Less public investment due to an aging population

The constant decline in public investment over the last four decades can only partly be explained by high public debt

Public investment, for instance in infrastructure, has been constantly decreasing for four decades. New research by RWI for 13 OECD-countries shows: this development significantly correlates with population aging. Senior citizens do not value future payoffs of infrastructure projects and other public investments as much as working-age-individuals since people's time preferences change with age. Because of their growing voting power, elderly voters exhibit an increasing influence on policy proposals of political parties. To counter these effects, politicians should consider demeny voting, where parents get additional votes for each child. Other options include user-pay-infrastructure or alternative funding sources like Public Private Partnerships.

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MAIN FACTS

In most developed countries, public investment has been decreasing for the past four decades.

Fiscal pressures are not the main reason for this phenomenon – there is a significant negative correlation between investment levels and population aging.

Politicians should keep the country's overall development in mind and consider new voting rules, an increase of the legal retirement age and the introduction of more user-pay-infrastructure projects to offset the decreasing support for public investments.

How did public investment change in past decades?

The public investment-to-GDP ratio declined almost steadily in most advanced economies since the 1970s. The RWI study analyzes a sample of 13 OECD countries, including the US, Great Britain, Germany and Japan. While in 1971, the sample countries spent on average 4.4% of GDP for public investment, this share has been constantly reduced to 2.4% by 2007. This seems especially puzzling since the overall empirical evidence indicates that the economic returns to public capital are markedly positive.

What are the reasons for the cut-back of public investment?

So far, the prevalent explanation for the cut-back in government financed investment centers on fiscal pressures caused by a rising level of public debt. According to this view, governments reduce public investment because voters oppose spending cuts for public consumption. However, new evidence shows: This is not the only explanation. For the first time, the RWI study links the declining investment share to population aging. The higher the share of over 65-year-olds, the lower the public investment-to-GDP ratio. This relationship is observable for all 13 OECD-countries, and also holds if other possible explanatory factors are controlled for.

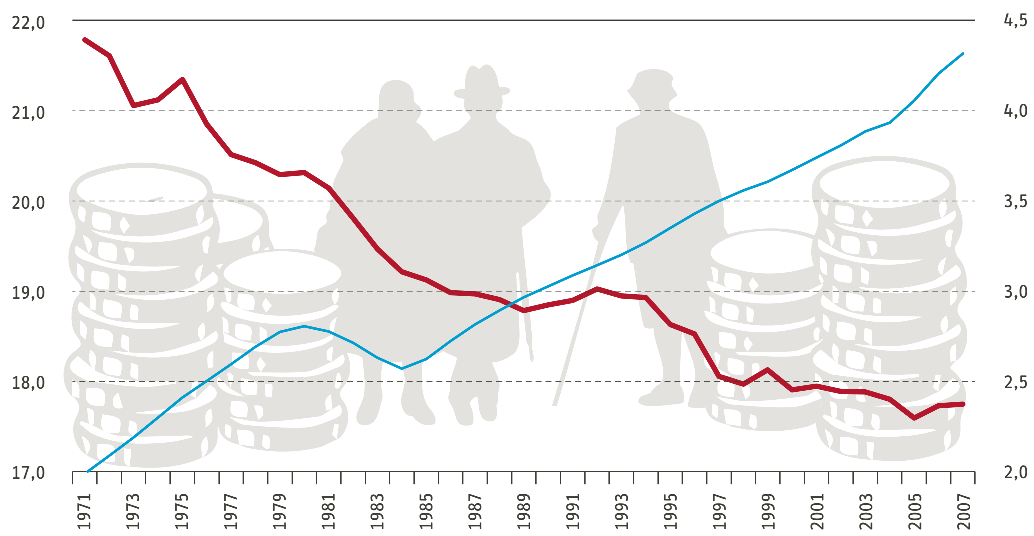
Why do democracies with aging populations invest less?

People's time preferences change with age. Experimental research reveals that senior individuals value future payoffs less than working-age people do. Consequently, to gain the support of senior voters, the expected payoff of a public investment project needs to be much higher than for working-age individuals. A rising fraction of elderly voters is, therefore, likely to cause a reduction in the overall demand for durable public goods. Hence, even though additional infrastructure investment would benefit the country's overall performance, the increase in elderly voting power works against public investment spending.

Source

Jäger, P., und T. Schmidt (2016), The Political Economy of Public Investment when Population is Aging: A Panel Cointegration Analysis. European Journal of Political Economy 43: 145-158 (earlier version published as Ruhr Economic Paper #557. http://www.rwi-essen.de/publikationen/ruhr-economic-papers/696/)

Growing share of elderly voters, declining public investment-to-GDP ratio



Individuals of 65 years and older (as %-share of individuals above 20 years) (left chart)
Public investment: % of GDP (right chart)

Sources: OECD, AMECO, own calculations.

Policy Recommendations

- Increase the legal retirement age in order to avoid crowding out of public investment by increasing expenditures for pension allowances.
- Introduce user-pay-systems to alleviate objections by senior citizens towards future public investment in infrastructure.
- Consider and discuss alternative funding sources like Public Private Partnerships and reforms of the political system, e.g. the introduction of demeny voting, which gives parents an additional vote per child in elections.

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