Implementation of the National Development Plan and National Planning Framework- Aspiration or Deliverable?

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Introduction

In February 2018 and thirty years on since the first national development plan (NDP) was published for Ireland, the Government produced their ten year capital investment plan.

Unlike the previous four plans, this publication was heralded as a major innovation in spatial planning and infrastructural investment in Ireland. For the first time the twenty year spatial plan for the country; the National Planning Framework (NPF) was developed in tandem with a ten year capital investment plan. Writing in the ESRI Investment Priorities Study in 1999, John Fitzgerald and his co-authors highlighted the need to develop a spatial planning framework for the country given the role of investment in shaping spatial patterns of development.[1] While there were attempts to coordinate the 2002 national spatial strategy with the 2000-2006 NDP and align it with the subsequent 2007-2013, it has taken almost two decades for the 1999 policy recommendation to be properly realised.

The other major innovation announced at this time was that the national planning framework would be placed on a statutory footing. It is envisaged that this will lead to a better synchronisation between the goals within the national planning framework, the regional and spatial economic strategies, the city and county development plans and local area plans across the country.

Will all this ensure that the goals or the "national strategic outcomes" of the NPF will be realised? The jury is still out.

The process to coordinate the local, county, regional and national plans is only just commencing at end 2018 and will take time to realise any discernible benefit. Funding for the capital projects was announced under the National Development Plan, but this is only one element to realising the goals of the NPF. The other requires detail on the current expenditure plans to improve "access to childcare, education and health services" and fiscal and current spending plans to help "transition to a low carbon and climate-resilient society" and as of Budget 2019, there is little progress to note.

In that context, this paper looks at the deliverability of the part of the NPF where we do have detail and that is in the NDP. Two main questions arise; can the ten-year spending plan be realistically implemented and is the scale of the funding sufficient to address the goals of the NPF.

A review of the spending plan raises questions about the net value of new capital spending contained within the Plan. This has implications for identifying the extent to which the NDP provides for the replacement of existing stock and the provision of new stock to meet future demographic and economic needs. Unfortunately, knowledge as to the value, depreciation and useful life of existing

[11] Morgenroth E. W (2006). *The National Spatial Strategy: Regional, Urban and Rural Development* in Morgenroth E. and FitzGerald J. (Ed.) (2006) *Ex-Ante Evaluation of the Investment Priorities for the National Development Plan 2007-2027* ESRI: Dublin

infrastructure is very patchy across government departments.

In addition, concerns are raised as to the adequacy of national budgetary systems to provide for operation costs and continued maintenance associated with the infrastructure.

The roll out of the NDP takes place amidst ongoing concerns about the potential overheating of the Irish economy. In particular concerns have been expressed about the supply of construction labour and the capacity to increase construction employment over the future years to roll out infrastructural investment and the growing demand for housing. We discuss this and conclude on the extent to which this is likely to impede delivery of the NDP and housing demand.

The NDP in a macroeconomic context

In both their 2003 mid term evaluation of the 2000- 2006 NDP and their ex ante evaluation of the 2007-2013 national investment priorities, the ESRI highlighted the pro- cyclical impact of the 2000-2006 NDP on an already fast growing economy.[2] In particular, they noted that the 2000-2006 NDP allocated a larger share of national income to capital investment compared with countries with a similar standard of living. Between 2000 and 2002 alone, NDP spending averaged 6.8% as share of GNP per year.

In contrast, the 2018-2027 NDP projects annual average public spend of 3.76% of GNI*. Despite the fanfare surrounding the stock of capital spending within the NDP of €116bn, the flow of additional financial commitment is relatively modest. Only €5.8bn in additional cumulative exchequer spending is planned over the decade 2018-2027. This comes in a period where the current Government is planning to generate exchequer surpluses of up to €12.7bn between 2020-2023.[3]

With the exception of Portugal, Ireland had the lowest public investment share of economic output across EU member states in 2018- just 1.9% of GDP.[4] The "catch-up" envisaged by the NDP expects this share to rise and thereby significantly exceeding the EU average over the period from 2021 on. This is a welcome development but it is important to note that capital spending across EU member states has not remained fixed over time. There has been a general decline in capital investment over the past decade with the euro-area average going from 3.2% in the period 1999-2008 down to 2.5% in 2017.

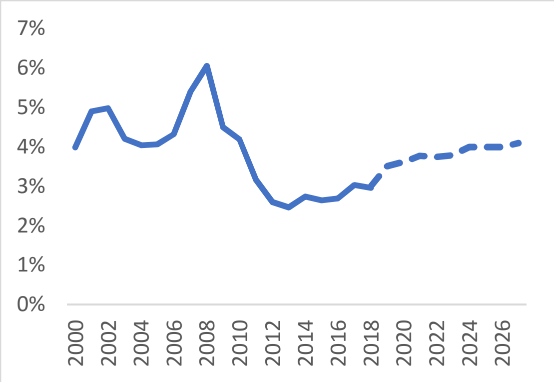
A more insightful measure is to compare capital expenditure over almost two decades within the Republic of Ireland with what is planned over the next decade. GNI* provides a more reliable insight into economic activity here compared with GDP and figure 1 charts investment as a share of GNI* over almost three decades 2000-2027. Between 2000 and 2008, capital expenditure averaged 5% as share of GNI*. Over the lifetime of the current NDP, capital expenditure will average 3.8% per annum as a share of GNI*. By 2027 capital expenditure will remain behind the trend growth levels recorded over the decade of the boom 2000-2008.

[2] Fitzgerald J. et al (2003). Mid Term Evaluation of the National Development Plan and Community Support Framework for Ireland, 2000-2006. ESRI: Dublin.

[3] Dept of Finance (2018).Economic and Fiscal Outlook. Government of Ireland: Dublin.

[4]Source: EU Commission General Government Data, Spring 2018.

Figure 1 Gross Voted Capital expenditure as share of GNI* 2000-2027(f)



Source: CSO National Income and Expenditure. Budget 2019 forecasts, NDP forecasts

Can it be realistically delivered?

Three risks to delivery are apparent; political, labour supply and operational.

The 10 year national development plan spans at least two electoral cycles, with almost 60% of the total NDP spend backloaded to the period 2023-2027. This is at least one or more government term away and it happens to coincide with the early years of any new political and economic arrangement between the UK and the EU and by extension, the Republic of Ireland.

The cost imposed by Brexit on the public finances remains unclear and while capital expenditure will account for just over 11% of gross voted government expenditure some five years into the NDP in 2023, there are concerns that the capital spending plan will become vulnerable in the event of a downturn. It has been signalled by Government that all exchequer financed capital expenditure will be funded from within own resources from 2019 so in the event of a downturn there will be no guarantee of outlay for the NDP.

On the upside, the prospect of Brexit has already provided a positive spill-over to construction factor costs with the continued weakening of sterling relative to the euro. The Leontief inverse coefficient in the input output tables suggests that construction materials have a relatively high import content of 47.8% and in this context, there may be a temporary saving to construction works under the NDP.

Labour supply

The potential overheating of the Irish economy is the other major uncertainty in the delivery of the NDP. Concern has been expressed about the Government's potential role in propelling the economy to overheat via construction employment/wages and investment demand. In particular there are concerns about the capacity to source and house sufficient construction labour supply with implications for wages in that sector.

The labour intensity of the projects plus the overall size of public investment relative to overall capital investment are the two critical factors to measuring the labour supply issue.

Compared with the total scale of private sector investment activity in Ireland, the public capital programme is small relative to total investment activity in the state. In 2018, the public capital programme is approximately one- fifth of the size of modified GFCF and this is not likely to change dramatically over the next decade if we assume GFCF* will grow in line with GNI* at an annual average of around 3% over the next decade.

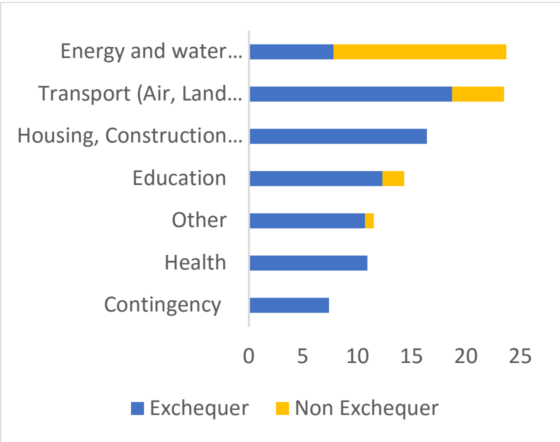
With regard to labour intensity, we can depend on Dept. of Public Expenditure and Reform estimates of labour input per infrastructure investment type.[5] Figure 2 below sets out the composition of NDP spend with the transport, energy and water sectors accounting for just under half of the total projected spend.

[5] Dept. Public Expenditure and Reform (2015). Public Capital Programme 2016-2021: Labour intensity of public investment.

Approximately 64% of the total NDP funding package is in construction related activities of which some 36% are in civil engineering projects, 24% in building activities with the balance in installation projects. Based on Dept of Public Expenditure and Reform guidance for labour input, we estimate that approximately 60,540 jobs will be created across these projects over the lifetime of the 10 year plan.

The long duration of the plan means there is no substantial and immediate labour supply risk posed by the NDP. However, there is a wider issue relating to the ramping up of private sector construction activity- most notably on the residential sector. Given that 60% of the NDP is backloaded to the period post 2023 and if private sector housing activity ramps up to the scale required around that same time, then there may be an escalation of labour supply shortages around that period. This wider labour supply issue in the construction sector is dealt with in the conclusion to the paper.

Figure 2. Distribution of NDP funding 2018-2027 Exchequer and Non Exchequer



Source: NDP

Operational risk

In their 2017 review of public investment management in Ireland, the IMF acknowledges recent improvements in the evaluation process for capital projects and a greater focus on the efficiency of public spending in Ireland.[6] However, a number of key areas were singled out for improvement in terms of multi-year project budgeting, the failure to properly identify operational costs and inadequate accounting systems relating to existing public assets.

Failure to identify the operational costs associated with capital projects poses two separate but related challenges. The first relates to the profiling of public finances into the future. In practise there is a timing issue here and the timely availability of current expenditure to operate infrastructure once it becomes available.

Unfortunately at the time of the publication of the 2018 National Development plan, no profile of additional current expenditure required to operate new capital projects was made available. With the exception of the revised Common Appraisals Framework within the Department of Transport, Tourism and Sport along with projects covered by PPPs and Irish Water, it is not clear whether ongoing operation costs are assessed apriori in any other public funding evaluation and where it is included in the calculated, there is no standard methodology across departments and agencies.

There has been a history of underutilisation or delayed utilisation of equipment and infrastructure within the Irish health system arising from a lack of total project planning. In education, some €2bn has been allocated to support infrastructure in universities over the next decade within the NDP and at the time of writing, there remains no mention of the very significant operational costs problem within 3rd level and in particular the university sector.

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[6] Renteria C. et al (2017). Public Investment Management Assessment. Technical Assistance Report as IMF Country Report 17/333. IMF: Washington D.C.

The second and more serious impact from an absence of multi-year project budgeting is on the efficiency of public spending. Again in their 2017 assessment, the IMF highlight that data on the use of existing capital stock is patchy across sectors. Establishing the value and condition of existing capital stock, quantifying the type and scale of maintenance and depreciation costs, constraints on additional supply and underlying drivers of demand is critical to establishing the optimal level and composition of public investment in public infrastructure.

Instead, the NDP is essentially a demand management spending plan; responding to future growth needs, with insufficient attention paid in the infrastructure planning process to the quality and quantity of existing public assets. Ironically, it appears that the next frontier in capital spending evaluation in this country is arriving at what should be a starting point in the process; understanding what type of public infrastructure we already have.

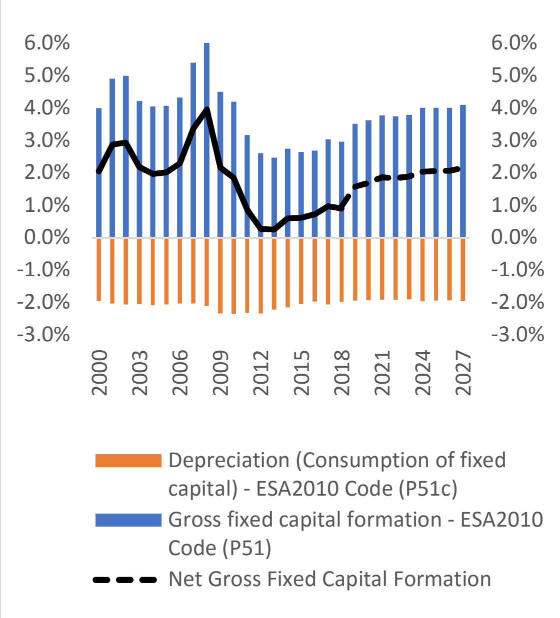
Will it be enough? Additionality of NDP

Such is the obsession with new infrastructure that little attention is given to the concept of upgrading and maintaining existing stock as discussed above. The absence of comprehensive maintenance and depreciation data across sectors complicates any assessment of the net new capital stock within the €116bn plan. Morgenroth (2014) highlights the absence of a centralised register of public stock in the Republic of Ireland and draws the comparison with Great Britain and Northern Ireland where a public asset register exists listing the values of all tangible assets.[7]

During the worse years of the economic and financial crisis, net new additions to the capital stock are estimated to have been close to zero. Depreciation/maintenance costs accounted for 90% of Public Capital Expenditure in 2012 and 2013 and in 2017, the share going to depreciation accounted for 68%. Our estimates suggest that the actual net new capital stock will grow at less than half the rate of public investment over the period 2018-2027. If we assume that the average annual rise in depreciation costs between- 2000-2017 of 4% is held constant, then depreciation is likely to average just over 50% of total capital investment between 2018-2027.

In that context, the NDP is likely to have much less of a dramatic impact on the expansion of infrastructure over the next decade.

Figure 3: Gross and Net Capital Stock (nominal values) 2000-2027(f)



Source: own calculations based on CSO Government Finance Statistics and NDP forecasts

Will it be enough?- Project Ireland 2040 (NPF), the NDP and Housing

Public infrastructure funding is typically justified on a number of grounds; targeted interventions in the event of market failure, investment in

[7] Morgenroth E. (2014). Submission to the Department of Public Expenditure and Reform on the review of the Public Capital programme. ESRI: Dublin.

public or semi-public goods, corrective pricing and redistribution. Public investment in housing has traditionally been viewed as a redistributive element of capital investment plans. However, more recent research from the fields of macroeconomics and new economic geography highlight the important positive spill over effects to the macroeconomy from adequate housing supply.

In that context, the NDP claims that resolving the issues driving the current housing crisis lies at the heart of the plan. Yet approximately €13.6bn or only 15% of the exchequer funded package is to be allocated to the development of housing.

The National Planning Framework identifies a need to deliver 550,000 houses between 2018 and 2040, with some 25,000 new houses required per annum to 2020 and somewhere between 30,000 to 35,000 houses each year to 2027. Two issues arise as to the scale of housing demand envisaged within the National Development Plan and the provisions put in place to incentivise that supply.

Firstly, details remain patchy as to the precise numbers of mixed tenure and social and affordable houses to be supported by the State's funding. The housing proposals within the NDP are an extension of the Rebuilding Ireland programme and make provision to support the construction and acquisition of 12,000 social houses per year between 2021 and 2031. Added to that, provision is made for the extension of LIHAF (Local Infrastructure Housing Activation Fund) and the Urban Regeneration and Development fund but these are expected to support the construction of just under 26,000 houses over the period of the plan- a figure that falls far short of the desired 30,000 to 35,000 annual target for the next decade.

Secondly and more importantly, total housing demand between 2018 and 2040 appears to be underestimated by the National Planning framework. Housing demand projections are typically a function of population growth and the rate of household formation. The National Planning Framework's estimate for population growth of 1.1m additional persons between 2016 and 2040 were based on assumptions of a constant fertility trend (F1- fertility rate of 1.81 per female), improved mortality rates and net migration to run at 12,500 from 2021 on, plus a 25% increase on the ESRI baseline projection.[8] However, this has since been surpassed by a sizable upward revision to CSO's own population and labour force projections in July this year. While the fertility and mortality assumptions remain relatively the same, there was a sizable upward revision in net migration estimates. All told, population projections underpinning the NDP may underestimate population growth by up to 282,000 over the next two decades.

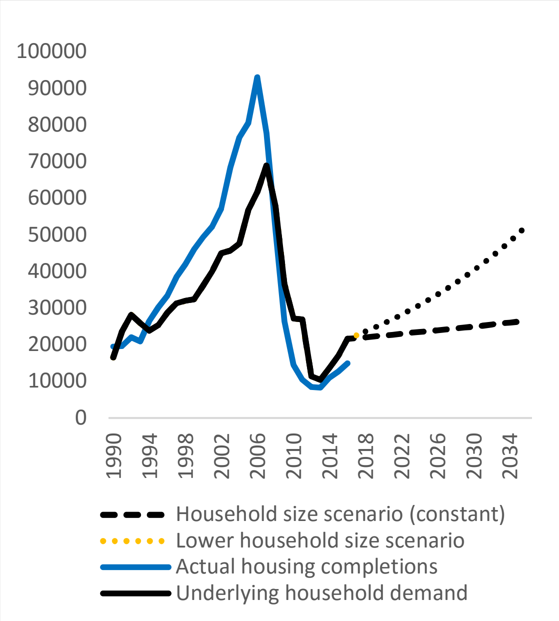
This issue is further complicated by household formation assumptions. The NPF housing-need projections are underpinned by average household size of 2.75 sliding to 2.5 by 2040. Over the two decades 1991-2011, the trend in household formation declined but then marginally rose between 2011 and 2016. Whether this represents a permanent inflection point in the long-term trend or a temporary rise due to housing supply shortages remains to be seen. However, estimates based on the longer term trend 1991-2016 or the short term trend 2006-2011 suggest that average household size will fall to somewhere close to 2.4 or less by 2040.

In their 2018 Economic Survey of Ireland, the OECD estimate two scenarios comparing housing demand in the event of average household size

[8] Morgenroth E. (2018). Prospects for Irish regions and counties. Scenarios and Implications. Research Series number 70. ESRI: Dublin.

remaining constant as per 2011-2016 and in the event of household size falling in line with the longer term trend 1988-2016.[9] In the first scenario housing supply grows by 26,000 or 1.05% per annum, marginally above the annual average population growth 0.9% (as per the revised population estimates). The second scenario shows housing demand rising to over 50,000 houses per annum by 2036.

Figure 4: Housing Demand and Output 1990-2036



Source: OECD Economic Survey of Ireland.

Conclusion

The synchronisation of national spatial planning with the allocation of a ten year capital plan is a very welcome step in right direction for policy making in Ireland. However, a gap exists between the ambition of the NPF and the funding and incentives provided for under the NDP. The scale of fiscal support to housing within the NDP relative to the housing supply targets in the NPF is the clearest example of this gap. To date, reliance on the private sector to significantly ramp up housing supply has resulted in a significant and growing shortfall.

Behind all this, there are fears that a ramping up of supply will contribute to an overheating within the sector and the wider economy, due to labour shortages within construction. This need not be the case.

SIPTU has a very large membership in the construction sector and two key insights are apparent into the constraints to employment growth. These can be narrowed down to recruitment constraints and training constraints. Targeted interventions to resolve these issues may alleviate the labour supply issue over time.

In their 2018 review of construction labour supply, Conefrey and McIndoe- Calder find little evidence to suggest significant unemployment or inactivity among former construction workers.[10] However, the review does not consider changes to the demography and business models prevailing in the construction sector as factors contributing to the growing shortage of craft and semi skilled construction workers.

There are estimates of somewhere in the region of an additional 70,000 construction workers to deliver an increase in housing output of over 20% over the next two years to 2020.[11] Inward migration of construction workers is typically mentioned as a temporary fix to the labour supply issue. However this is not a temporary labour supply problem.

Unless ground-breaking labour replacing technology emerges in the sector over the medium term, the shift level increase in residential housing activity to meet current and

[9] OECD (2018). OECD Economic Surveys Ireland. OECD: Paris.

[10] Conefrey T & T. McIndoe-Calder (2018). Where are Ireland’s construction workers? Central Bank Quarterly Bulletin Q2 2018.

[11] DKM (2016). Demand for skills in construction to 2020. Report for the CIF.

future demand requires a very substantial and permanent increase in construction labour supply.

However, SIPTU members report that alternative employment that offers lower work intensity and more consistent employment options is crowding out labour supply into construction.

In particular, the lack of availability of direct contractor employment and the growth of agency work in the construction sector, with its associated insecurity in terms of income and work, is deterring former construction workers into coming back into the sector.

The distribution of firms in the construction sector has typically been highly skewed to firms employing 10 or less people (97% in 2015) and the more recent decline in direct employment is evidenced in the increased fragmentation in construction market. Average firm size has fallen from 2+ in 2008 to less than 2 in 2015. Added to this has been a growing trend of vertical disaggregation of construction projects with a marked rise in sub contracting activity at each stage of the construction process.

This has implications not only for income and certainty of employment but also for training in the crafts and general operative grades. Apprenticeships are still only 37% of the 2008 peak but with the declining size of firms, an issue arises with insufficient staff to apprentice ratios to be able to take on apprentices. In order for general operatives to progress, they need to acquire "tickets", however as the bulk of general operative employment is with employment agencies, the level of employer sponsored training is miniscule.

All these structural issues within construction employment pose serious challenges with regard to the scaling up of the construction workforce, the meeting of future training needs and retention of skilled workers in the sector.

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