Available online at www.sciencedirect.com

ScienceDirect

Transportation Research Procedia 8 (2015) 29 – 40

Transportation Research Procedia

www.elsevier.com/locate/procedia

European Transport Conference 2014 – from Sept-29 to Oct-1, 2014

Perspectives on the significance of assessment tools and appraisal frameworks in approaching publicly funded infrastructure decisions in support of economic growth: insight from Ireland's experience and US and UK practice.

Austin Smyth[a], Luke Kelleher[a, *], Robert Miller[b]

a. University of Hertfordshire, Hatfield, Hertfordshire, AL109AB, England.
b.Central Places Limited, Beech House, Mertsham, Surrey, RH1 3DD, England.

Abstract

The effectiveness of systematic and targeted investment in infrastructure, particularly transport, has divided opinion about the effectiveness of such spending as a tool for driving economies out of recession by creating jobs and economic growth. Ireland responded to a clamor for greatly increased investment in its infrastructure during its prolonged economic boom from the late 1990's through to 2008/9. Empirical evidence is now available on which to assess the efficacy of that prolonged programme of infrastructure investment that was brought to an abrupt halt in the last few years following the onset of the worldwide financial and economic crisis in 2009. In the US, the idea of spending on public works projects like road-building as economic stimulus has been a mainstay of jobs proposals from both Congressional Democrats and the White House in recent years. The evidence from Ireland provides arguably a unique opportunity to evaluate the economic and related impacts of a massive spending programme that was the equivalent to the US investing more than $275 billion per annum for 10 years on transport infrastructure. The arguments for infrastructure spending among interest groups, lobbyists and many economists and the evidence for it stem from a variety of analytical tools and empirical evidence. This paper evaluates the Irish experience over the last decade on the basis of regional and census data as well as other secondary evidence and relevant literature. It also reviews the approaches and methods employed in and outcomes reported from the US, based largely on secondary evidence.

Selection and peer-review under responsibility of Association for European Transport

Keywords: Assessment tools ; appraisal frameworks; infrastructure decisions; economic growth; stimulus spending.

* Corresponding author
E-mail address: l.kelleher@herts.ac.uk

Selection and peer-review under responsibility of Association for European Transport
doi:10.1016/j.trpro.2015.06.039

1. Introduction

A new stretch of motorway almost 60km in length is due to open on the western seaboard of Ireland in 2018, an element of an unprecedented programme of road investment under the Transport 21 programme initiated during the Celtic Tiger phase in the development of the Irish economy. However, the go ahead for the current construction was given after the onset of both global recession and the collapse of the Irish economy in 2008/9. More surprising is the projected use of the new road, officially put initially at no more than 20% of capacity rising to no more than 25% by 2030. The project was given the go ahead in part to act as stimulus to the regional economy. However, its projected use begs questions about the efficacy of that spending given the constraints on the public funds generally.

Calls for investment in infrastructure have been heard frequently in recent years as the global and national economies have been faced with financial and economic challenges not experienced in the Western democracies for more than eighty years. Opinion on this strategy as a tool for driving the economy out of recession and creating jobs however, is divided, particularly in the US (Congressional Research Service, 2011; Executive Office of the President, 2011). Support for such spending along with various fiscal measures is typically ascribed to a Keynesian perspective in contrast to a monetarist approach focusing on reducing public expenditure. Such a distinction is somewhat artificial given for instance, the UK Government's encouragement to infrastructure spending, albeit funded or at least financed by large contributions from the private sector.

It is not only in times such as these and with a focus on fiscal austerity that there have been calls for such investment to address infrastructure deficits. Ireland increased investment in its infrastructure during its prolonged economic boom through to 2008/9. The 60km Gort – Tuam motorway represents continuation of that programme, dubbed Transport 21. Empirical evidence is now available on which to assess the efficacy of that programme, brought to an abrupt halt following the onset of the worldwide financial and economic crisis in 2009.

Transport spending under the US stimulus program has formed only part of a much larger set of initiatives embracing not only investment in infrastructure but a wide variety of other measures including fiscal reforms and recurrent spending programs. This makes it difficult to isolate the effects of spending on transport. Moreover, it is arguably too soon to draw comprehensive conclusions on the impacts and effectiveness of the US program. While evidently of very different scale the Irish case study provides arguably a unique opportunity to evaluate the economic and related impacts of a massive spending programme (relative to the size of the economy) that was the equivalent to the US investing more than $275 billion per annum for 10 years on transport infrastructure.

The arguments for infrastructure spending stem from a variety of analytical tools and empirical evidence. This paper seeks to identify the implications of approaches to informing government decisions in times of austerity. It begins with an overview of the arguments promoted and evidential base for boosting infrastructure spending in the US that emerged in 2008/9. The paper also offers an overview of the short term outcomes reported from the US. It then turns to consideration of the Irish experience over the last decade on the basis of regional and census data as well as other secondary evidence and relevant literature.

It is against this backdrop that this paper seeks to test an hypothesis that setting aside the merits of a Keynesian or monetarist policies, choice of tools with which to base investment decisions will have an important bearing on outcomes in terms of economic performance as well as transport and travel behaviour/. The merits of investment in infrastructure under both the US stimulus program and in the case of Ireland has been informed by a variety of tools, including aggregate econometric models. This paper reviews the approaches and methods employed in appraising and linked to such investment outcomes, with particular reference to the US.. Informed by the US literature and with reference to UK experience, it goes on to proffer some insights into the role of selected approaches to decisions on investment for securing value for money from scarce public funds in times of austerity, with particular reference to the Irish experience.

2. Calls for stimulus funding for infrastructure in the US and Ireland

In the US, the idea of spending on public works projects like road-building as economic stimulus has been a mainstay of job proposals from both Congressional Democrats and the White House in recent years. In February 2009, the U.S. Congress approved the American Recovery and Reinvestment Act. President Obama's FY 2013 Budget proposed a bold plan to renew and expand America's infrastructure. The plan included a $50 billion up-front