluent before they started to turn into ageing societies. Thus, they are in the position to provide comprehensive welfare state coverage for their older populations, in terms of pension payments<sup>1</sup> as well as in terms of health care, long-term care and social services provision. The situation in Central and Eastern Europe is completely different. Owing to the lack of equivalent social systems, a poorer starting position following four decades of 'communism', sacrifices made during the transformation process to become market oriented societies, a changed overall context of growing global competition, the rapidness of population ageing, as well as the persistence of partly very negative stereotypes about older people (Hoff 2006a; Ruzik & Perek-Bialas 2005) makes life for older people in CEE far more difficult than for their contemporaries in Western Europe. In a nutshell, *Western Europe became rich before it was growing old – Central and East Europe is growing old before it had the chance to become rich.*

What can the Central and Eastern European governments do about population ageing in this context? Providing pension payments that are sufficient to pay for older people's needs and are paid on a regular basis is of course essential. But there are many other things governments can do to improve their ageing populations' quality of life. First of all, they will have to raise public awareness of the specific needs of older people. Thus, the new EU member states established ministerial departments working on the National Action Plans (NAPs) to reduce poverty and social exclusion of disadvantaged social groups (which includes older people) in their respective countries to comply with the aims set out by the EU Lisbon Agenda using the so-called Open Method of Co-ordination (Hoff 2006b). Secondly, CEE policy makers will have to continue developing an infrastructure catering for the needs of older people. This is particularly important in the light of growing concerns about the capacity of families to continue providing support for their older members. The emigration of younger people from their

<sup>1</sup> Despite of various pension reforms since the mid/late 1990s that significantly lowered pension payments compared with that received by previous cohorts in the West, they are still generous compared with other parts of the world.

places of origin – whether they move abroad or to their national hubs of economic activity has the same effect – is likely to erode the families' capacity to provide day-to-day assistance with cleaning, shopping, repairs, etc. Therefore, it is vital that more, more widespread and better social services are provided. These services would be the main, if not the only source of support for older people without local family support. At the same time, they would make life easier for other older people as well. Caring for an older family member (usually parent or partner) is a very demanding job that can easily overburden a family carer. Therefore, the provision of respite care to give family carers a break from their responsibilities (to go on holidays, for example) would help to maintain family solidarity. Furthermore, better linking social services with healthcare, better linking informal care with professional care, would improve the situation of older people and their carers considerably.

Developing social policies for older people has to be a central task of policy-making in an ageing society. But that is only part of the equation for securing a sustainable demographic development in the future. At the same time, CEE policy makers will have to make life for their younger generations attractive to stem the tide of young emigrants leaving their countries for better employment prospects in the West. Central and Eastern Europe is currently facing the worst case scenario in terms of migration patterns, with millions of their young, well-educated people emigrating to Western Europe and North America, resulting in a 'brain drain' these countries can ill afford. But also the demographic consequences are dramatic. Not only does the loss of many young people increase the share of older people in the CEE societies, effectively accelerating the ageing of their populations – the loss of the younger generation will have consequences for the future demographic development of the CEE countries. Young women born in CEE will now have their children abroad and 'boost' other countries' fertility. Thus, the number of births is unlikely to return to the pre-1990 levels even when the socio-economic transition is completed at some point in the future, which would be difficult enough anyway according to Caldwell & Schindlmayr's (2003: 257) verdict that "A global economy governed by liberal economics creating a high degree of economic individual insecurity may be incompatible with societal replacement."

An answer to this dilemma could be a new intergenerational approach in Central and Eastern European policy-making, which takes seriously the interests of both the older and the younger generations. This approach would need to raise public awareness of the benefits of intergenerational solidarity – both at family and societal level. Older people need assistance in their homes – young parents need help with childcare (grandchildren). Older and younger people can learn from each other. They can socialise with each other. A number of NGOs (e.g. 'Zivot90' in the Czech Republic, 'Forum 50+' in Poland, SAMBURIS "GABIJA" in Lithuania, the 'Anton Trstenjak Institute' in Slovenia) have emerged all across CEE to promote intergenerational interaction, such as intergenerational learning activities where the young teach older people how to use computers or programmes entitled "Adopt a grandma!" that bring together otherwise socially excluded people, such as lone mothers and their children with older people lacking social contacts.

Intergenerational solidarity can be a major asset of CEE countries, with their well-trained older workforces exchanging skills and knowledge with their well-educated, flexible and mobile young generations. The former mastered the difficulties of life in a 'communist' society; the latter bravely face the challenges of free, globalised market societies full of uncertainty. The middle generation that changed life under 'communist' rule in the 'Solidarnosc' movement of the early 1980s, the 'Perestroika' of the mid/late 1980s, or the 'peaceful revolution' of 1989/90 experienced that individual people can change even the most difficult circumstances. Each generation can make a specific contribution to mastering the challenge of the *ageing transition societies* in Central and Eastern Europe. Therefore, we conclude that intergenerational solidarity could be a unique asset of CEE societies that will be a key element to successfully mastering the challenges of both an ageing society and completing the transition to democratic market societies in Central and Eastern Europe.

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## VIDURIO IR RYTŲ EUROPOS ŠALIŲ GYVENTOJŲ SENĖJIMAS KAIP SOCIALINIO EKONOMINIO PERĖJIMO PRIE KAPITALIZMO PADARINYS

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### Santrauka

Straipsnio tikslas – išsiaiškinti Vidurio ir Rytų Europos (VRE) šalių nepaprastai sparčios demografinės raidos, vykusios XX a. paskutiniame dešimtmetyje, prielaidas. Siekiama parodyti, jog gyventojų senėjimas VRE šalyse yra šių šalių socialinės ekonominės transformacijos, pereinant nuo „komunistinės“ prie „kapitalistinės“ visuomenės, nenumatytas šalutinis rezultatas.

Sparčiai mažėjant gimstamumui, daugybei jauno amžiaus žmonių emigruojant bei ilgėjant vidutinei tikėtina gyvenimo trukmei nepaprastai spartėja VRE šalyse gyventojų demografinio senėjimo procesas.

Pirmiausiai socialinės ekonominės krizės bei demografinės raidos sąveika atskleidžiama remiantis mokslinės literatūros bei Eurostat duomenų analize. Toliau straipsnyje apibūdinamos gyventojų demografinio senėjimo VRE šalyse tendencijos bei šį procesą skatinantys veiksniai: mirtingumas, gimstamumas, migracija. Galiausiai aptariamos socialinės ekonominės transformacijos bei demografinio senėjimo pasekmės VRE šalims ir jų žmonėms.

**Pagrindinės sąvokos:** demografinė raida, gyventojų demografinis senėjimas, gimstamumas, mirtingumas, migracija, Vidurio ir Rytų Europos šalys.