

Most countries have room to increase public investment

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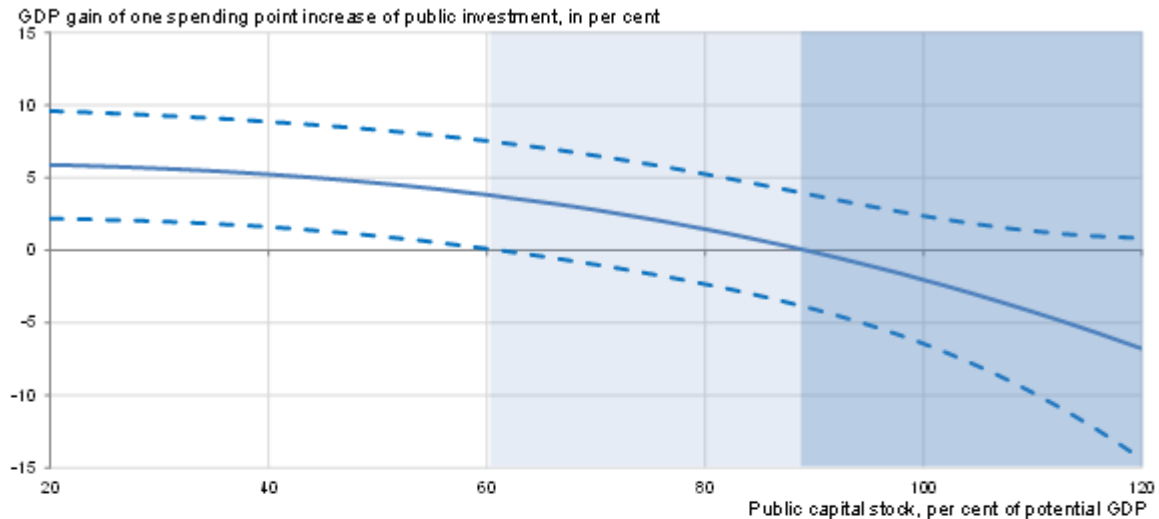
Public investment benefits current as well as future generations. [My research](#) shows that public investment is a game changer, when it comes to boosting long-term growth. Increasing the share of public investment in primary government spending by one percentage point (offset by a reduction in other spending) would increase the long-term GDP level by about 5%. For countries that are catching-up to the productivity frontier, there is also evidence that public investment can substantially speed up the pace of convergence.

Public investment is good for economic activity because it stimulates private investment. Indeed, a recipe that mixes public and private investment produces a bigger economic pie. For instance, roads and railways connect firms. This suggests that the most relevant investment projects are those with the largest spill-overs. For instance, investment in health (hospitals and their equipment) is found to have a large effect as healthier workers are more productive. Investment in research and development also can have a particularly large effect as public research can spur private innovation.

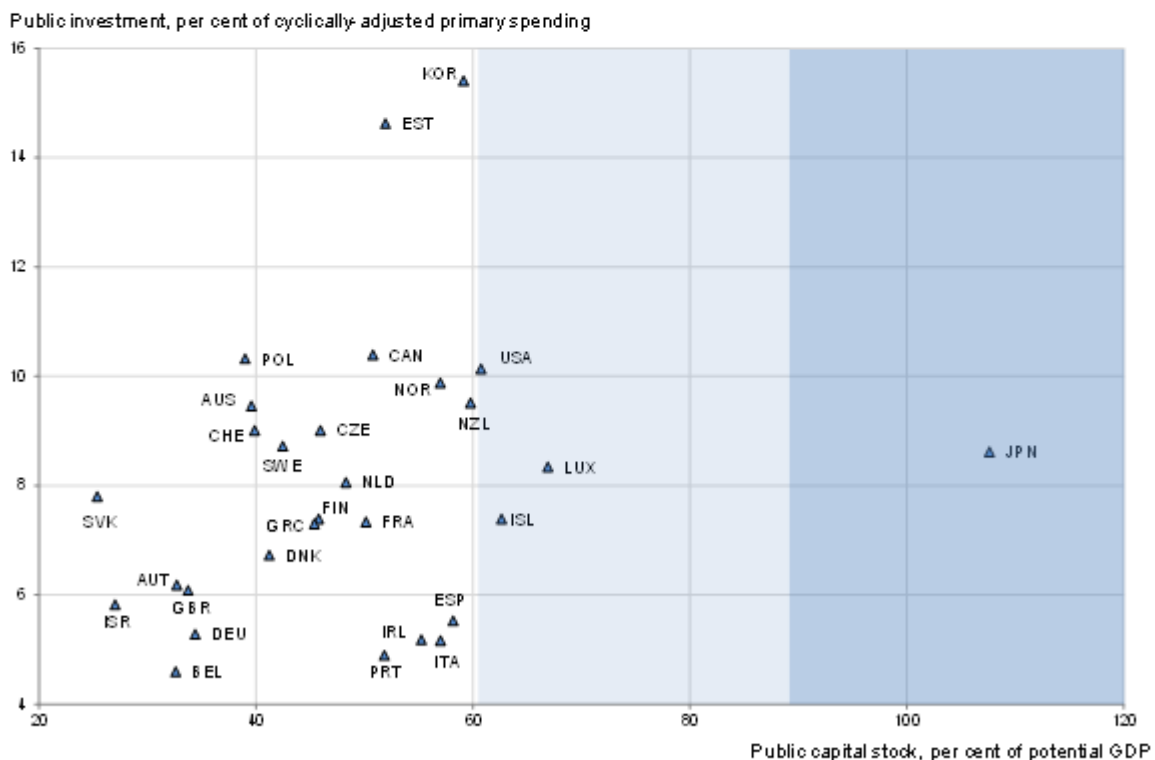
The long-term effect of public investment depends on the initial level of the public capital stock, which includes, for instance, roads, schools or patents. In countries where this initial level is relatively low compared with the size of the economy, there is more scope for high-yielding investment projects. The analysis shows that virtually all countries have room to expand the public capital stock, with the exception of Japan, where it is already very large (Figure).

Estimates of decreasing returns to public investment

Panel A. The effect of public investment on potential GDP decreases with the level of capital stock¹



Panel B. Most countries have room to increase the stock of public capital (2013 data)



1. Public investment is scaled by underlying primary public spending. The dashed line indicates the 95% confidence interval. The measure of the capital stock depends on assumptions on the rate of depreciation of capital and on the level of disaggregation at which the calculation is made. The IMF data can thus differ from national sources. The data of the two sources are close for most countries. In a few cases, such as Austria, the difference can be considerable. The IMF database is used here because the capital stock is computed in all countries with the same methodology. Light shading indicates a positive not significant investment effect and darker shading indicates a negative not significant investment effect.

The evidence that the public capital stock is below its optimal level means that public investment should rise above the pre-crisis level. However, the opposite has happened. In most countries, public investment has declined substantially during the recent fiscal consolidation period. In 2015, net investment was even negative in Germany, Italy, Portugal and

Spain. This means that public investment does not suffice to compensate for the natural depreciation of the existing public capital stock in these countries. In the United States, net investment has reached an almost record low level of 0.5 per cent of GDP in 2015, so that the public capital stock grows much less than GDP.

Major challenges are to identify the right investment projects, and to implement them in an efficient way. For this, governments need sound public investment policies (provide the right incentives, carry out cost/benefit analysis underpinned by good data). Moreover, the focus should be on projects with high spill-overs.

References:

Source: Fournier, J.M. (2016), "[The Positive Effect of Public Investment on Potential Growth](#)", *OECD Economics Department Working Paper*, No. 1347, OECD Publishing, Paris.

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