



Live expectancy in East and West Germany

Risk of death in East Germany started declining before German reunification

German reunification was not the only factor responsible for the rapid increase in life expectancy in East Germany. The process had already started ten years before, during the GDR regime, when mortality started falling substantially.

Rostock, Germany. German reunification is believed to have triggered a historically quick convergence of life expectancies in the Eastern and Western parts of Germany. For instance, life expectancy of women in the socialistic former German Democratic Republic (GDR) was three years less than for those in the Western Federal Republic of Germany right before reunification in 1990, but today matches the higher Western level.

The introduction of the Western health care and retirement system in the Eastern part of Germany is commonly considered to be the cause for this rapid improvement. As East Germans benefitted from better medical treatment and improved prosperity, they lived longer.

However, a new study by the Max Planck Institute for Demographic Research (MPIDR) in Rostock now indicates that it was actually not the new health care system in the East that started the convergence of life expectancies. Rather, the process had already started ten years before reunification.

“German reunification per se did not initiate the convergence process of life expectancies, but rather reinforced and accelerated trends that were already apparent in the GDR”, says MPIDR researcher Pavel Grigoriev. He published the findings in the *European Journal of Population* together with Markéta Pechholdová from the University of Economics in Prague, Czech Republic.

In their study the demographers split mortality, that is the risk of dying, into single causes of death so that their occurrence can be quantified as far back as 1960, long before German reunification in 1990. It turned out that the most common cause of death, cardiovascular diseases, had already started declining markedly ten years before German reunification.





In the GDR, cardiovascular mortality fell starting in 1980

The data from the new study proves that between 1980 and 1990 the risk of dying from cardiovascular diseases fell by 16 percent in East Germany. In the preceding years the values had remained about the same.

“We regard this as the first sign of the so-called cardiovascular revolution, and thus the start of accelerated life expectancy increase”, says Pavel Grigoriev.

The term *cardiovascular revolution* means a massive decline in deaths by diseases like heart attack or stroke. It has been observed in virtually all developed countries and is regarded as the starting point for further development of living conditions in the course of which life expectancies have risen substantially around the globe throughout the last decades.

After the Fall of the Berlin Wall the risk of dying from cardiovascular diseases decreased even quicker by another 39 percent during the first ten years in united Germany.

Individual behavior in the GDR plausible reason for mortality drop

The two things which mostly influence mortality in the medium term are individual behavior (such as smoking, alcohol consumption, diet, and exercise) and the health care system.

“It is very unlikely that mortality improvements before German reunification are due to the health care system,” says Pavel Grigoriev. The health care system of the GDR was well-known for its lack of efficiency, especially with respect to cardiovascular diseases.

MPIDR researcher Grigoriev believes that the most plausible reason for the GDR improvements in the risk of dying is that GDR citizens turned to a healthier lifestyle by the 1980s, though the data of his study does not give direct proof of this. He also noted that “the even faster decline of cardiovascular mortality since 1990 cannot be explained without the introduction of the Western health care system”. Behavioral change alone could not cause a decline as rapid and universal as observed since reunification.

“Despite extensive research, the mechanisms leading to the convergence of lifespans in the East and the West of Germany have not yet been understood sufficiently,” says Pavel Grigoriev.

The early start of the cardiovascular revolution, and thus the processes leading to the convergence of life expectancies in the East and the West, had not been recognized to date, as the focus had been more on life expectancy itself, rather than on the underlying mortalities, broken down by causes of death.





Causes of death made comparable

The data compiled for the new study could make causal research easier. To make the risk of dying comparable over many decades for both parts of Germany, the scientists introduced a consistent catalogue of 186 causes of death, which can be quantified every year back to 1960 without gap. Normally, the definitions for causes of death differ from country to country and change over time.

About the MPIDR

The Max Planck Institute for Demographic Research (MPIDR) in Rostock investigates the structure and dynamics of populations. It focuses on issues of political relevance such as demographic change, aging, fertility, the distribution of work over the course of life, as well as aspects of gender issues and medicine. The MPIDR is one of the largest demographic research bodies in Europe and one of the worldwide leaders in the field. It is part of the Max Planck Society, the internationally renowned German research society.

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This press release and the graphics in high resolution can be found at

www.demogr.mpg.de/go/east-west-deaths

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