

# What is the scope for public investment to lift long-term growth ?

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Long-term rates are low in OECD countries, particularly in Japan, France and Germany. This opens up fiscal space and can justify any public investment projects with a positive rate of return. At the same time, infrastructure needs are sizeable, especially as fiscal consolidation in recent years has pushed down public capital spending to very low levels in many countries. In such a situation, additional public investment is likely to benefit from high rates of return (Fournier, forthcoming).

New estimates in the June OECD Economic Outlook show long-term output gains of a budget neutral sustained investment stimulus of 0.5% of GDP could amount to between 0.5% and 2% (figure below).

Collective action among the major advanced economies to raise good-quality public investment is estimated to bring additional GDP gains. This would represent a gain of around one-half on average after the first year compared to a scenario where countries acts individually in the large advanced economies but Japan, where the gains are uncertain (Auerbach and Gorodnichenko, 2014). Amongst the major advanced economies, Germany would benefit the most from collective action to boost public investment.

What factors affect the gains to such a stimulus (see table below)? OECD analysis points to the following country-specific factors:

- the initial level of public capital stock and the rate

of returns of these investments: Lowering returns to public capital by one standard deviation could significantly reduce the long-term effect on output, by cutting it by around 3/4. Amongst the large advanced economies, the effect on output would be above average in Germany and the United Kingdom, while the output gains can be negative for Japan.

- the country's initial position in the economic cycle and the extent of labour-market rigidities, which determine how far persistent demand weakness undermines the productive capacity of the economy ("hysteresis"). In Italy and France, where this hysteresis effect is stronger, the effect of public investment stimulus is stronger.
- the additional gains structural reforms can bring to the economy: Reforms targeted at frictions that hold back demand for investment, such as increasing product market competition, can lower the opportunity costs of investing, and hence raise the catalytic impact of public investment on private capital spending. Lowering product market regulations by the average improvement over two years in a typical OECD country could add around 0.1-0.3 percentage point to the growth impact after the first year. Such gains would be sizeable in France, Italy and Canada.

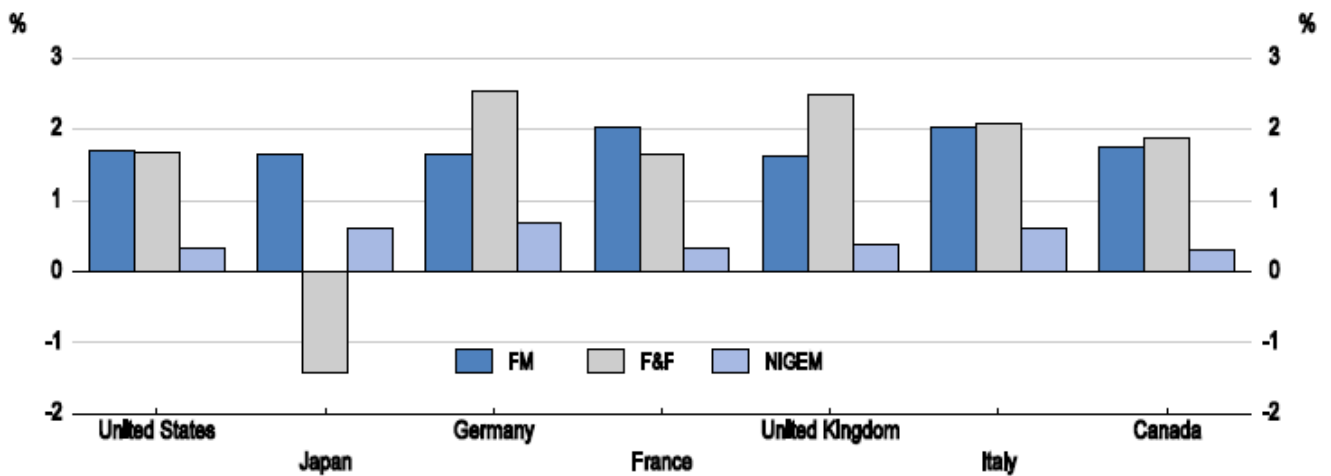
**Table : Country-specific conditions and the impact of public investment stimulus**

	Collective action	Low level of public capital/high rate of return	Hysteresis	Structural reforms
United States	+	+	+	+
Japan	+	--	=	++
Germany	++	++	=	+
France	+	+	++	+++
Italy	+	+	++	+++
United Kingdom	+	++	=	+
Canada	+	+	+	+++

*Note:* signs summarise the amplitude of the output gains following an investment-led stimulus. For instance the existence of hysteresis in France and Italy makes these countries gain more from such a measure than other advanced economies.

*Source:* OECD calculations based on F&F, FM and NiGEM models. F&F refers to the stochastic model described in Fall and Fournier (2015), FM refers to the Fiscal maquette developed in Botev and Mourougane (forthcoming) and NiGEM refers to the macro-economic model from the NIESR.

Long-term output gains of a sustained increase in public investment by 0.5% of GDP



Note: F&F refers to the stochastic model described in Fall and Fournier (2015), FM refers to the Fiscal maquette developed in Botev and Mourougane (forthcoming) and NIGEM refers to the macro-economic model from the NIESR.

Source: based on Mourougane et al. (2016).

## References

Auerbach, A.J. and Y.Gorodnichenko (2014), "Fiscal Multiplier in Japan", *NBER Working Papers*, No. 19911.

Botev, J. and A. Mourougane (forthcoming), "Fiscal Consolidation: What are the Breakeven Fiscal Multipliers?", *OECD Economics Department Working paper*, OECD Publishing, Paris.

Fall, F. and J.M. Fournier (2015), "Macroeconomic Uncertainties, Prudent Debt Targets and Fiscal Rules", *OECD Economics Department Working Papers*, No. 1230, OECD Publishing, Paris.

Fournier, J.M. (forthcoming), "The Positive Effect of Public Investment on Potential Growth", *OECD Economics Department Working Paper*, OECD Publishing, Paris.

Mourougane, A., J. Botev, J.M. Fournier, N. Pain and E. Rusticelli (forthcoming), "Can an Increase in Public Investment Sustainably Lift Growth?", *OECD Economics Department Working Papers*, OECD Publishing, Paris.