

Infrastructure investment is a no-brainer

- for countries with infrastructure needs, the combination of low interest rates and mediocre growth mean that it's time for an investment push

by Jérémie Cohen-Setton on 13th October 2014



What's at stake: For countries with infrastructure needs, the combination of low interest rates and mediocre growth mean that it's time for an investment push. While Brad DeLong and Lawrence Summers already laid out the theoretical case in a [2012 Brookings paper](#), the empirical case was laid out this week in Chapter 3 of the latest IMF World Economic Outlook.

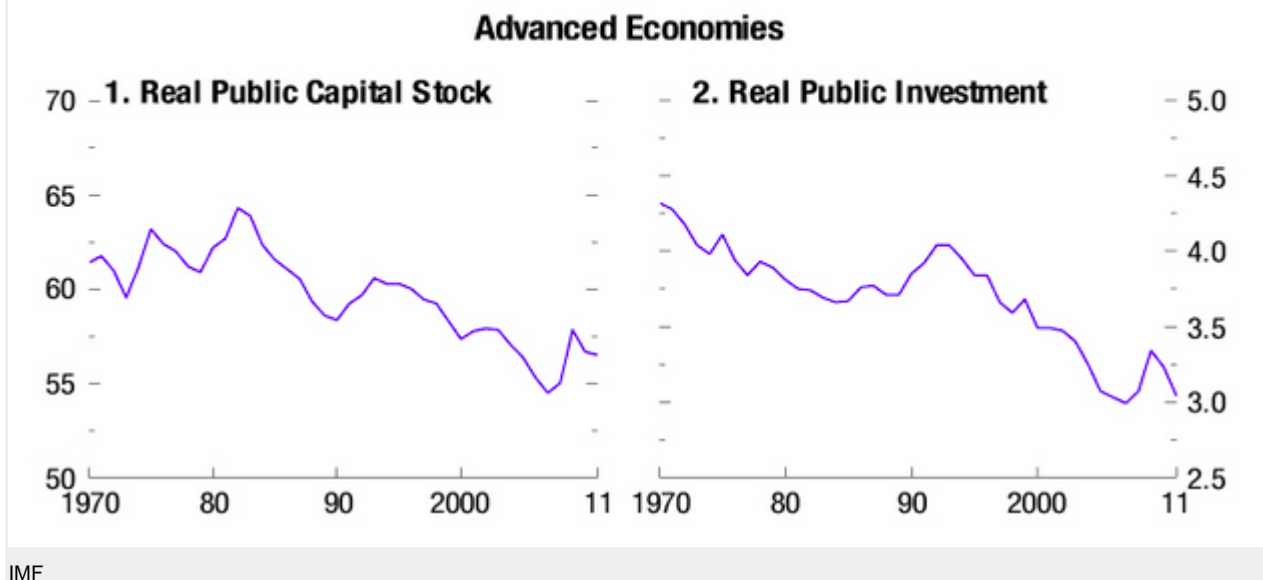
[Lawrence Summers](#) writes that in a time of economic shortfall and inadequate public investment, there is for once a free lunch – a way for governments to strengthen both the economy and their own financial positions. [Greg Mankiw](#) writes that the free-lunch view is certainly theoretically possible (just like self-financing tax cuts), but we should be skeptical about whether it can occur in practice (just like self-financing tax cuts).

Disinvestment madness

In advanced economies, public investment was scaled back from about 4% of GDP in the 1980s to 3% of GDP at present

Abiad and al. write on the IMF blog that **the evolution of the stock of public capital suggests rising inadequacies in infrastructure provision**. Public capital has declined significantly as a share of output over the past three decades in both advanced and developing countries. In advanced economies, public investment was scaled back from about 4 percent of GDP in the 1980s to 3 percent of GDP at present (maintenance spending has also fallen, especially since the financial crisis).

Figure 2. Evolution of Public Capital Stock and Public Investment
(Percent of GDP, PPP weighted, unless noted otherwise)



This makes a very strong case for sharply increasing public investment in a depressed economy

Paul Krugman writes that this is disinvestment madness. Real interest rates are extremely low, indicating that the private sector sees very little opportunity cost in using funds for public investment. There has been a lot of slack in the labor market, so that many of the workers one would employ in public investment would otherwise have been idle — so very

little opportunity cost there either. This makes a very strong case for sharply increasing public investment in a depressed economy; a case that doesn't rely on claims that there is a large multiplier, although there's every reason to believe that this is also true.

Methodology for identifying investment shocks

The authors of the WEO's chapter 3 write that in contrast to the large body of literature that has focused on estimating the long term elasticity of output to public and infrastructure capital using a production function approach, the IMF analysis adopts a novel empirical strategy that allows estimation of both the short- and medium-term effects of public investment on a range of macroeconomic variables. Specifically, **it isolates shocks to public investment that can plausibly be deemed exogenous by following the approach of smooth transition VARs of Auerbach and Gorodnichenko (2012, 2013)**, where the shocks are identified as the difference between forecast and actual investment. In the WEO chapter, the forecasts of investment spending are those reported in the fall issue of the OECD's Economic Outlook for the same year.

The positive effects of increased public infrastructure investment are particularly strong when public investment is undertaken during periods of economic slack and monetary policy accommodation

The authors of the WEO's chapter 3 write that **a problem in the identification of public investment shocks is that they may be endogenous to output growth surprises**. But the public investment innovations identified are only weakly correlated (about -0.11) with output growth surprises. Another possible problem in identifying public investment shocks is a potential systematic bias in the forecasts concerning economic variables other than public investment, with the result that the forecast errors for public investment are correlated with those for other macroeconomic variables. To address this concern, the measure of public investment shocks has been regressed on the forecast errors of other components of government spending, private investment, and private consumption.

Main results

Abiad and al. write on the IMF blog that **the benefits depend on a number of factors**. The authors find that the positive effects of increased public infrastructure investment are particularly strong when public investment is undertaken during periods of economic slack

and monetary policy accommodation, where additional public investment spending is not wasted and is allocated to projects with high rates of return and when it is financed by issuing debt has larger output effects than when it is financed by raising taxes or cutting other spending.

Infrastructure investment in Europe

Mario Monti writes that **while a simplistic stability pact may have been the right choice when the euro was in its infancy, Europe can no longer afford to stick with such a rudimentary instrument.** By failing to recognize the proper role of public investment, it has pushed governments to stop building infrastructure just when they should have built more. What is needed is not the flexibility to deviate from the rules, but rules that are economically and morally rigorous. The new Commission should announce a proposal for updating the rules on fiscal discipline, to reflect the role of productive public investment. The commission would then enforce the existing stability pact while allowing for the favorable treatment of public investment within the limits set out in 2013.

Europe needs mechanisms for carrying out self-financing infrastructure projects outside existing budget caps

Lawrence Summers writes that **Europe needs mechanisms for carrying out self-financing infrastructure projects outside existing budget caps.** This may be possible through the expansion of the European Investment Bank or more use of capital budget concepts in implementing fiscal reviews.

<http://www.bruegel.org/nc/blog/detail/article/1457-infrastructure-investment-is-a-no-brainer>