Northern Ireland Assembly

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Potential of social infrastructure investment to enhance social development and economic growth in Northern Ireland.

Overview

Research has established that social infrastructure provision positively influences economic growth and social development, and a review of historical spending in NI indicates an identified need to upgrade and replace social infrastructure. Yet, as the UK Government continues to implement its austerity policies, the NI Executive has been subject to imposed budgetary cuts and as a result, capital budgets have been restrained. Against this backdrop, there is a necessity to review social infrastructure provision policies and the mechanisms by which it is provided in NI.

Public-Private Partnerships (PPP) have been the predominant mechanism for large social infrastructure provision in the UK and will continue to be utilised through the new Private Finance 2 (PF2) model, introduced in 2013. Similarly in the Scotland, the Scottish Futures Trust approach to infrastructure investment is based on joint ventures between the Scottish Territories and private sector partners.

In providing, the new NI executive, solution-based recommendations, this presentation deliberates on the application and compatibility of the strategic infrastructure investment approaches adopted both UK and Scottish Governments as potential strategies for increased social infrastructure investment and the opportunity to enhance economic growth and social development in Northern Ireland.

Defining Infrastructure

Infrastructure serves as a fundamental contributor to societal macro, meso and micro-level functioning. Categorised as social or economic, infrastructure encompasses both public and private assets, including public services, the economic sector as well as social contributors influencing living standards and quality of life (Grimsey and Lewis, 2004). Infrastructure is the basic services or social capital of a nation, which bolsters economic and social activities (Rutherford, 2002).

- Economic infrastructure is constituted from large, long-standing structures such as transportation, power, communications and utility systems which facilitate economic activity (Gramlich, 1994).
- Social infrastructure encompasses municipal, housing, education, health, justice and recreational assets which ameliorate human development, quality of life and living standards (Howes and Robinson, 2005).

Importance of Social Infrastructure Provision

Internationally, there has been a recorded failure by governments to appreciate the potential benefits of social infrastructure. Likewise, in the United Kingdom (UK) and Northern Ireland (NI), there are now pertinent signposts indicating a necessity to counter historical underinvestment and upgrade existing facilities and services (NAO, 2015). This failure can be attributed bilaterally; a historical affinity for economic infrastructure provision, but also, equally, difficulties in identifying and quantifying the added benefits of social infrastructure investment. Against this backdrop, the purpose of this section is to highlight some of the key benefits of social infrastructure investment.

Social infrastructure is a myriad of explicit and implicit benefits, and is thus difficult to measure. Nevertheless, over the past 15 years, there is a growing body of literature which demonstrates the benefits of social infrastructure far outweighing its provision costs. The Washington State Institute for Public Policy (Aos et al., 2004) estimated, for every dollar invested in early childhood education, the cost-benefit ratio exceeds $2. The same study also recorded over $11 returns per dollar invested in youth development programmes. The RAND Corporation projected, for every dollar invested in pre-school education, there is a net-return of $2.60 (Karoly and Bigelow, 2005). Psacharopoulos and Patronis (2004) found returns to both social and private capital in OECD countries ranging from 8.5 to 13.4% as a direct result of education investment. Education provision also has wider long term, embedded, tacit advantages. Schultz (1975) and Welch (1970) argued education is fundamental in the development of skills and scientific knowledge necessary for the long-term betterment of wider societal and technological advancement. Likewise, Kerf (2002) maintained, education is integral in the advancing and progression of other infrastructures such as road networks and energy systems.

As well as education, access to other social facilities and assets has been somewhat documented. The Office for National Statistics (ONS; White and Edgar, 2010) found statistically significant differences between social class and Health Life Expectancy (HLE) in England. Those with a lower social class were found to typically exhibit a shortened HLE. White and Edgar (2010) also claimed, socially disadvantaged were more likely to develop a limiting long-term illness (LLTI) and increased mortality rates (White and Edgar, 2010). Bebbington and Bajekal (2003) and Rasulo et al. (2007) correlated poorer general health, both in absolute and relative terms to social deprivation. Likewise, according to Aguilera and Marrufo (2007), over 70% of infant mortalities occur inside hospitals, therefore, by improving hospital quality through infrastructure provision, Infant Mortality Rates (IMR) may decline. Leipziger et al. (2003) opined, by improving a country's infrastructure index by as little as 10%, child mortality may be reduced by 5%, infant mortality by 3.7% and maternal mortality rate by 7.8%.

Casey (2005), citing Marmot and Wilkinson (2001) purported, for every $1 invested in community infrastructure, $10 could be saved through reduced crime, better employment opportunities and so on. Moreover, social infrastructure creates employment opportunities. In the 2011 Northern Ireland census, almost 31% (213,352) of the national workforce were employed in the public sector. Over 68,000 worked in education and 117,201 in health and social work (AgendaNI, 2012). Similarly, in Australia, it is estimated the total annual benefit attributable to public access to libraries is AUS$3 billion and provides 30 950 jobs (SGS Economics and Planning, 2013).

Described as the 'glue which holds communities together' (World Bank, 1998), Casey (2005) discussed the importance of social infrastructure in fostering social capital. Social capital has been instrumental in achieving increased economic success, improved school performance, decreased crime, and all round better health and well-being. Furthermore, social capital has been attributed to lower levels of depression, reduced crime and reduced rates of suicide (Harvard Kennedy School, 1999).

From this discussion, there are clear economic and social benefits to social infrastructure investment. Moreover, against the backdrop of historical underinvestment, in tandem with economic changes, evolving population demographic, social and civic changes, and employment patterns in NI, Executive infrastructure investment strategies must be commensurate with societal demands.

Comparative analysis

The previous section of this paper provided evidence that the investment and delivery of social infrastructure should be at the heart of Northern Ireland's regeneration. Predicated on a civic agenda, social infrastructure has the potential to transform the international profile of this region and boost the local economy'. This section of the paper will examine both the monetary value of investment in social infrastructure in NI, Scotland and the UK and examine the investment models adopted by these regions.

Northern Ireland – Spend, Trends and Funding

Established in 2003, the Strategic Investment Board (SIB) in Northern Ireland ***'helps government plan infrastructure, deliver major projects and manage assets'.*** The Strategic Investment Board Northern Ireland (SIBNI) produces the Investment Strategy for Northern Ireland (ISNI). The current ISNI, 'building a better future', 2011-21, acknowledges the need for 'efficient infrastructure' yet recognises the constraint that there is 'less money to go around'. The current ISNI identifies a 10-year '*spending allocation'* and further provides government departments with '*indicative spending priorities*'. These spending priorities are used by government departments to plan and deliver major capital projects.

Table 1.1 – ISNI Social Infrastructure Spending Allocation

Sector	2011/12 to 2014/15 (£M)	2015/16 to 2020/21 (£M)	Total (£M)
Skills (Schools, FE/HE and Libraries)	652	1,482	2,134
Health	943	1,970	2,913
Social (housing, culture)	1,130	1,345	2,475
Justice	290	385	675
% spend on social projects over total infrastructure spending allocation	59%	63%	61%

This table identifies that spending priorities of social infrastructure and capital projects accounts for, on average, 61% of the total spending priorities of the Northern Ireland government departments. This shows both the recognised need to spend on social infrastructure but also the relevance of social infrastructure investment in making a '*key contribution to the Programme of Government*'. To provide more detail on these priority spending plans the SIB have developed and produced a quarterly, an *infrastructure investment pipeline*. The pipeline identifies government funded infrastructure projects (pre-contract stage) and the proposed procurement route. In June 2016 the pipeline identified the following social infrastructure projects:

- **Skills (schools and colleges):** - the pipeline identifies 18 projects with the combined project cost of £354m. Although this is a significant investment the pipeline identifies only two projects over £45m (Strule Campus £100m and SRC (£45m). The remaining 16 projects are for smaller new build projects ranging in value from £1m - £20m.
- **Health:-** In total two projects have been identified in the pipeline, with a combined cost of £37m.
- **Social:-** in total 36 projects have been identified in the pipeline, with a combined total cost of £524m. Of which two are over £20m, namely Social Housing Scheme (£120m) and Heating service for NIHE (£260m). Collectively all 36 projects are designed to deliver on SIBNI's commitment to the *Social Intervention Fund*, the Executive's £80m intervention dedicated to helping alleviate deprivation and dereliction through strategic area based intervention.

Funding of Social Infrastructure in Northern Ireland

Although the pipeline shows commitment to the delivery of social infrastructure there is lack of detail on the funding of these projects. The pipeline provides for public funded projects but does not consider other models of social infrastructure investment. This is partly due to the nature and size of the proposed projects and/ or partly the reluctance of policy makers to consider private sector investment.

Investment in Northern Ireland's infrastructure is therefore essentially provided by the UK Government Block Grant. The reduction in the Northern Ireland block grant has necessitated the pursuit of '*an alternative finance solution of capital expenditure*', (SIBNI, 2011). The alternatives to infrastructure investment must, '*protect public interest, facilitate greater efficiency, offer genuine long term value for money*', (SIBNI, 2011). The SIBNI does not articulate what these funding models are, rather they '*consider the potential of alternative funding models…that attract inward investment into public private partnerships'*.

Scotland – Spend, Trends and Funding

The Scottish Futures Trust (SFT), similar to SIBNI, was established by the Scottish Government to work closely with the public sector to seek and deliver improved value for taxpayers on public sector infrastructure investment. SFT's work during 2014/15 delivered £135m of net benefits and savings to infrastructure investment in Scotland

SFT's operational budget for 2016/17 is £10.3 million. Of which the following social infrastructure funds have been included:-

- Housing £1,012m, this compares with NI spend allocation of £1,345m over the next five years.
- Education £864m, this compares with NI spend allocation of £1,482m over the next five years

Funding of Social Infrastructure in Scotland

Similar to Northern Ireland, Scotland also produces a Government Infrastructure Investment Plan, together with an updated Project Pipelines. Unlike the NI pipeline, the Scottish investment plan only considers projects above £20m. Furthermore the Scottish infrastructure pipeline also identifies how the project is being funded. The funding of capital projects, as per the 'The Scotland Act 2012' provides Scotland with borrowing powers for capital expenditure. It was hoped that this Act would stimulate private sector investment by creating, '*new opportunities to effectively finance, deliver and manage Scottish infrastructure assets*', (Smith 2014). These new funding opportunities are reflected in one of thee of the following investment models have been adopted for infrastructure investment:-

1. Non-Profit Distributing (NPD) - superseded the traditional Private Finance Initiative (PFI) model in Scotland. This model of funding has managed to reduced time and cost during the procurement process by developing a 'simplified standard contract'. Thus removing a barrier to private sector investment. Furthermore, this model boosts public sector engagement by delivering projects partnerships with local authorities, health boards and other public bodies and benefits from public sector engagement. In 2015 this model delivered £464m of capital projects.

2. Tax Incremental Financing (TIF):- This model, does not seek private sector investment directly, rather it enables the delivery public sector infrastructure through locally generated, public sector revenues (e.g. non-domestic rates). TIF project must demonstrate that the investment must contribute to economic growth and regeneration which in turn will unlock more than £1.3bn of private sector investment.

3. National Housing Trust (NHT):- According to the Scottish Government, this '*successful*' model uses private sector funding and council borrowing to support the delivery of homes for intermediate rent. income from tenants' rents will be used to pay interest on the borrowing. This model has delivered over 1,600 homes, supported 2,000 jobs in the construction industry and wider economy.

4. Growth Accelerator (GA):- The Growth Accelerator programme is not an infrastructure investment model, rather a city-centre initiative that stimulates and creates the right conditions for different types of public and

private sector investment to be made. Fundamentally this initiative seeks to enhance economic growth, increase job creation and creating developer profit share opportunities.

According to SFT, these investment programmes and initiatives have '*unlocked nearly £6bn of additional investment in* Scotland' which allows infrastructure to be procured and constructed, creating jobs in construction and other industries, thus making a contribution to economy.

These Scottish models are not the only or main investment models adopted by the UK. The PPP model is used extensively to fund infrastructure projects. For example in Scotland in 2015 the PPP models funded 88 capital investment projects, totalling £5,711m of which £4,747m funded social infrastructure projects. Compare this with Northern Ireland, in total there have only been 39 projects delivered using PPP in the past 15 years.

UK Spend Trends and Funding

The vast majority of funding on infrastructure in the UK is public funded. The National Audit Office, (2015), found that publicly financed capital investment was reduced by one third in real terms from a peak of £57 billion in 2009-10 to £42 billion in 2013-14. This is partly due to the contribution of the private sector investing in new infrastructure. Investing in new infrastructure is detailed in the UK National Infrastructure Plan: the 2014 plan contains a pipeline of £327 billion of public and private infrastructure investment planned to 2020-21. This compares to the Northern Ireland regional infrastructure investment of £11bn (ISNI 2012-2021).

In the UK, the National Infrastructure Delivery Plan, (NIDP)recognises that '*infrastructure is the foundation on which our economy is built', and has* published its intention to invest more than £100 billion at a national level in major infrastructure projects and programmes that will benefit people and places across the country. This simple and straight forward act of nationally publishing infrastructure investment priorities acts as a beacon to potential private sector investors, ergo making investment more likely. NIDP aims to invest £23bn over the next five years on social infrastructure project. This includes building and refurbishing over 500new schools, 9 new prisons, new hospitals and hospital laboratories.

The National Infrastructure Plan envisages that around 80% of new economic infrastructure investment, amounting to more than £35 billion a year, will be wholly or partly privately financed. Private finance is essentially secured through Government's popularised PPP initiatives. These initiatives include, the UK Guarantees scheme and PF2. In these instances, the upfront finance is provided by the private sector who take on the construction and other risks, with the payments from the government funding the projects over their lifetime. The Priority Schools Building Programme and the Midland Metropolitan Hospital projects have highlighted the attractiveness of the PF2 framework to the public sector and investors.

Additionally the UK government has established a national Infrastructure Commission. The role of the Infrastructure Commission is '*to provide long term strategic thinking on infrastructure planning and spending'*. This too has the benefit of providing investment certainty, a key driver of infrastructure investment.

Consideration of policy and legislative proposals in Northern Ireland

This policy briefing paper adds to knowledge by not only contributing an understanding of the importance of social to the economy but also by defining the models of social infrastructure investment used successfully by the UK and Scottish Governments. This policy paper imparts the fundamental aspects of the application of the identified models of social infrastructure investment and the tangible results pertaining to the delivery of the services. These public private models, (PPP, NPD, TIF, NHT and GA) offer a construct to Government on which they could progress a social infrastructure capital investment programme.

This policy paper further highlights the challenges and considerations of implementing and adopting these models of social infrastructure delivery. Not least of these challenges is the need for a proactive and not reactive Assembly that prioritises, plans and identifies a transparent pipeline and expedited procurement process for the social infrastructure investment. This commitment depends on the firm and reassured understanding of private sector investor and recognition of the collaborative role that each sector (public and private) must play in the delivery and running of a service. To attract private sector investment it is vital the centralised strategic decisions are taken. These strategic considerations should analyse the social benefits of the social infrastructure investment in terms of quality and sustainability, so that the investment decision taken is the right decision that not only delivers the social infrastructure service but fundamentally produces a long-term legacy that benefits the health, wellbeing, environment and economy of all citizens of Northern Ireland.