

## **Findings**

**Overview trends.** The Eastern Europe & Eurasia region is the only region worldwide to have experienced a **contraction in population** from 1991-2002 (*Table 1* and *Figure 1*).<sup>3</sup> The transition region overall witnessed a contraction in population from 1991-2002 of -0.1%. To contrast, high-income economies witnessed population growth of 0.7% in this period and low-income economies, 2%. The population contraction in the transition region is more pronounced (-0.3%) if one excludes the 6 Muslim-majority transition countries (which experienced population growth of 1.4%), and was the most pronounced in the Baltics (-0.8) (*Table 1* and *Figure 2*). 18 of 27 transition countries experienced a contraction in population in this period. A pronounced decline in population growth in the transition region coincided with the collapse of communism; i.e., it became particularly pronounced from 1989 through the mid-1990s (*Figures 1 & 2*).

Population changes are a function of two dynamics: **natural changes in the population** (the difference between **birth rates** and **death rates**) and migration. *Table 2* shows the net effect on population growth from a natural change in the population and migration (i.e., immigration or emigration) from 1999-2002 for the transition region as well as for other parts of the world. The EE region was the only region in the world in this period that experienced both a natural decrease in population and emigration on balance.

*Table 3* and *Figure 3* show the natural change in the population trends from 1991-2002. The EE region is the only region worldwide that has not experienced a natural increase in population from 1991-2002 (where birth rates exceed death rates), and since 1994, the natural change in the population in the region has been negative. This pattern was the most pronounced in Northern Former Soviet Union (NFSU). The Muslim-majority transition countries are the salient exception in the transition region. From 1991-2002, the six Muslim-majority countries experienced a natural increase in population equal to almost 2%, comparable to the natural increase among the low-income developing countries. The natural change of population in EE has passed through 3 stages since 1991: a steep drop from 1991-94; a more moderate drop from 1994-98; and a leveling off from 1999-02 (*Figure 3*).

*Figure 4* shows all the countries of the world for which the crude death rate in 2000-2001 exceeded the crude birth rate; i.e. where a natural decrease in the population took place. Fourteen of these 18 countries are transition countries. The largest decreases in the natural population took place in the NFSU (most notably Ukraine which experienced 197 deaths per 100 births) as well as in Bulgaria and Hungary. Three of the four Western Europe countries (Italy, Greece, and Sweden) had crude deaths exceeding crude births only slightly; Germany's crude death to birth rate was higher (112 deaths per 100 births), and closer to some transition country standards, such as those in Moldova and Croatia

The global trend in **migration** has been emigration from the low-income countries and immigration to the high-income countries (*Table 4*). The EE region, which consists mostly of middle-income countries, experienced emigration on balance from 1991-2002 (*Table 4* and *Figure 5*). The only other region worldwide to experience net emigration during this period was Latin America and the Caribbean.

Twenty of twenty-seven EE countries experienced emigration from 1991-2002. The top three emigrating countries in the transition region in fact are in the top 20 emigrating countries worldwide (*Table 5*): Armenia and Albania are number 1 and 2, respectively. Both countries experienced a reduction in population overall close to 25% during this period. Kazakhstan is number 6 worldwide. Four of the other countries in the top-ten are tiny islands (Samoa, Tonga, Marshall Islands and Dominica); the other top-ten countries are Somalia, Guyana, and Greenland.

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<sup>3</sup> Some of the following figures have been updated to include the recently released data from the World Bank's *World Development Indicators 2005* (April 2005). The tables have not been updated. In most cases, this translated into an additional year (2003) in the charts.

The data show only four transition countries experiencing immigration on balance from 1991-2002: Russia, Hungary, Belarus and Turkmenistan. The data for Turkmenistan are highly suspect (and inconsistent across different sources).

Emigration in the transition region was generally higher earlier on in the transition, particularly in the Balkans and the Caucasus. However, emigration was still taking place in the latest time period assessed (1999-2002) in the majority of transition countries, in 17 out of 27 countries, and most notably in Kazakhstan, Armenia, Tajikistan, and Albania.

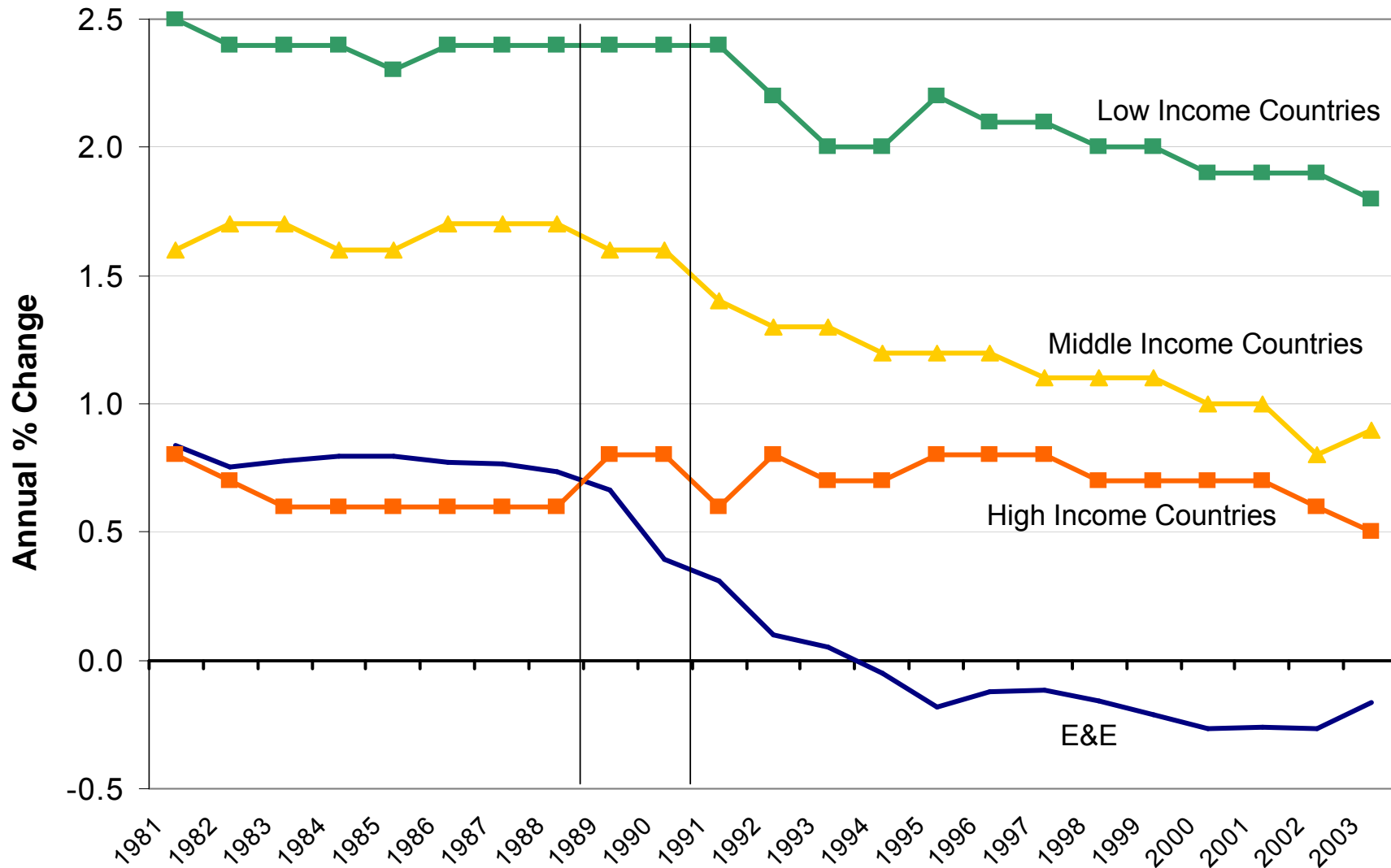
Table 1- Aggregate Population Trends

Table 1: Average Population Growth Rates (%)						
	1981-85	1986-90	1991-94	1995-98	1999-02	1991-02
Turkmenistan	2.5	2.5	2.8	2.2	1.7	2.2
Uzbekistan	2.5	2.5	2.2	1.8	1.2	1.7
Tajikistan	2.9	2.9	2.0	1.6	0.6	1.4
Azerbaijan	1.6	1.4	1.5	1.0	0.8	1.1
Kyrgyzstan	1.9	2.0	0.6	1.4	1.1	1.0
Macedonia	0.8	-0.7	0.6	0.8	0.3	0.6
Poland	0.9	0.5	0.3	0.1		0.2
Slovak Republic	0.8	0.3	0.3	0.2	-0.1	0.2
Serbia and Montenegro	0.8	0.6	0.0	0.3	0.1	0.1
Slovenia	0.7	0.2	-0.1	-0.1	-0.2	-0.1
Hungary	-0.2	-0.4	-0.3	-0.4	0.1	-0.2
Belarus	0.7	0.4	0.1	-0.4	-0.4	-0.2
Czech Republic	0.2	0.0	-0.1	-0.4	-0.2	-0.2
Moldova	0.9	0.8	-0.1	-0.3	-0.3	-0.2
Russia	0.7	0.6	0.0	-0.3	-0.5	-0.2
Romania	0.5	0.4	-0.5	-0.2	-0.2	-0.3
Albania	2.0	2.1	-0.3	-1.1	0.4	-0.3
Georgia	0.8	0.7	-0.4	-0.3	-0.6	-0.4
Ukraine	0.4	0.4	0.0	-0.8	-0.8	-0.5
Lithuania	0.8	0.8	-0.3	-0.7	-0.6	-0.5
Croatia	0.5	0.3	-0.1	-1.9	0.3	-0.6
Bosnia and Herzegovina	1.1	0.6	-5.0	0.9	2.2	-0.7
Bulgaria	0.2	-0.5	-0.8	-0.5	-0.9	-0.8
Kazakhstan	1.0	0.9	-0.1	-1.2	-1.1	-0.8
Latvia	0.6	0.4	-1.2	-1.4	-0.8	-1.1
Estonia	0.7	0.5	-1.8	-1.5	-0.5	-1.2
Armenia	1.5	1.2	-1.2	-1.5	-0.9	-1.2
Europe and Eurasia	0.8	0.7	0.1	-0.1	-0.2	-0.1
NT CEE	0.6	0.3	0.0	-0.1	-0.1	0.0
ST CEE	0.6	0.4	-0.7	-0.3	0.0	-0.3
N. FSU	0.6	0.5	0.0	-0.4	-0.6	-0.3
Eurasia	0.9	0.8	0.3	-0.1	-0.3	0.0
Muslim Majority	2.3	2.3	1.8	1.5	1.0	1.4
European Monetary Union	0.2	0.3	0.4	0.3	0.3	0.3
East Asia and Pacific	1.6	1.7	1.4	1.2	1.0	1.2
Latin America and Carib.	2.1	1.9	1.7	1.6	1.4	1.6
Middle East and North Afr.	3.3	3.1	2.5	2.0	1.9	2.1
South Asia	2.2	2.2	2.0	1.9	1.8	1.9
Sub-Saharan Africa	2.9	2.9	2.6	2.7	2.3	2.5
Low-Income Economies	2.3	2.3	2.1	2.1	1.8	2.0
Middle Income Economies	1.6	1.6	1.3	1.2	0.9	1.1
High Income Economies	0.7	0.7	0.7	0.8	0.7	0.7

World Bank, *World Development Indicators* (2004). Serbia-Montenegro's 2002 population growth rate was excluded from the aggregations.

**Figure 1**

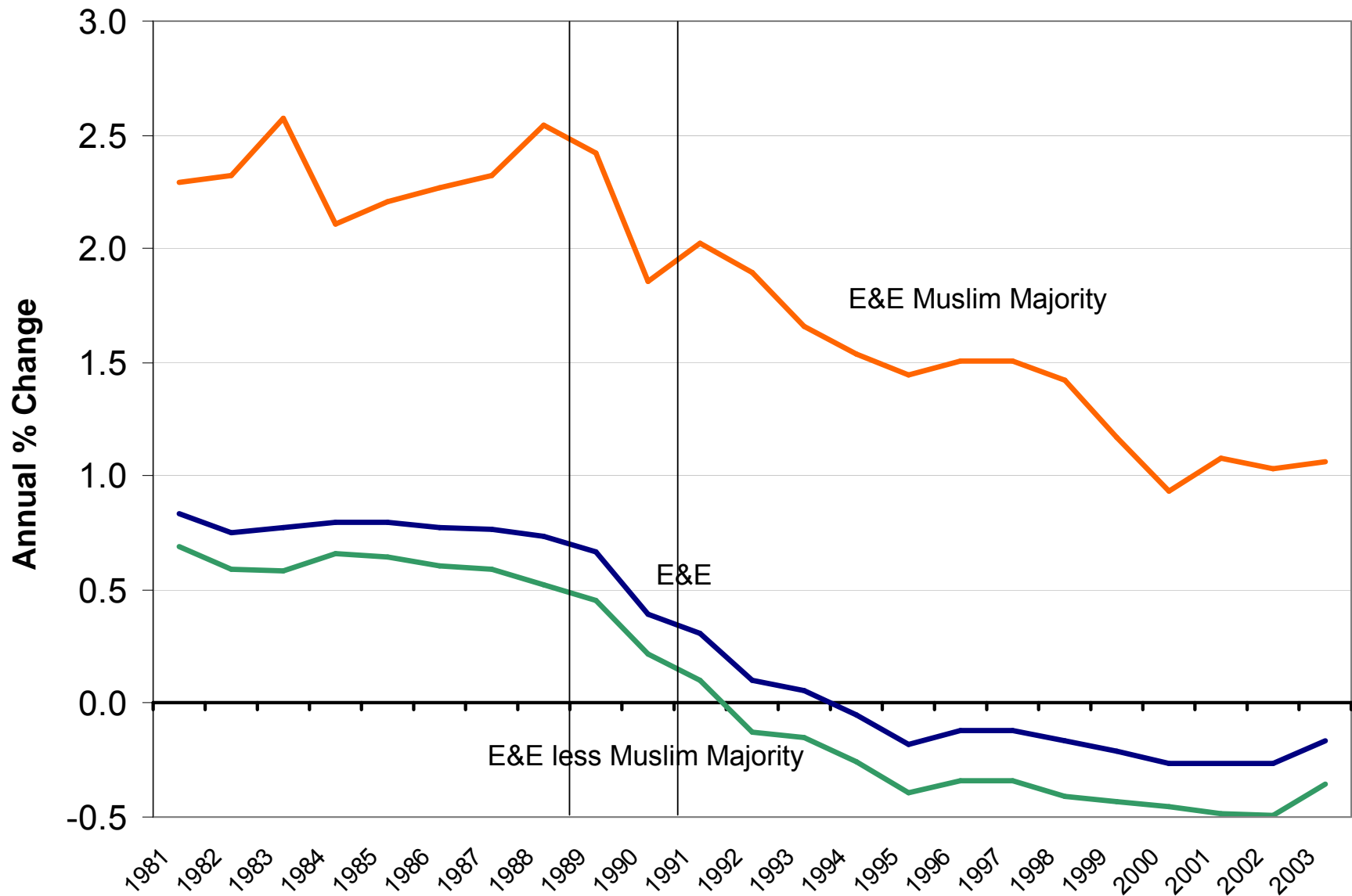
# Population Growth in the World



World Bank, *World Development Indicators* (2005). Missing values were interpolated.

**Figure 2**

## Population Growth in E&E



World Bank, *World Development Indicators* (2005). Missing values were interpolated.

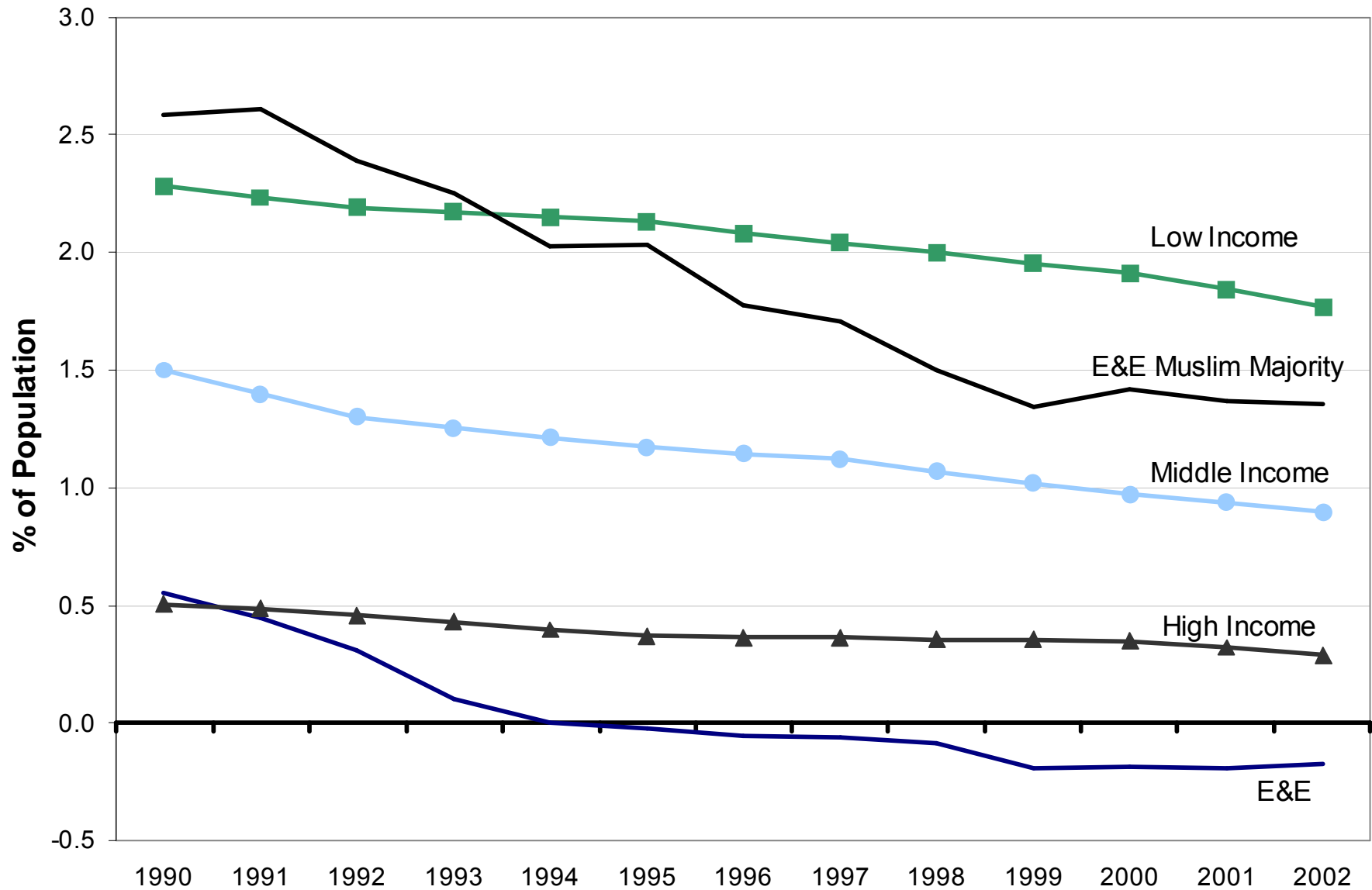
Table 2: Natural Change, Migration & Population Growth 1999-02			
	Natural Change	Migration	Population Growth
Ukraine	-0.7	-0.1	-0.8
Russia	-0.6	0.1	-0.5
Latvia	-0.5	-0.2	-0.8
Bulgaria	-0.5	-0.4	-0.9
Belarus	-0.5	0.1	-0.4
Estonia	-0.4	0.0	-0.5
Hungary	-0.4	0.5	0.1
Czech Republic	-0.2	0.0	-0.2
Lithuania	-0.2	-0.4	-0.6
Croatia	-0.2	0.4	0.3
Romania	-0.2	-0.1	-0.2
Moldova	-0.1	-0.2	-0.3
Georgia	-0.1	-0.5	-0.6
Slovenia	-0.1	-0.2	-0.2
Slovakia	0.1	-0.1	-0.1
Serbia-Montenegro	0.1	0.0	0.1
Armenia	0.3	-1.1	-0.9
Bosnia-Herzegovina	0.4	1.8	2.2
Kazakhstan	0.4	-1.5	-1.1
Macedonia	0.5	-0.2	0.3
Azerbaijan	0.9	-0.1	0.8
Albania	1.2	-0.8	0.4
Kyrgyzstan	1.4	-0.3	1.1
Turkmenistan	1.4	0.2	1.7
Tajikistan	1.5	-0.9	0.6
Uzbekistan	1.6	-0.4	1.2
Poland*	0.1	0.0	0.1
Europe and Eurasia	-0.2	-0.2	-0.4
NT CEE	-0.1	0.0	-0.1
ST CEE	0.0	-1.1	-1.1
Eurasia	-0.2	-0.1	-0.3
NFSU			
Muslim-majority	1.4	-0.4	1.1
European Monetary Union	0.1	0.2	0.3
East Asia and Pacific	1.0	0.0	1.0
Latin America and Carib.	1.5	-0.1	1.4
Middle East and North Afr.	1.9	0.0	1.9
South Asia	1.8	0.0	1.8
Sub-Saharan Africa	2.3	0.1	2.3
Low-Income Economies	1.9	-0.1	1.8
Middle-Income Economies	1.0	0.0	0.9
High-Income Economies	0.3	0.3	0.7

\* Data for 1995 - 1998.  
World Bank, *World Development Indicators* (2004). Serbia-Montenegro's 2002 population growth rate was excluded from the aggregations.

Table 3: Average Rate of Natural Increase (%)				
	1991-94	1995-98	1999-02	1991-02
Ukraine	-0.3	-0.6	-0.7	-0.5
Latvia	-0.3	-0.6	-0.5	-0.5
Russia	-0.3	-0.5	-0.6	-0.5
Bulgaria	-0.3	-0.6	-0.5	-0.5
Estonia	-0.3	-0.5	-0.4	-0.4
Hungary	-0.3	-0.4	-0.4	-0.3
Belarus	0.0	-0.4	-0.5	-0.2
Czech Republic	0.0	-0.2	-0.2	-0.1
Romania	0.0	-0.2	-0.2	-0.1
Croatia	-0.1	0.0	-0.2	-0.1
Lithuania	0.2	-0.1	-0.2	0.0
Slovenia	0.0	0.0	-0.1	0.0
Moldova	0.5	0.1	-0.1	0.1
Poland	0.3	0.1		0.2
Slovak Republic	0.4	0.1	0.1	0.2
Georgia	0.4	0.3	-0.1	0.2
Serbia and Montenegro	0.4	0.2	0.1	0.2
Bosnia and Herzegovina	0.6	0.6	0.4	0.5
Kazakhstan	1.1	0.5	0.4	0.7
Macedonia	1.0	0.7	0.5	0.7
Armenia	1.1	0.5	0.3	0.7
Azerbaijan	1.8	1.1	0.9	1.3
Albania	1.8	1.4	1.2	1.5
Kyrgyzstan	2.0	1.6	1.4	1.6
Turkmenistan	2.6	1.7	1.4	1.9
Tajikistan	2.7	1.8	1.5	2.0
Uzbekistan	2.6	2.1	1.6	2.1
Europe and Eurasia	0.2	0.0	-0.2	0.0
NT CEE	0.1	-0.1	-0.1	0.0
ST CEE	0.2	0.0	0.0	0.1
Eurasia	0.2	0.0	-0.2	0.0
N. FSU	-0.3	-0.5	-0.6	-0.5
Muslim Majority	2.4	1.8	1.4	1.9
European Monetary Union	0.1	0.1	0.1	0.1
East Asia and Pacific	1.4	1.2	1.0	1.2
Latin America and Carib.	1.8	1.7	1.5	1.7
Middle East and North Afr.	2.3	2.1	1.9	2.1
South Asia	2.1	2.0	1.8	2.0
Sub-Saharan Africa	2.8	2.6	2.3	2.6
Low-Income Economies	2.2	2.1	1.9	2.1
Middle Income Economies	1.3	1.1	1.0	1.1
High Income Economies	0.4	0.4	0.3	0.4

World Bank, *World Development Indicators* (2004).

# Figure 3 Natural Change in Population in the World



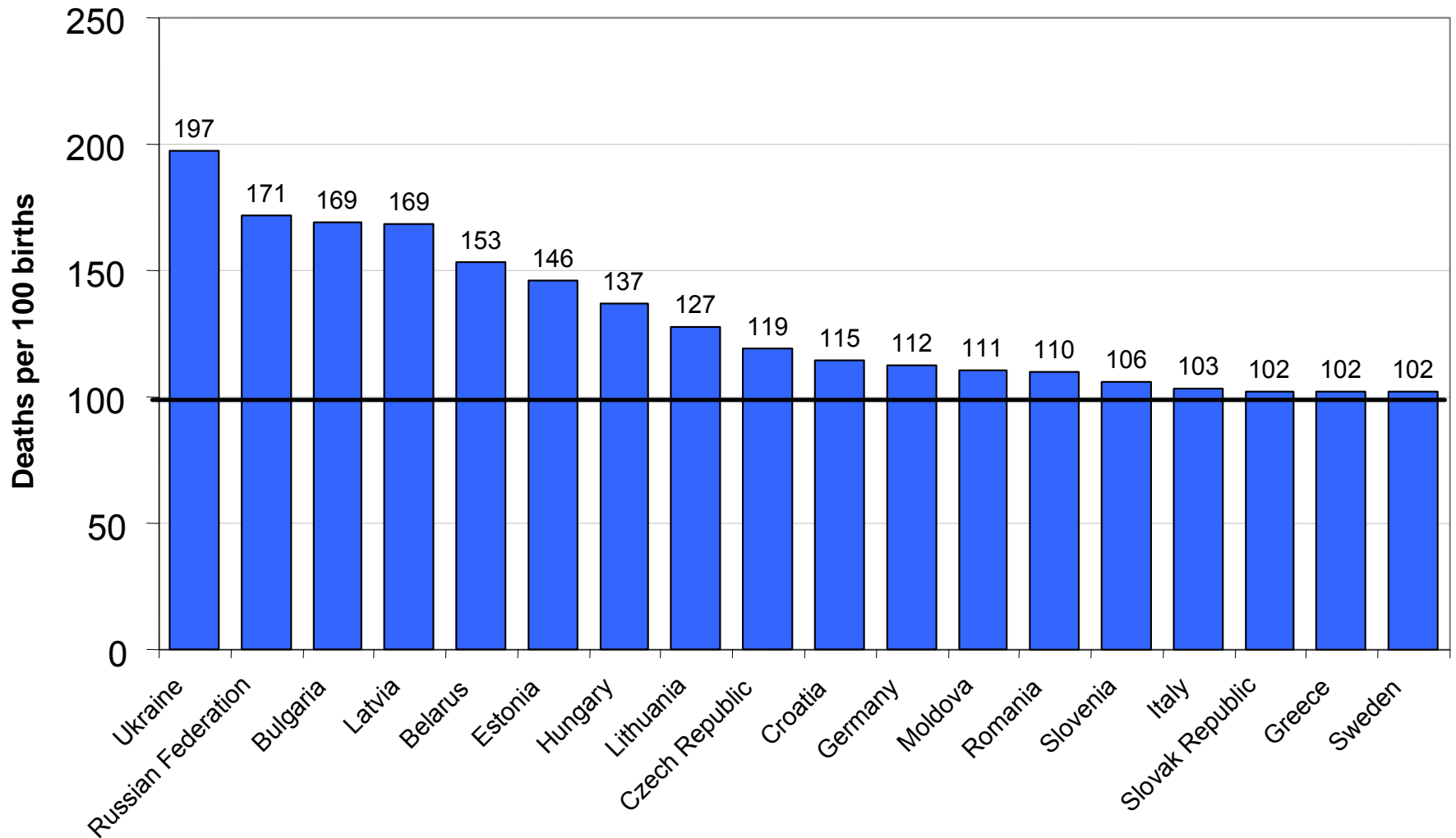
World Bank, *World Development Indicators* (2004). Natural Change in population is the difference between crude birth rates and crude death rates, expressed as a percentage. Missing values were interpolated.





Figure 4

## Europe and Eurasia Countries of Natural Decrease in Population (Deaths per 100 Births)



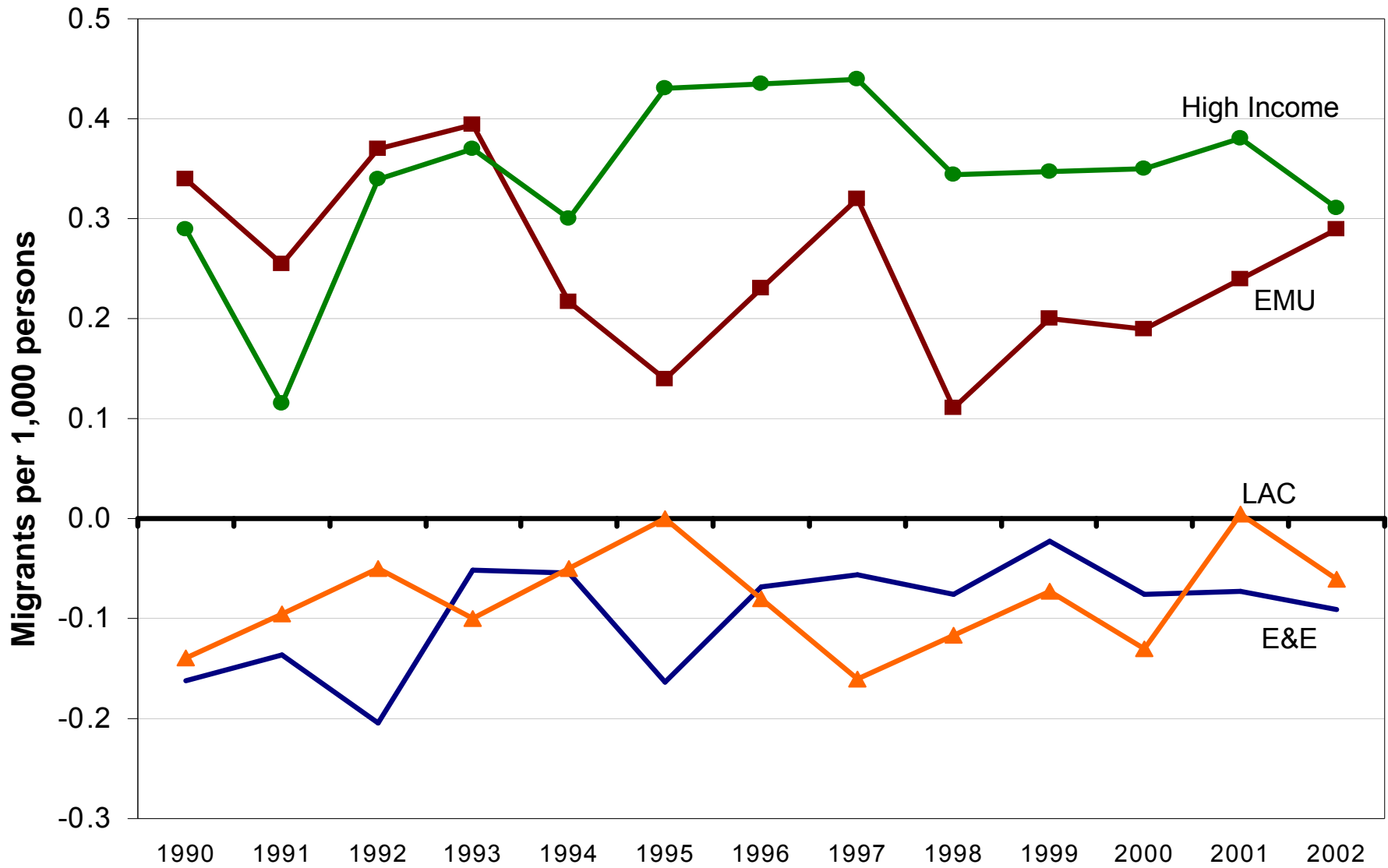
Data are from 2000 & 2001. Eberstadt, *The Demographic Factor in Russian Development* (December 2003) drawing from Council of Europe, *Recent Demographic Developments in Europe* (December 2002).

(Migrants per 1,000 pop.)	1991-94 avg	1995-98 avg	1999-02 avg	1991-02 avg
Turkmenistan	0.2	0.5	0.2	0.3
Russia	0.3	0.3	0.1	0.2
Hungary	0.0	0.0	0.5	0.2
Belarus	0.1	0.0	0.1	0.1
Ukraine	0.3	-0.2	-0.1	0.0
Slovakia	-0.1	0.1	-0.1	0.0
Poland	-0.1	0.0		0.0
Czech Republic	-0.1	-0.2	0.0	-0.1
Slovenia	-0.2	-0.1	-0.2	-0.1
Serbia-Montenegro	-0.4	0.0	0.0	-0.1
Macedonia	-0.4	0.0	-0.2	-0.2
Romania	-0.5	-0.1	-0.1	-0.2
Azerbaijan	-0.3	-0.1	-0.1	-0.2
Bulgaria	-0.6	0.1	-0.4	-0.3
Moldova	-0.6	-0.3	-0.2	-0.4
Uzbekistan	-0.4	-0.3	-0.4	-0.4
Lithuania	-0.4	-0.6	-0.4	-0.5
Croatia	0.0	-1.9	0.4	-0.5
Tajikistan	-0.7	-0.2	-0.9	-0.6
Latvia	-0.8	-0.8	-0.2	-0.6
Kyrgyzstan	-1.3	-0.2	-0.3	-0.6
Georgia	-0.8	-0.6	-0.5	-0.7
Estonia	-1.5	-0.9	0.0	-0.8
Bosnia-Herzegovina	-5.6	0.3	1.8	-1.1
Kazakhstan	-1.1	-1.7	-1.5	-1.4
Albania	-2.1	-2.5	-0.8	-1.7
Armenia	-2.2	-2.1	-1.1	-1.8
Europe and Eurasia	-0.1	-0.1	-0.1	-0.1
NT CEE	-0.1	-0.1	0.0	-0.1
ST CEE	-0.9	-0.3	0.0	-0.4
Eurasia	0.0	-0.1	-0.1	0.0
N.FSU	0.2	0.1	0.1	0.1
Muslim Majority	-0.6	-0.3	-0.4	-0.4
Balkans	-1.3	-0.6	0.2	-0.5
Caucasus	-0.9	-0.6	-0.5	-0.7
E&E less	0.0	0.0	-0.1	0.0
Balkans & Caucasus				
European Monetary Union	0.3	0.2	0.2	0.3
East Asia and Pacific	0.0	0.0	0.0	0.0
Latin America and Carib.	-0.1	-0.1	-0.1	-0.1
Middle East and North Afr.	0.2	-0.1	0.0	0.0
South Asia	0.0	0.0	0.0	0.0
Sub-Saharan Africa	-0.3	0.1	0.1	0.0
Low-Income Economies	-0.1	-0.1	-0.1	-0.1
Middle Income Economies	0.0	0.0	0.0	0.0
High Income Economies	0.3	0.4	0.3	0.3

World Bank, *World Development Indicators* (2004).

**Figure 5**

# Migration in the World



World Bank, World Development Indicators (2004). Migration is calculated as the residual from total population change less the natural change in population.

Table 5: Migration Rates for the World's Top 10 Emigrating Countries

<i>(Migrants per 1,000 pop.)</i>	1991-02 avg
<b>Armenia</b>	<b>-1.8</b>
<b>Albania</b>	<b>-1.8</b>
Samoa	-1.6
Tonga	-1.6
Marshall Islands	-1.5
<b>Kazakhstan</b>	<b>-1.5</b>
Dominica	-1.4
Somalia	-1.2
Guyana	-1.2
Greenland	-1.0

World Bank, *World Development Indicators* (2004)