Analytical Note No. 9:

June 2016

Public Capital: Investment, Stocks and Depreciation

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KEY MESSAGES

- Reductions in public capital investment accounted for a disproportionate share of the fiscal consolidation programme implemented in Ireland from 2008-2014. During this period, public investment fell from a peak of 6 per cent of GNP in 2008 to 2.2 percent of GNP in 2015. This places investment below its long run average of 3.7 per cent of GNP, and *SPU 2016* forecasts project investment levels averaging only 2.1 per cent of GNP over the period from 2016 to 2021.

- Investment in the areas of transport, public housing, communication and education have seen sharp reductions. Given the curtailed level of investment over the past number of years, current growth rates in output and future demographic changes, evidence of bottlenecks has emerged in these areas.

- After allowing for depreciation of the existing stock, the current *Infrastructure and Capital Investment Plan 2016*-2021 implies only a modest increase in the stock of public capital over the medium term. Historically, estimated depreciation costs average some 2.1 per cent of GNP since 1995. Given that General Government investment is projected to average 2.1 percent of GNP over the medium term, the scope for upgrading and expanding the public capital stock within the current plan appears limited.

- The *Programme for a Partnership Government* includes a provision for a cumulative additional €4 billion in public investment compared to the current plan out to 2021. This would raise average public investment to around 2.4 percent of GNP over the forecast horizon. Nevertheless, public investment as a share of output in Ireland will still remain among the lowest in the EU28.

- From a forecasting perspective, maintaining public capital investment at such low levels might be difficult to sustain taking into account unmet demand following years of curtailed investment since 2008, current projections for economic growth and future demographic changes.

1.   INTRODUCTION

Since the beginning of the crisis in 2008, investment in public capital has fallen substantially from the high levels seen during the boom years. Ireland's fiscal consolidation programme implemented from 2008-2014 saw large reductions in expenditure as well as increases in taxation in order to reduce the government deficit and to stabilise, and eventually lower, the debt-to-GDP ratio. During fiscal consolidation episodes, international evidence suggests that capital expenditure is often more easily curtailed than current expenditure.[1] In Ireland, while General Government current primary expenditure in 2014 was 5 per cent lower than in 2008, expenditure on public investment fell by around 62 per cent in the same period. It should be noted that while investment levels have fallen sharply in recent years, the high levels of capital investment observed in the immediate pre-crisis period did much to address infrastructural deficits in the state, particularly with regards to the motorway network. Nevertheless, there has been a prolonged period of low public investment since 2008 and private investment has also contracted sharply over the same period, related in particular to the decline in the building and construction sector.

This note analyses changes in public capital investment and the public capital stock over the period 1995-2014. The projections for public capital investment out to 2021 as set out in the recently announced *Stability Programme Update 2016 (SPU 2016)* and the *Infrastructure and Capital Investment Plan 2016-2021* are assessed, taking into account trends in the depreciation of the capital stock over time. The findings suggest that the current and projected levels of public investment are low by historical and international standards and may be inadequate to support the public capital stock needed to meet policy objectives, creating an additional potential future spending pressure.

2.   GROSS FIXED CAPITAL FORMATION

Public investment in fixed assets carried out by the General Government (GG) is referred to as Gross Fixed Capital Formation, and data are compiled by the CSO in the Government Finance Statistics.[2] Figure 1 below shows the evolution of primary expenditure and public investment from 1970-2015. Over this period, GG investment has accounted for 12.2 per cent of primary expenditure[3] on average, reaching a peak of 13.2 per cent in 2007 and subsequently falling to a low of 5.1 per cent in 2013. Note that the figures for 2015-2021 are forecasts from *SPU 2016* and are therefore subject to a degree of uncertainty.

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1 Evidence of this effect across the EU during the 1990s was found by Balassone & Franco (2000), and during the 'Great Recession' by Afonso and Souza (2012).

2 GFCF is defined under ESA 2010 as acquisitions less disposals (excluding consumption of fixed assets) plus additions to the value of non-produced assets.

[3] Total government expenditure net of interest repayments on debt.

FIGURE 1: PUBLIC INVESTMENT AS A SHARE OF PRIMARY EXPENDITURE, 1970-2021
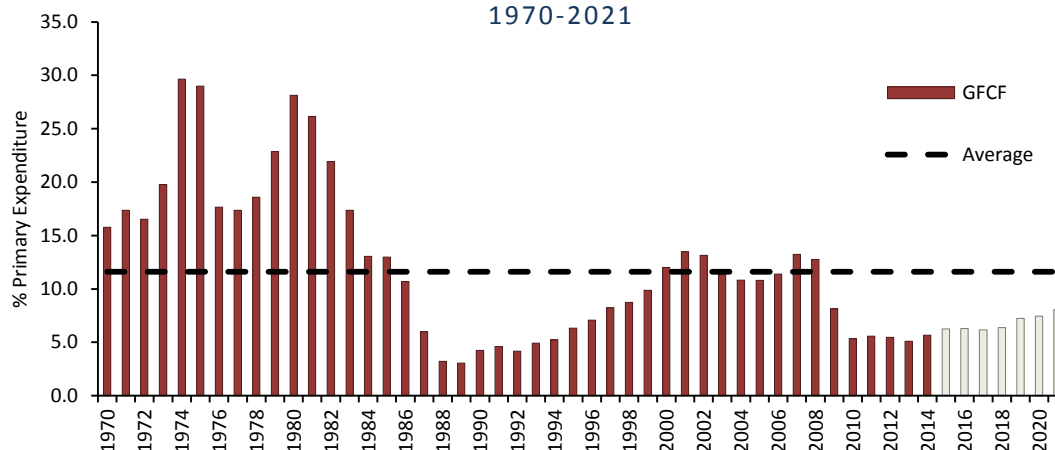
Source: CSO, *SPU 2016,* internal IFAC calculations.
Note: Primary Expenditure equals total expenditure less interest rapayments on government debt.
White bars show the forecasts from *SPU 2016.*

Expressing public investment as a share of nominal GNP paints a similar picture over the more recent period 1995-2015, with investment having fallen from a peak of 6 per cent of GNP in 2008 to 2.2 per cent in 2015 and is projected in *SPU 2016* to average approximately 2.1 per cent per-annum from 2016 to 2021.[4] This puts public investment below its long-run average of 3.7 per cent of GNP.[5]

FIGURE 2: GENERAL GOVERNMENT GFCF (% NOMINAL GNP), 1995 - 2021
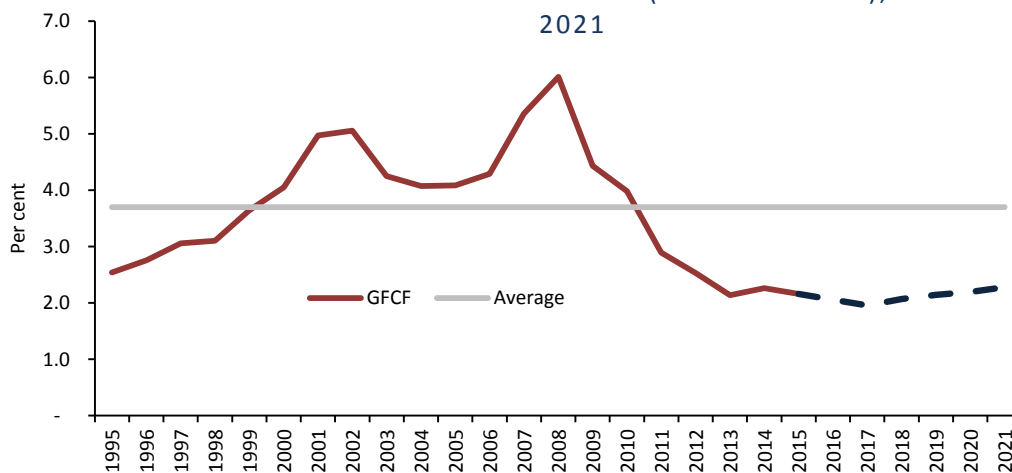
Source: CSO, Internal IFAC Calculations.

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[4] GNP is used due to the size of the multinational sector. For Ireland it is likely a better indicator of aggregate economic activity than GDP.

[5] Averaged over 1995-2015.

Turning to the composition of government investment, Figure 3 below shows GG investment by sector over the period 1995-2014. The low level of public investment since 2008 has seen evidence of bottlenecks emerging in both Transport and Housing. Both these areas have seen very large investment reductions since 2008, while investments in Health, Education and Water Supply have also fallen, though to a lesser degree. Notably, investment in public housing has fallen by some 90 per cent over the period from 2008 to 2013.

FIGURE 3: PUBLIC INVESTMENT (% GNP)
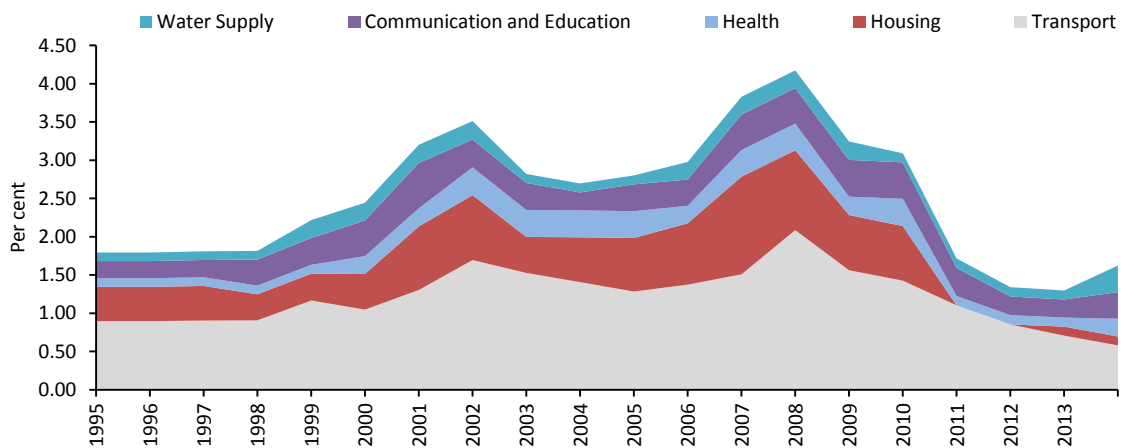
*Source:* Eurostat, internal IFAC calulations

The *Infrastructure and Capital Investment Plan 2016-2021* allocates some €2.9 billion to housing over the period 2016-2021 with an additional €300 million under PPP which would bring total public investment in housing to levels observed in the early 2000s. Current government estimates indicate that some 90,000 households are on housing waiting lists for some form of social housing support. *Social Housing Strategy 2020* (Department of Environment, Community and Local Government, 2014) outlines plans to deliver some 35,573 social housing units over the period 2015-2020 at a cost of €3.8 billion in two phases; some 19,000 units approximately are planned for delivery by the end of 2017, while the remaining 17,000 are planned for delivery by 2020. The strategy splits investment between current and capital, with the initial period supported mainly by capital expenditure.[6] Given the historically low levels of current housing investment and completions (as shown in Figure 4), as noted by the ESRI (2015d) these targets appear challenging to achieve. While local authority completions and acquisitions doubled in 2015 to 1,030, this is well below the required target of about 5,800 units annually out to 2020. Furthermore, while the *Social Housing Strategy* aims to provide the 35,500 new units as a mixture of completions, acquisitions

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[6] The split is due to the fact that the 35,500 units are not all new constructions, but are also acquisitions of existing stock for social housing needs and leasing. Additional investment is also planned to take place in the form of Public Private Partnerships (PPP's).

and leases, the tight supply situation currently prevailing in the housing market indicates that it is likely that completions will need to form the majority of planned provision.

In addition to the public housing area, there is evidence of capital shortfalls in other areas, such as in the national water network and in transport infrastructure, particularly in the Dublin region. [7,8]

FIGURE 4: LOCAL AUTHORITY HOUSING COMPLETIONS, 1970-2020
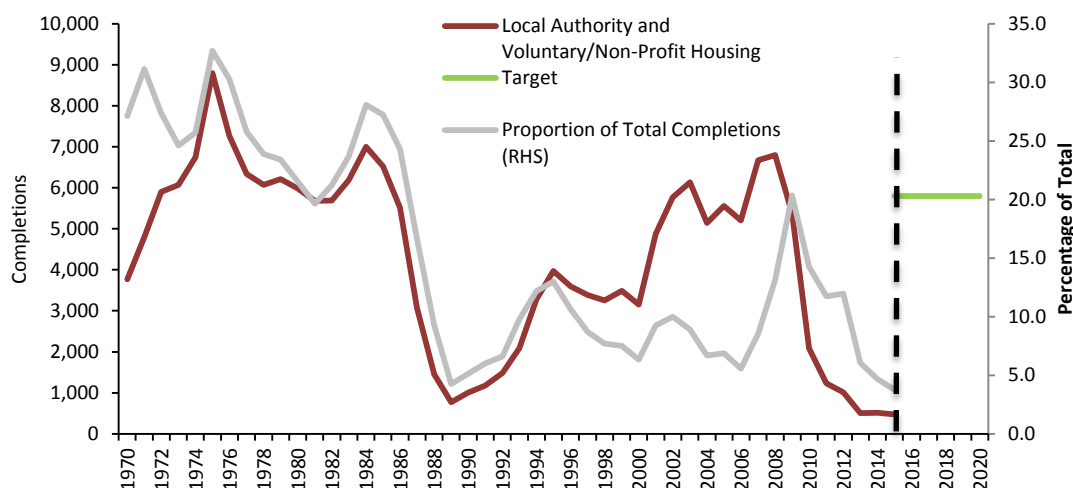
Source: Department of Environment, Community and Local Government
Note: Approximately 5800 units are needed annually in order to meet the target. This includes both completions and acquisitions

Overall, while the capital plan allocates some €27 billion in exchequer resources and a further €14.5 billion non-exchequer over the period 2016-2021, this only brings total General Government investment to around 2.3 per cent of GNP by 2020.[9] Furthermore, as explained below, it is likely that a large proportion of this expenditure will be required to cover the cost of depreciation.

Figure 5 shows that relative to Ireland's European partners, forecasted investment as a share of output in 2016 and 2018 in Ireland is the lowest in the EU. It should also be noted that public investment levels in the EU have generally been trending downwards in recent years. The rationale for the *Investment Plan For Europe* (EC, 2014), and in particular *The European Fund for Strategic Investments* (EFSI), which aims to mobilise some €315bn in additional investment over the coming

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[7] See Irish Water (2015) *Strategic Services Plan: A Plan For the Future of Water Services* for further details.

[8] The TomTom Traffic Index ranks Dublin as the fourth most congested city in the world with a population of less than 800,000.

[9] This note examines General Government investment. Therefore, the figure of 2.3 per cent of GNP given above includes the €27 billion Exchequer component of the *Infrastructure and Capital Investment Plan 2016-2021*, but not the non-Exchequer component of €14.5 billion since this investment lies outside of the General Government, and thus cannot be considered as public investment carried out by the Government. Including the non-exchequer component would raise investment to some 3.5 per cent of GNP on average over the 2016-2021 period. Adding the proposed €4 billion additional investment as announced in the *Programme for a Partnership Government* would raise General Government investment to some 2.4 percent of GNP over the period. This additional amount has not been finalised and is not included in the GFCF figures in *SPU 2016.*

three years, is to help to alleviate some of the pent-up demand across the EU by stimulating higher investment.

FIGURE 5: GG GFCF (%GDP), 2016-2018
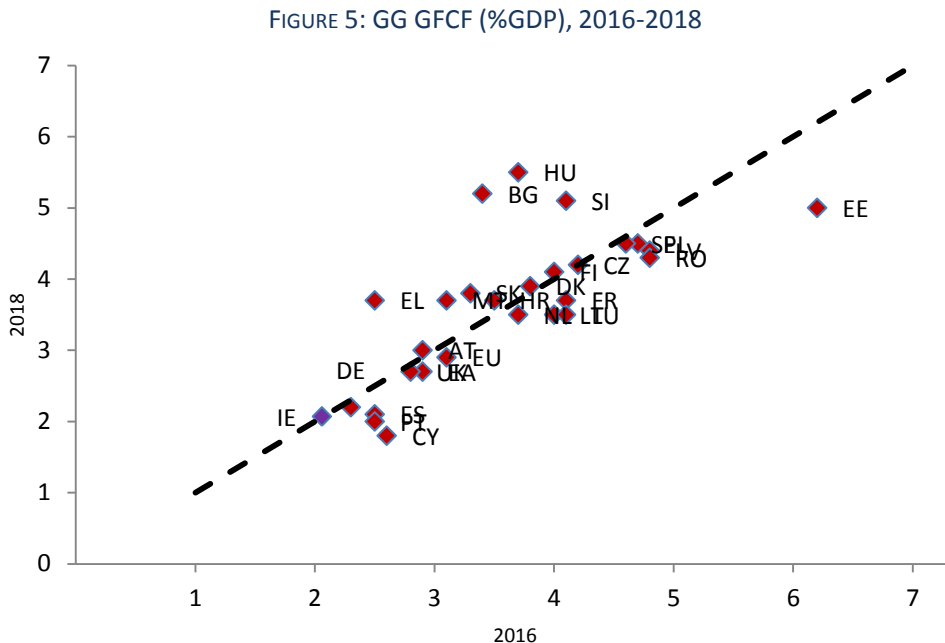
Source: European Commission , SPU 2016, internal IFAC calculations
Notes: Ireland is presented on a GNP basis due to the dominance of the mutinational sector. The dashed line has a slope of 1, therefore for any countries above the line, investment is higher in 2018 than in 2016. The reverse is also true.

3.   PUBLIC INVESTMENT WITHIN THE FISCAL RULES

From 2016, Ireland will operate under the Preventive Arm of the Stability and Growth Pact, which is focused on achieving a Medium-Term Budgetary Objective (MTO) for the structural budget balance. The structural balance is the surplus or deficit in the government's budget after adjusting for the cyclical position of the economy and one-off factors. The MTO for Ireland was recently revised from a balanced budget in structural terms to a deficit of 0.5 per cent of GDP. For a discussion of the update to the MTO, see Box F in the council's *Fiscal Assessment Report, June 2016.*

The assessment of progress towards the MTO uses the structural balance as a reference, but also includes an analysis of expenditure growth net of discretionary revenue measures. The Expenditure Benchmark is an important factor in the overall assessment of compliance with the preventive arm of the Stability and Growth Pact. It provides guidance on how expenditure should be set to fulfil the adjustment path condition when a country is not at its MTO or on maintaining the structural balance at the MTO once it is attained. In Ireland, the expenditure benchmark informs the setting of the statutory multi-year expenditure ceilings.

The expenditure benchmark essentially says that annual expenditure growth should not exceed the medium-term rate of potential GDP growth, unless the excess is matched by discretionary revenue measures. If expenditure increases at the medium-term reference rate of potential GDP, the benchmark aims to ensure that there is no change in the structural budget balance.

Compliance with the expenditure benchmark (EB) is assessed by constructing a corrected expenditure aggregate which is calculated by subtracting interest expenditure, adjusted GFCF, cyclical unemployment expenditure and government expenditure co-financing EU funding from total expenditure in a given year. The adjusted GFCF value is constructed by subtracting a backward-looking 4-year average of GFCF from the current year GFCF. This adjustment affords some flexibility as it allows governments to smooth the cost of investment projects over a 4-year horizon. The key objective of the EB is to ensure sustainable increases in government spending in line with the economy's underlying capacity to generate the tax revenue required to fund any spending increases. Expenditure growth in excess of the economy's underlying potential growth is permitted provided the excess spending is matched by revenue raising measures. From this perspective, the EB does not constrain governments' ability to undertake capital investment but only requires that such spending is funded from sustainable tax revenue.

BOX A: PUBLIC INVESTMENT IN FISCAL RULES

Given the important role which public capital has in the provision of public services, and its contribution to potential output, there is some debate over the merits of adopting a 'Golden Rule' which excludes public investment from the fiscal rules (see Portes and Wren-Lewis 2014, Mintz and Smart, 2006).

Several modifications to the rules have been proposed in order to strike a balance between fiscal responsibility and an appropriate level of investment. Modigliani et al. (1998) suggest the use of a deficit measure which nets out capital investment, though Balassone & Franco (2000) show that this may lead to inconsistencies with regard to the Excessive Deficit Procedure (EDP). Portes and Wren-Lewis (2014) argue for a capital investment target (X per cent of GDP for example). This would serve two purposes: firstly, it would prevent capital investment from being cut disproportionately in the event of a shock which negatively impacts the public finances or conversely from increasing too much during a boom; and secondly, it would allow governments to achieve an optimal level of capital investment given economic and demographic factors in a transparent fashion.

Alternative financing arrangements such as Public Private Partnerships (PPP's) can offer governments several apparent advantages, the most notable of which is that since PPP's allow governments to effectively amortise the cost of investments over a number of years, they are considered 'off balance sheet' for the purposes of the deficit and therefore are outside of the fiscal rules

However, there are also notable disadvantages. Since private sector firms cannot diversify risks as widely or efficiently as the public sector, this often results in the rate of return paid

to the private firm being above the attainable interest rate on government debt.[10] Secondly, the large contingent liabilities which accrue due to this type of 'off balance sheet' investment can adversely affect long-term fiscal and macroeconomic sustainability, and impose an intertemporal cost burden on future generations (Araújo and Sutherland, 2010). There are also issues surrounding the selection of the appropriate bidder, and construction of appropriate contractual arrangements such that the relative risks are efficiently allocated.

Thus, PPPs can appear an attractive means of funding capital investment. However, PPPs in effect represent a deferred payment, and the net financial position largely depends upon the value for money achieved by the PPP project, and the sustainability of the projects. Careful analysis should therefore be undertaken by the authorities in order to identify the most appropriate means of investment for a given project.

4.   TRENDS IN THE PUBLIC CAPITAL STOCK

Public investment is important as it contributes to the stock of public capital, which is needed to support the provision of public services. A public capital stock series is compiled by the CSO in the Government Finance statistics, and is referred to as General Government net worth: non-financial assets (NFA's). The series is available only since 2009, however, a longer series is constructed here using the Perpetual Inventory Model (PIM) employed by the CSO to estimate the stock (see Box C, below). In practice, this stock is comprised of fixed assets in public administration and defence, education, health and local authority housing. Note that since this series is classified as General Government, it excludes certain state-owned companies and semi-state bodies such as the Central Bank of Ireland.[11,12]

BOX B: PUBLIC CAPITAL AND ECONOMIC GROWTH

A large body of economic literature exists which explores the relationship between public capital and output. Early work in this area, notably Aschauer (1989a, 1989b), adopted simple production function approaches where output *Y* is determined by total factor productivity *A*, labour inputs *L*, private capital *K*, and public capital *G*:

$$Y_t = A_l L_t^\alpha K_t^\beta G_t^\gamma, \tag{1}$$

where the parameter γ gives the elasticity of output with respect to the public capital stock. In practice however, estimating such an equation is fraught with econometric difficulties, notably endogeneity between capital and output. Nonetheless, this methodology is common; a typical example is Kamps (2006), who finds an elasticity of 0.22 across a panel of 22 OECD nations between 1960 and 2001. This result implies that a one per cent increase in

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[10] Spackman (2002) and HM Treasury (2000) estimate that non-diversifiable risk pushes the interest rate on senior debt in PPP's 2 – 3 percentage points above the interest rate on government debt.

[11] An exception to this is Irish Water, which is classified as a 'non-market entity controlled by Government' and is thus included in the general government. See the July 2015 letter from Eurostat for further details.

[12] See Barnes and Smyth (2013) for a detailed discussion of the classification of Government assets and liabilities.

the public capital stock is associated with a 0.22 per cent rise in output.

In order to overcome the endogeneity problem, many studies have employed VAR and VECM analysis, which generate both short-and long-run elasticities. Kamps (2004) follows this approach using time-series data from 22 OECD countries. The results show no significant effects of public capital on real GDP in Ireland over the long run. However, the elasticity of private capital with respect to public capital is 0.58 and significant, indicating that while public capital may not directly affect output, it can do so indirectly through 'crowding in' effects.

Another common method is to employ cost functions, which obey marginal productivity theory, offer more flexible functional forms, and allow modelling of public-private capital links. Demetriades & Mamuneas (2000) employ quadratic cost functions to estimate elasticities across 12 OECD countries. The estimates vary from 2.06 (Norway) to 0.36 (UK).[13]

The results from the varying methodologies generally indicate that increases in public capital contribute positively to output, either directly or indirectly. This implies that falling stocks of public capital could act as a drag on growth, while investment in new capital could help to drive future growth.

The NFA series is published in net terms, meaning that it accounts for depreciation. Although the series is published in nominal values only, a price deflator can be constructed using equation (4) from Box C below, and from this a real series can be computed. Both nominal and real public capital stocks are shown in Figure 6A, and Figure 6B gives the nominal stock as a share of GDP, GNP and IFAC's hybrid measure of fiscal capacity.[14] For the period from 2015-2021, the stock is grown forward using equation (3) in Box C below (assuming an average rate of depreciation of 3.8 per cent). Figure 6B in particular shows that public capital stock as a share of output is falling in each year over the forecast horizon. It is worth noting that the large increase between 2008 and 2010 is primarily attributable to the sharp contraction in the measure of output used in the denominator during this period.

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[13] Ireland is not included in the Panel.

[14] The hybrid measure of output is an intermediate measure of fiscal capacity between GDP and GNP. It puts differential weight on GNP and the excess of GDP over GNP, defined as: H = GNP + 0.4(GDP − GNP). For details see IFAC (2012b).
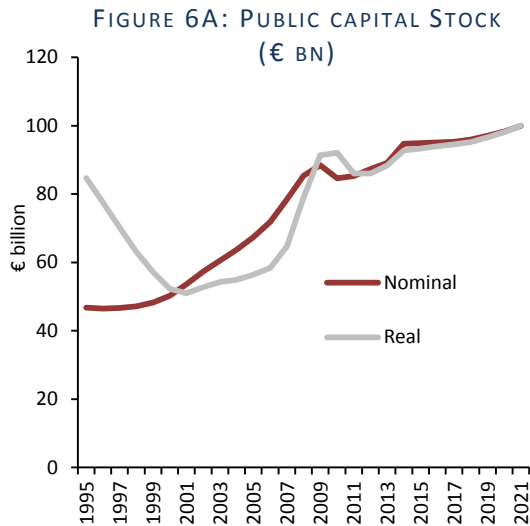
FIGURE 6A: PUBLIC CAPITAL STOCK (€ BN)

Note: The real series is constructed using a price deflator computed from a Perpetual Inventory Model.
Source: CSO, internal IFAC calculations.

FIGURE 6B: NOMINAL PUBLIC CAPITAL STOCK AS SHARES OF OUTPUT
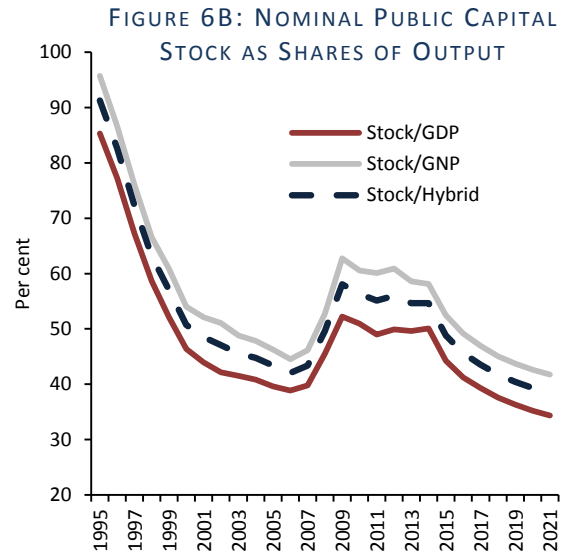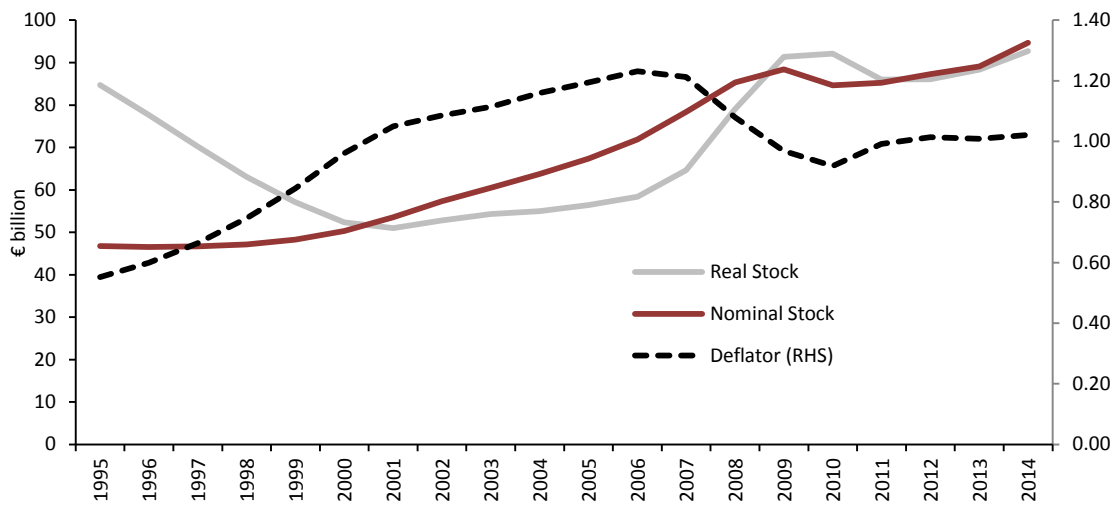

Source: CSO, internal IFAC calculatons

In assessing the capital stock and its relationship to output, it is important to take into account both the volume of capital (the physical amount of capital goods) and the price or value of each unit of capital. Figure 7 below shows the net public capital stock in nominal and real terms, and also shows the implicit price deflator on the secondary (RHS) axis. As the chart shows, during the boom years the value of the capital stock increased mostly as a result of strong investment, but also due to valuation changes in the capital stock.

During the crisis years, the nominal public capital stock flattened out due to weak investment. As the capital stock deflator fell by an even larger amount, the decline in the nominal stock did not translate into an equivalent reduction in the real value of the capital stock which had risen sharply in the latter years of the boom. In recent years, rising investment prices (albeit from a low base) have seen the nominal stock exceed its pre-crisis peak. However, while lower investment prices mean that a given amount of nominal spending can yield more real capital, trends in real investment and the capital stock remain subdued.

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FIGURE 7: NET PUBLIC CAPITAL STOCK: PRICE/VOLUME SPLIT

Note: The real series is constructed using a price deflator computed from a Perpetual Inventory Model
Source: CSO, internal IFAC calculations

A comparison of the Irish public capital stock with those from other European countries shows that as a share of output, the real Irish public capital stock is slightly higher than Ireland's continental peers, but substantially lower than that in the UK.

FIGURE 8: REAL PUBLIC CAPITAL STOCKS (%GDP), 1998-2014
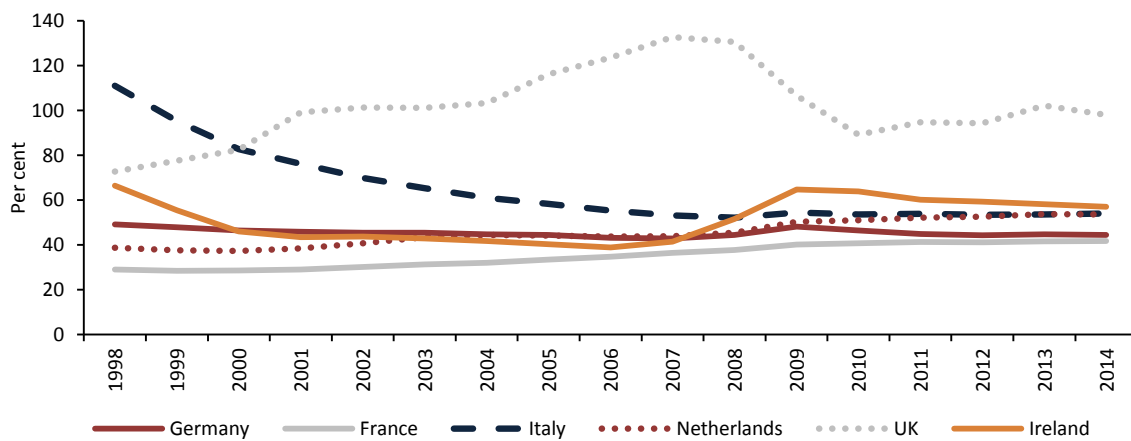
Note: Ireland is presented on a GNP basis due to the dominance of the multinational sector.
Sources: Eurostat, CSO, internal IFAC calculations.

5. CONSUMPTION OF FIXED GOVERNMENT CAPITAL (DEPRECIATION)

The relationship between investment and the net stock of capital depends on depreciation, which can be best described as the loss in the value of an asset over a given period due to wear and tear. For example, a section of road produces services for the vehicles using it, but will gradually wear as a result of the traffic and other factors. Economically, depreciation is best described as a deduction from income to account for the loss in capital value owing to the use of capital goods in production

([OECD, 2009](#)). Depreciation is referred to as consumption of fixed capital in ESA 2010 (series P51c in Table GFA01 of the Government Finance Statistics). Box C below details the methodology used by the CSO to compute depreciation in the National Accounts.

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BOX C: ESTIMATING THE CAPITAL STOCK: PERPETUAL INVENTORY METHOD

The CSO computes annual estimates of the capital stock of fixed assets using the Perpetual Inventory Method (PIM) following the OECD guidelines (2007, 2009). The capital stock is valued in both gross (including depreciation) and net (excluding depreciation) amounts, and is available in nominal terms. The nominal stock is the value of the stock held at the end of the year, valued at average prices during the year. The gross stock G at time t can be expressed as:[15]

$$G_t = \sum_{j=0}^{L} (GFCF_{t-j})(s_j) \tag{1}$$

Where L is twice the life of the asset and s is the proportion of GFCF still in use after j years, and is calculated using estimated mortality functions based on the log-normal density function. The assumptions made regarding the life of an asset can be quite restrictive, particularly with regard to infrastructure; for example, the lifespan of a road or bridge is extremely difficult to determine.

The net stock K at the end of period t follows a geometric profile of the form:

$$K_t = \left(1 - \frac{\delta}{2}\right)\left[\sum_{n=0}^{j} (1-\delta)^n GFCF_{t-n}\right] \tag{2}$$

Where δ is the rate of depreciation. In general, depreciation is assumed to equal $2/m$, known as double-declining geometric depreciation, where m is the average life of an asset. For longer-lived assets however, notably public administration office buildings, the rate is assumed to be $1.3/m$. The stock-flow relationship for the geometric profile is:

$$K_t = K_{t-1} + GFCF_t - \delta\left[\frac{GFCF_t}{2} + K_{t-1}\right] \tag{3}$$

Computing δ using the public net capital stock gives an average rate of depreciation of around 4 per cent over the 1995-2014 period. Consumption of fixed capital D becomes available through the estimation of the stock in gross and net terms, and can be expressed as:

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[15] The discussion follows the [CSO methodological note on the capital stock estimates](#), and the [OECD (2009) *Measuring Capital*](#) manual

$$D_t = P_0 \delta \left[\frac{GFCF_t}{2} + K_{t-1} \right]$$

(4)

Where *P* is a price index for depreciation.

Placing depreciation within the context of general government expenditure, Figure 9 illustrates that while investment in fixed capital exceeded depreciation by a substantial margin during the boom, the fall in investment since the crisis leaves current investment levels roughly at parity with depreciation. On average, over the period 1995-2014 depreciation has accounted for 61 per cent of GFCF, with a peak of 105 per cent in 2013. When investment falls short of depreciation, there are no net increases in the stock of public capital. An important distinction is this regard is that of gross versus net investment; gross investment refers to the total GFCF outlay excluding depreciation, and net investment refers to the remainder after depreciation has been accounted for. An example of this is the €6 billion investment in roads announced in the *Infrastructure and Capital Investment Plan 2016-2021*, of which €4.4 billion (some 73 per cent) is allocated to depreciation costs. Figure 9B shows net investment out to 2021 based on the *SPU 2016* forecasts plus the additional €4 billion investment proposed in the *Programme for a Partnership Government.* Although increasing, net investment only reaches one percent of GNP by 2021.

FIGURE 9A: GFCF AND DEPRECIATION (€ BILLION)
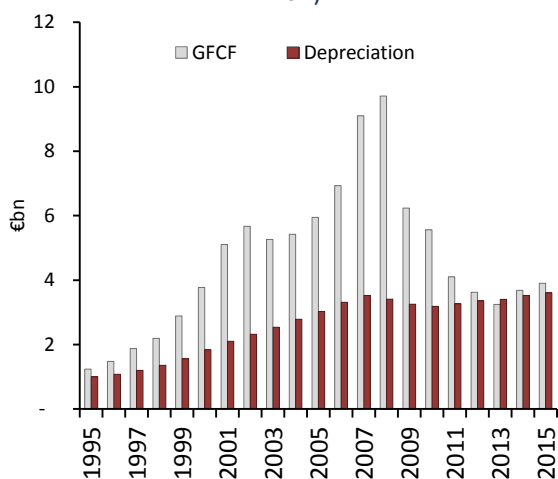
FIGURE 9B: NET INVESTMENT (% GNP), 2016-2021

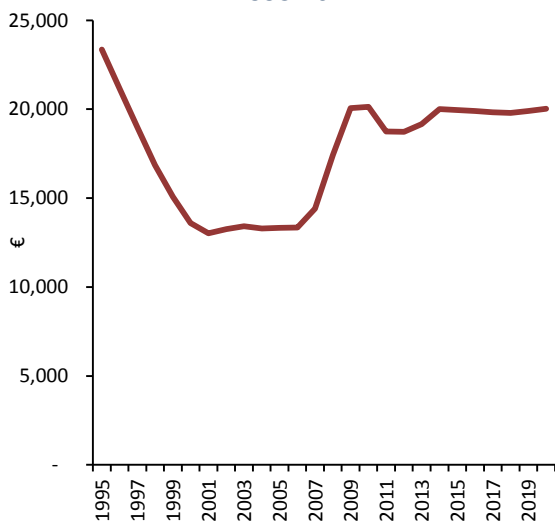*Source:* CSO, *SPU 2016,* Internal IFAC calculations.
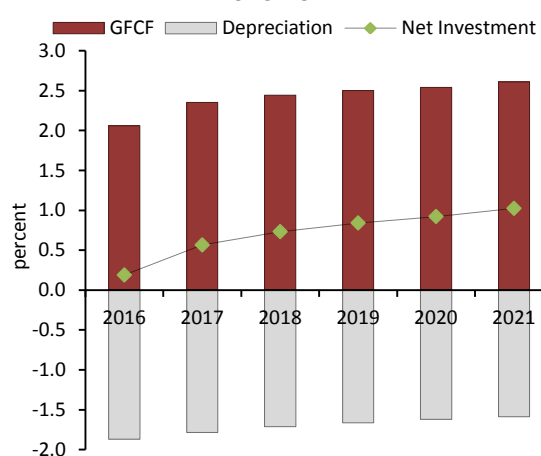
Source: SPU 2016, internal IFAC calculations
Note: Depreciation is assumed to be 4 per cent per annum over the period 2015-2021. The additional €4 bn GFCF outlined in the *Programme for Government* is included by adding €0.8 bn in each year from 2017 to the *SPU 2016* GFCF projections

The low levels of net investment anticipated over the coming years are concerning in light of expenditure pressures previously identified by the Council (see IFAC, 2015b). Although the *Infrastructure and Capital Investment Plan 2016-2021* allocates €41.5 billion,[16] public investment over the forecast horizon is barely adequate to cover the estimated cost of depreciation of public capital, based on historical depreciation rates. One way in which future expenditure pressures can be illustrated is by taking the real net capital stock per capita. For the period from 2015-2021 depreciation is assumed to hold at 3.8 per cent per annum, and the projected population estimates are taken from IFAC's demographic model. Forecasts for investment in public capital are taken from *SPU 2016.* Figure 10A below shows the real net public capital stock per capita over the period 1996-2021. As can be seen, the per capita stock is expected to fall before increasing slightly to the levels observed in 2014. Figure 10B shows that the at current rates of investment and depreciation, the public capital stock as a share of real GNP will fall over the medium term, indicating that public capital investment is not currently projected to keep pace with growth in the economy over the medium term.

FIGURE 10A: NET REAL STOCK PER CAPITA, 1995-2021

Source: CSO, internal IFAC calculations.

FIGURE 10B: NET REAL STOCK (% GNP), 1995-2021
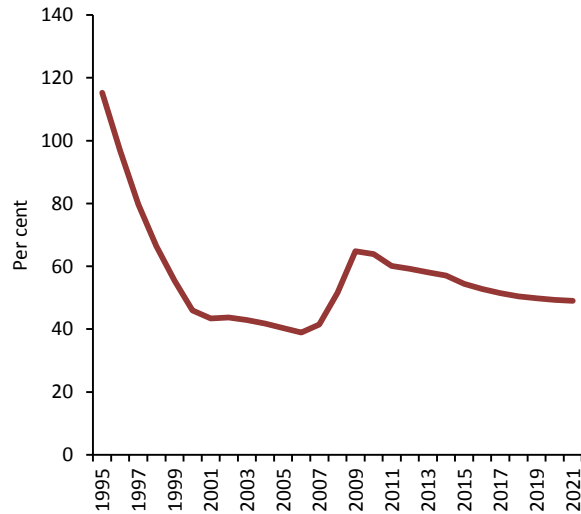
Source: CSO, Internal IFAC calculations.

6.   CONCLUSION

The analysis presented here indicates that investment in public capital is at historically low levels. Over the *SPU 2016* forecast horizon, investment projections imply only modest increases in the stock of public capital after allowing for depreciation of the existing stock. This is not unusual in the European context, although Ireland fares particularly poorly relative to the other EU countries.

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[16] Some €27 billion on an exchequer basis and €14.5 billion non-exchequer

Furthermore, a sizeable body of international literature shows that stocks of public capital are important for long-run potential output growth. Consequently, there is a risk that the low level of projected public capital investment in Ireland could reduce the long-run potential of the Irish economy.

From the perspective of assessing the Government's budgetary forecasts, given these projected trends for public capital investment and the medium-term spending pressures previously identified by the Council, current projections by the Department of Finance may underestimate future expenditure needs.

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