Budgetary plans can be made more robust if they are founded on a better understanding of the drivers of expenditure and how these are expected to evolve over the medium term. The *Mid-Year Expenditure Report 2016* noted progress of work in developing a methodology to "separately model the evolution of volume/demand and price impact" on public expenditure. This approach would provide a useful guide for future spending pressures. If combined with detailed spending reviews, it could provide a valuable input to future medium-term expenditure forecasts and improve the basis on which achieving fiscal aims is assessed.

Investment Expenditure

Investment expenditure is expected to increase substantially over the forecast period (2018-2021), with additional resources which had previously been indicated for the Rainy Day Fund now allocated to capital expenditure. Gross fixed capital formation is projected to grow at an average annual rate of 10.6 per cent out to 2021. Following a period of reduced public investment growth, Ireland will move from relatively low levels of public investment to levels that are among the highest in the EU. Box G discusses plans for public investment spending.

Box G: Plans for Public Investment Spending

This box looks at the Government's plans for public investment spending. Public investment is set to ramp up quite rapidly to levels among the highest in the EU in coming years, while still complying with the fiscal rules. The Government has also indicated that a value of 3 per cent of an appropriate measure of national income (e.g., GNI*) might be considered a reasonable target for the long-term level of public capital spending for Ireland. A target of this form would be a sensible approach to ensuring that investment spending is sustained over the course of the cycle. If adhered to, this approach could help to prevent forced cuts to public investment in downturns and excessive investment expansions in booms.

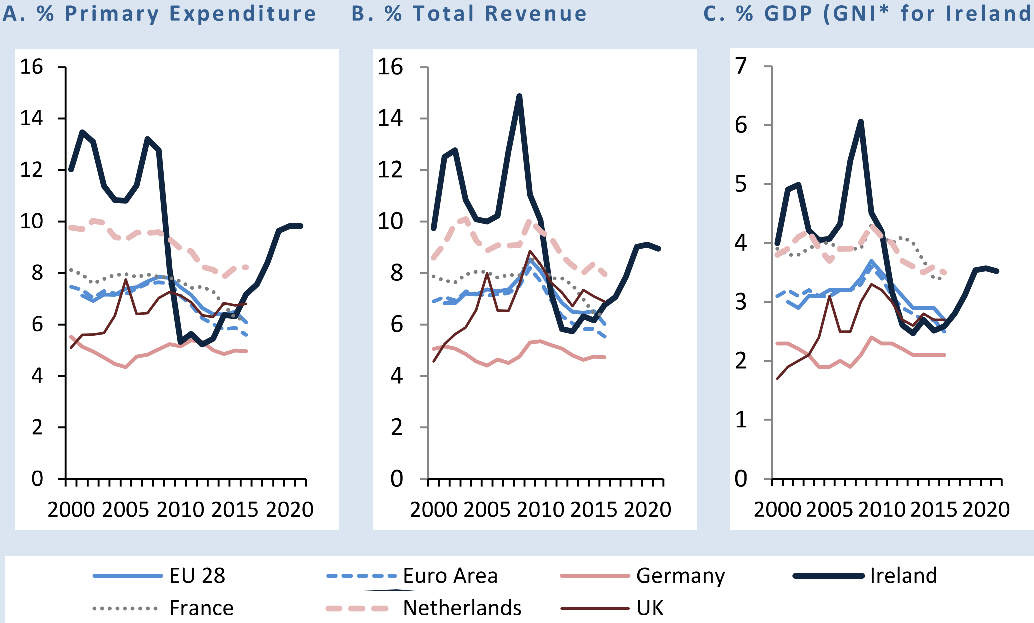
Concerns have been expressed at the manner in which high public investment levels in Ireland were reduced to very low levels as the public finances underwent a sharp correction in recent years. However, *Budget 2018* plans show that annual public investment levels in Ireland will move from relatively low levels to levels that will be among the highest in the EU in a relatively short period of time.

Figure G1 shows the evolution of public investment in Ireland since 2000. Investment levels are shown as a share of (A) total government primary expenditure (i.e., total spending excluding interest costs); (B) total government revenue; and (C) GDP (with GNI* used for Ireland). On each measure, the procyclical nature of investment spending is evident. During the early 2000s and up to the end of the property/credit bubble period, investment spending was far above levels in other EU Member States, such as Germany and the UK. Efforts during the downturn to correct a large deficit then saw capital spending approximately halved.

Having been scaled back to a low base, public investment levels are expected to ramp up quite rapidly again, rising to levels that are among the highest in the EU under current plans. For instance, by 2021, public investment is planned to rise to 9.8 per cent of primary spending; 8.9 per cent of total revenue; and 3.5 per cent of GNI*. Across all measures, this would be higher than present levels for countries such as France, the Netherlands, Germany and the UK as well as for the EU and Euro Area aggregates. Importantly, this is possible while still complying with the fiscal rules in later years.

Figure G1: Annual Public Investment Spending

Percentage of respective denominator, general government basis



Sources: Eurostat; CSO; Department of Finance (*Budget 2018*); and internal IFAC calculations.

With public investment levels set to return to relatively high levels soon, efforts should be made to prevent this category of spending from following a procyclical pattern yet again in future years. The *Review of the Capital Plan 2016–2021* (Department of Public Expenditure and Reform, 2017c) notes that a value of 3 per cent of an "appropriate measure of national income" might be considered an appropriate target for the long-term level of public capital spending for Ireland. This is informed by the fact that Irish public investment levels averaged approximately 3 per cent of GNI* over the period 1995–2015 – a level similar to the EU-15 average over the same time.

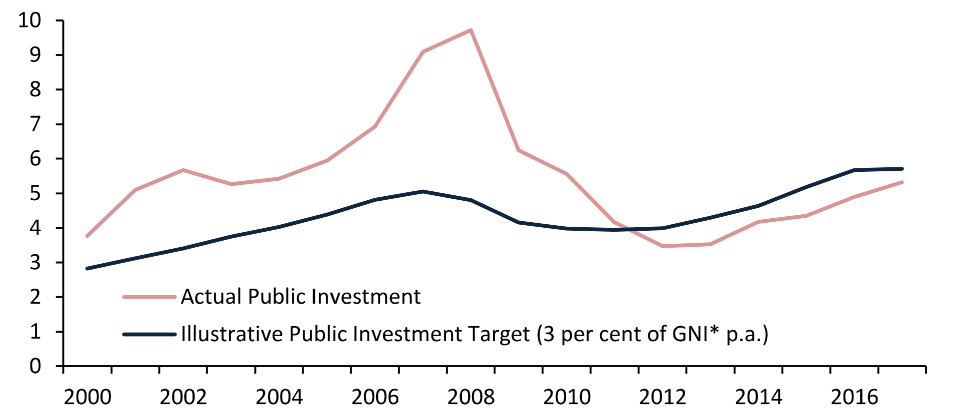
A commitment to stick to a specified level of public investment as a share of GNI* would be a sensible basis for fiscal policy over the medium term.[85] If adhered to, this approach could help to prevent forced cuts to public investment in downturns and excessive expansions in investment during booms.

If a targeted level of public investment had been followed in the previous boom–bust cycle, this would have limited the procyclical increases in investment levels observed during the mid-2000s. It would also have helped to prevent the sharp cuts to investment observed in the subsequent downturn and recovery. Figure G2 illustrates how a 3 per cent of GNI* target for public investment might have operated over the period 2000-2017 if adhered to. As shown, levels of investment would have been lower than actually observed in the pre-crisis period, and higher in the post-crisis period. The cumulative gap between targeted investment and actual investment would have been of the order of €3.7 billion in the 2012-2017 period (though endogeneity of the path for GNI* is clearly an issue here). Smoothing government investment spending can also help to provide greater certainty regarding future infrastructure projects. This, in turn, can help to make technology investments in the sector more viable, thus driving productivity gains.

[85] One argument in favour of targeting of this sort is set out by Portes and Wren Lewis (2015), for example. The argument follows that an optimal way to prevent public investment being squeezed in times of austerity is to have an explicit public investment target as a share of some measure of overall economic activity. Such a target could also operate well in the context of a system of fiscal rules that includes targets for the overall deficit (or structural deficit as in the *SGP*).

Figure G2: Illustrative Public Investment Path

Gross fixed capital formation (€ billions), general government basis



Sources: CSO; Department of Finance (*Budget 2018*); and internal IFAC calculations.

Much of the domestic debate concerning the need for additional investment has focused on the benefits of this to the productive capacity of the economy. However, not all public investment will necessarily boost the productive capacity of the economy and there is an inevitable trade-off with debt sustainability considerations especially when public debt is already high.

Public investment has been shown to have, on average, a more positive impact on economic growth than other types of government spending (Bénétrix and Lane, 2009; Hall, 2010). Benefits may also be more pronounced when there is economic slack, and when monetary conditions are more accommodative (Abiad *et al,* 2015). Debt sustainability concerns can reduce the capacity to pursue this without negatively impacting on creditworthiness. Furthermore, due to the open nature of the Irish economy, net leakages of income have been shown to lessen the positive effects of fiscal policy over the medium term (Cronin and McQuinn, 2014). Estimates using the ESRI's large-scale HERMES macroeconomic model suggest that a €1 billion increase in government investment can lead to an increase in real GDP of 0.1 per cent in the long run (Bergin *et al*, 2009).

While public investment can lead to positive economic gains, all public investment projects should still be assessed rigorously. In particular, evaluations should assess the quality of the investment proposed, its efficiency and the method of financing intended. Warner (2014) finds that the impact of investment on long-term economic activity can be limited where project appraisal, selection and management procedures are weak. This is one of the areas identified in the recent IMF *Public Investment Management Assessment* of Ireland (IMF, 2017) as in need of improvement in Ireland.

The short- and long-term fiscal and macroeconomic impacts of any investments should also be considered. In particular, plans should be cautious of aggravating boom–bust cycles.