



Effect of the fall of the Berlin Wall

## Three hours of life per euro

Each additional euro eastern Germans received in benefits from pensions and public health insurance after reunification accounted for three additional hours of life expectancy

**Rostock, Germany.** Public spending appears to have contributed substantially to the fact that life expectancy in eastern Germany has not only increased, but is now almost equivalent to life expectancy in the west. While the possible connection of public spending and life expectancy has been a matter of debate, scientists at the Max Planck Institute for Demographic Research (MPIDR) have now for the first time quantified the effect. They found that for each additional euro the eastern Germans received in benefits from pensions and public health insurance after reunification, they gained on average three hours of life expectancy per person per year.

These are the conclusions of an analysis based on a newly developed set of age-specific data on public expenditures through the year 2000. MPIDR demographer Tobias Vogt published the results of the analysis recently in the scientific journal “Journal of the Economics of Ageing.”

From the fall of the Berlin Wall in 1989 through the start of the new millennium, life expectancy in eastern Germany increased substantially, by almost four years. Before the Wall came down the average life expectancy of eastern Germans was just 73.5 years — considerably lower than the 76 years in West Germany. But by the year 2000, the east-west gap of 2.5 years had shrunk to less than one year. Over the same period, the amount of public spending on social insurance for eastern Germans rose from around 2,100 euros per person per year to around 5,100 euros per person per year.

### Health care spending is more important than pension benefits

“What has often been called an explosion in social spending in the wake of reunification has, however, led to a gratifying jump in life expectancy,” says Tobias Vogt. He noted that when money was spent on harmonizing living standards, mortality risk levels could also converge.

“When the aging of society is discussed, the increase in public spending is often cited as its main





consequence,” the Rostock researcher stated. “But in contrast, our analysis shows that public spending can also be seen as an investment in a longer life.”

Additional expenditures by the health care system were found to have had a greater impact on life expectancy than higher pensions: each euro the public health insurance system spent in the east contributed 2.5 times as much to the reduction in mortality as each additional euro spent by the pension system. Vogt noted that “improved health care is the most important factor in a long life.” This is because more public spending on health insurance also means gaining access to more and higher quality pharmaceuticals, medical treatment and other health care services. However, Vogt observed, “without the pension payments of citizens in east and west converging to equivalent levels, the gap in life expectancy could not have been closed.” This is because when there are no differences in the quality and level of medical care, the standard of living becomes the decisive factor in life expectancy. And the standard of living of older people is determined to a large extent by the size of their pensions.

## Reunification as a large-scale social experiment

Until now it was unclear what influence public spending had on the ongoing process of rising life expectancy. A reunified Germany served as an ideal social experiment to the MPIDR researcher Vogt. It represents an exceptional historical case in which there were two populations with different social systems and life expectancies which converged within a few short decades.

MPIDR’s east-west comparison became possible after the newly developed dataset “National Transfer Accounts,” which gathered data on pension and health care expenditures for different age groups, became available for the first time. This enabled MPIDR researchers to restrict their analysis to people over age 65 and thereby exclude the effects on life expectancy from other important factors which might have been relevant mainly for younger people, such as education and migration.

## 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 redistribution of work over the course of life, as well as aspects of evolutionary biology 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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Original publication:

Tobias C. Vogt, Fanny A. Kluge, Can public spending reduce mortality disparities? Findings from East Germany after reunification, *Journal of the Economics of Ageing* (2014),

<http://dx.doi.org/10.1016/j.jeoa.2014.09.001>

