



Tax Breaks and the Residential Property Market

By

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Final Report

Submitted to the Department of Finance

10 September 2015

Abstract

The report begins with the observation that the supply of new housing appears to be falling short of demand. This observation is based on the results of demographic models and also on rising house prices and rents. Given this situation, we explore what the impact might be of tax breaks aimed at encouraging developers to build more housing units. Through a simple model of the housing market, we show that tax breaks will have limited impacts on supply if supply is being constrained by factors such as planning restrictions. Our simple model also shows that tax breaks in these circumstances can simply lead to a transfer of tax revenue from the state to developers with no effect on supply. We go on to ask if there is evidence to suggest that there are quantitative restrictions in operation in Ireland's housing market which mirror the situation in our model. While we do not attempt to be conclusive on this point we show that three factors are consistent with supply being constrained in a way that will make tax breaks ineffective. These factors are limited finance for developers with viable projects, the planning system and the absence of infrastructure needed to support development. We also discuss how the costs of house-building may have risen due to regulations. While a tax break could be effective in stimulating supply in this case, it is not clear that it makes sense for the state to impose costly regulations on the one hand and then for the state to forego tax revenue on the other hand in an effort to ease the burden of those regulations. On the basis of this analysis, we conclude that tax breaks aimed at stimulating house and apartment building should be avoided until (a) it can be conclusively shown that the "market failure" to be corrected will yield positive results without excessive unintended transfers to developers and (b) the impacts of regulations on the cost of building are properly understood and also the potential effects of any tax breaks in the context of regulatory-related costs.

Section 1: Introduction

The recovery of the Irish economy from the near collapse experienced post 2007/8 has been evident since late 2012. Most key macroeconomic indicators suggest that growth is consolidating with contributions from both domestic and external demand. Employment is rising and the public finances are now on a sustainable path.

In spite of this generally positive context, one area continues to be a source of concern, namely, housing. There are a number of strands to the concern. First, while the scale of mortgage arrears is easing, the level of such arrears remains high with negative consequences for household consumption and the health of the banking system. Second, house price and rents have been increasing at rapid rates, although house prices appear to be stabilising in the most recent months. From some perspectives rising house prices can be viewed as a positive development because, for example, this helps to ease the problem of negative equity and also provides a wealth boost to households who are not in negative equity. However, from a different perspective rising house prices and rents point to higher housing costs for households. To the extent that such costs reduce real disposable income, they add to competitiveness pressures in the economy. Rapidly rising house prices are also not conducive to financial stability, as Ireland's recent economic history demonstrated.

A third strand of the concern related to housing is the apparent failure of housing supply to respond to housing need particularly in urban areas. Increases in house prices and rents are likely in part to be a reflection of the problem – there appears to be an increase in housing demand but with only a limited supply response house prices and rents would typically increase. But apart from the resulting price and rent increases, the failure of housing supply to meet demand means that housing is being rationed in some way which is likely to reduce well-being. For example, young adults may be constrained in the ability to form new households and people may be unable to move locations in response to employment opportunities.

This apparent failure of housing supply to rise in response to growing demand is a concern for policy makers and so the question arises of how policy should address this. In this report, we explore whether the tax system would be an appropriate way to increase housing supply. The core question which we address is whether tax breaks on the supply side of the market should be used to boost supply. In looking at this issue, we encounter the standard issues which arise in the ex ante evaluation of tax expenditures generally. However, we encounter these issues in the specific context of the residential property market with all of its special features and peculiarities.

Our approach will be as follows. Motivated by guidelines for tax expenditure evaluation (Department of Finance, 2014) in Section 2 we ask what objective might underpin a tax incentive to boost housing supply. Drawing on ESRI research, we look more closely at this question of whether housing supply is indeed lagging housing demand.

In Section 3, we move onto the next stage of the process and consider in conceptual terms what form of market failure might be present in the housing market. A core principle in the economics of public finance is that government interventions should only occur where a market failure is in existence which inhibits the optimal allocation of resources – in this case, the allocation of resources towards the construction of residential property. However, even where a market failure exists, the

precise nature of that market failure can have an important bearing on the likely effect of a tax break aimed at stimulating supply. In Section 3 we discuss circumstances in which tax expenditures will not produce optimal outcomes even where market failures exist.

Given the importance of the nature of market failure in determining the likely effects of a tax break, in Section 4, we develop the discussion of market failure and ask what forms of market failure might be in operation in Ireland's residential property market at present. The importance of this discussion is as follows: if a particular form of market failure that is constraining housing supply is also one of those forms of market failure where tax expenditures will not lead to optimal outcomes, then it is important to establish this. The issues which we consider in this section are: planning, finance, regulations/costs of building and infrastructure.

In Section 5, we draw together the conclusions from the earlier sections and ask whether tax expenditures are the optimal policy lever for boosting housing supply.

In addition to the main body, this report also contains two appendices. In Appendix 1, we comment on how the Department of Finance guidelines for tax expenditure evaluation may require further interpretation in the context of evaluating property-related tax expenditures. In Appendix 2, we review some earlier work on the evaluation of property-related tax expenditures but it is useful here to reflect briefly on some broad themes from these earlier analyses.

Indecon (2005) reviewed a range of tax incentives as part of a broader analysis coordinated by the Department of Finance which was to inform decisions on the continuation of tax reliefs in Budget 2006. Indecon provided positive assessments of some of the schemes. For example, in discussing capital allowances for hotels and holiday camps, they noted that "the existence of the tax incentive (had) improved both the quality and quantity of supply and the levels of investment experiences since 1997 would not have occurred in the absence of the incentive". However, they expressed a clear view that many of the schemes were no longer needed by 2005 and that their continuation could have negative consequences. This view is best captured by the following quote:

"In many cases while the schemes have had a benefit our analysis suggests they have served their purpose and there is absolutely no case for future government incentives. Continuing to approve new projects would contribute to oversupply and represent a clear waste of scarce public resources". (page vii)

The "waste of scarce public resources" refers to the deadweight which was becoming evident in the property-related reliefs.

Goodbody (2005) reviewed area based schemes as part of this broader review of tax reliefs. Like Indecon, they saw some positive aspects to the schemes. For example, with respect to the Urban Renewal Scheme they commented that "the scheme has had very positive effects on dereliction" and also that it has "enhanced housing output in the target areas". But also like Indecon, Goodbody also expressed a view that the need for such schemes had passed by 2005.

Goodbody (2005) made some additional observations which are relevant to the analysis below. They noted that the tax benefits of the Urban Renewal Scheme had accrued to a relatively small number of high-income earners and so ran counter to policy objective on income distribution. They also that the scheme had led to inflation in property prices.

This point on the impact of property-related tax reliefs on property prices was taken up by Regling and Watson (2010). They argued that these tax reliefs contributed to the property bubble of the 2000s. They also argues that extension of tax reliefs (property-related and others) added to the erosion of the tax base which was so problematic when the crash of 2008 occurred.

The points made by Indecon, Goodbody and Watson/Regling were echoed again by the Department of Finance (2011) in another review of property reliefs. The following quote sums up the points made:

“While the various property relief schemes contributed to significant economic regeneration and employment, in general they outlived their usefulness and contributed to excess supply in certain sectors, namely residential housing and hotels. In the future, tax relief schemes should not be extended again and again without a thorough ex ante cost benefit analysis on each occasion.” (page 4).

Section 2: Housing supply and housing demand

Duffy, Byrne and FitzGerald (2014) provide estimates of housing need so it is helpful to review their methodology and results. The approach they take is rooted in demographics and demographic projections and relies on two key inputs – population change and changes in “headship rates”.

The headship rate is the proportion of individuals in an age cohort that list themselves as “head of household” or “principal reference person” in the Census or in the Quarterly National Household Survey (QNHS). Each household provides one reference person, thus an increase in the headship rate reveals an increase in the number of households. In recent years Ireland has seen increases in headship rates - the headship rate for the total population increased from 29 per cent in 1991 to 36 per cent in 2011. This increase occurred across all age categories but was particularly pronounced in the younger age groups. In spite of this increase, Duffy et al point out that Irish headship rates remain below those of the UK and France thereby suggesting that Ireland’s headship rate may continue to grow in the coming years.

If the population remained constant but headship rates increased, there would be an increased need for residential dwellings. However, population tends not to stay constant due to the natural increase and migration. Using the ESRI’s demographic model Duffy et al produce a number of scenarios to project housing need into the future. They do so by varying projected trends in headship rates and in migration and by applying assumptions on fertility and mortality.

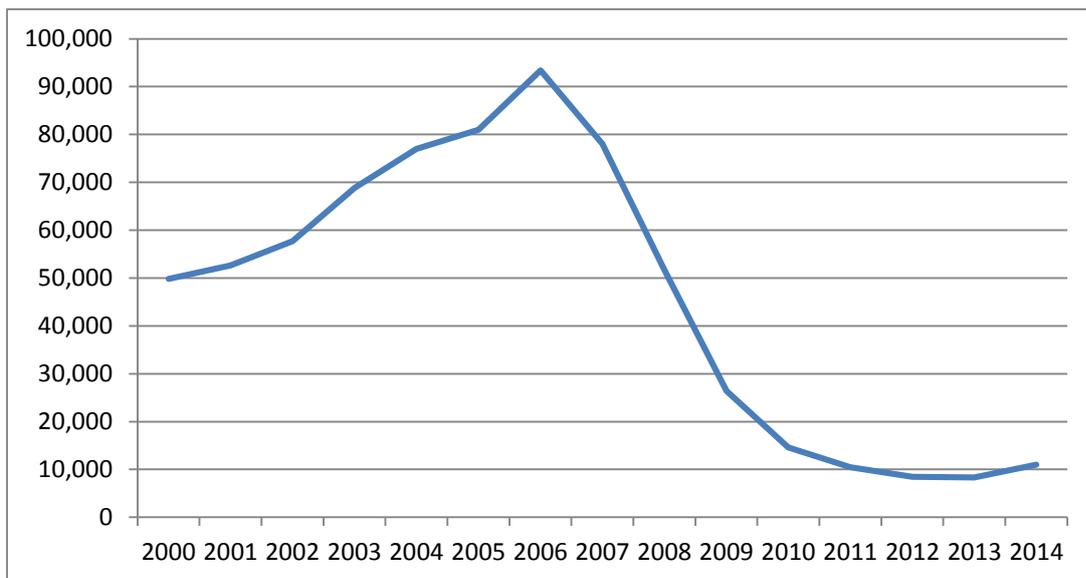
The scenarios analysed by Duffy et al lead them to project annual increases in household numbers of between 19,000 and 33,000 per annum over the next fifteen years. Taking account of obsolescence, which amounts to about 5,000 dwellings per year, they conclude that at least 25,000 new dwelling will be required each year over the coming fifteen years.

If we compare this figure of 25,000 with current rates of housing completions we get a clear sense of supply lagging behind demand. In Figure 1, we show house completions between 2000 and 2014¹. The rise and fall in activity can be seen in the figure and also the failure of activity to increase again to any significant degree since 2013 when other areas of the economy have begun to improve. While the demographic-based estimates of housing demand produced by Duffy et al provide one indicator of the existence of excess demand for housing, rising rents and house prices are clearly indicators also.²

¹ As highlighted by a recent SCSi report completions data are based on connections to the electricity network and so may not reflect building activity. The report suggests that the gap between completions and activity may currently be approximately 20 per cent. However, as the overhang of vacant stock is absorbed, it is expected that completions will again start to provide a more accurate guide to house building. Thus, the gap between supply and demand may, at present, be greater than that suggested by the completions data.

² The figures discussed here are at the national level but the problem of under-supply of housing varies substantially across counties. Morgenroth (2014) shows that three quarters of new houses needed out to 2021 will be needed in Dublin, Louth, Meath, Kildare and Wicklow.

FIGURE 1: HOUSE COMPLETIONS 2000 TO 2014



Source: www.environ.ie

Section 3: Market failure and tax breaks

In Section 2, we have shown that there is evidence to suggest that housing supply is lagging housing demand at the moment. For many situations, the observation that the demand for a good or service exceeded supply would not prompt policy action because a normally functioning market would see prices rise and additional supply emerging in response to the price rise. In the case of housing however, such a straightforward supply response does not appear to be forthcoming. House building is an industry where a number of institutional factors exist which would tend to inhibit the operation of the market. For example, the planning system and building regulations are specifically designed to impose constraints on building activity. While planning and regulations should not be categorised as market failures in the classic sense, they operate in such a way as to distort the outcomes which the standard market mechanism would produce and so they can be analysed in ways which parallel the analysis of market failure. In the case of planning and regulations, the aim is to counter sub-optimal outcomes which the unregulated market would tend to produce.

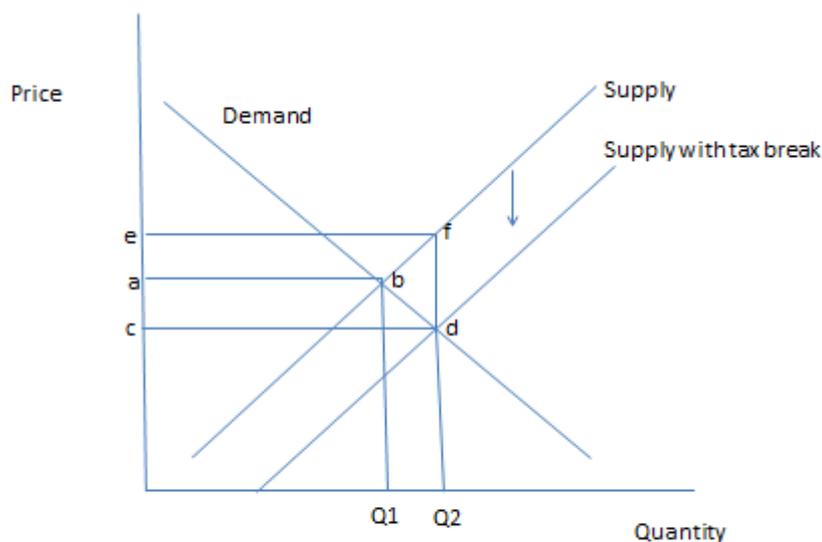
In Section 4, we develop further our thinking on possible market failures (or at least factors which constrain the operation of the housing market) but for now we want to address a different question. The question which we now ask is whether the existence of a constraint on activity in the housing market necessarily means that a tax break aimed at stimulating activity would be an appropriate response.

We begin our discussion of the impacts of tax breaks by looking at a standard market where supply and demand interact to produce an equilibrium level of output and price, as shown in Figure 2. Figure 2 can be taken to represent the housing market. As with all markets, demand is downward sloping – cheaper housing leads to an increase in the quantity of housing demanded. Supply is upward sloping, again using the standard reasoning.

A government could decide that the level of output Q_1 is lower than desirable – for example, the government could believe that positive externalities would accrue from extra building and so they choose to stimulate building. They introduce a tax break, the effect of which is to shift the supply curve downwards – for any given price, supplying houses is now more attractive. The new supply curve now intersects demand at a level of output Q_2 . Hence, the policy objective of increased housing supply has been achieved. A simple way to think of the cost of the policy is in terms of the revenue forgone - the rectangle $efdc$.³ This is the per unit value of the tax break multiplied by the quantity. An evaluation of the efficiency of the project would involve, amongst other things, an assessment of whether the cost $efdc$ was appropriate relative to the extra output Q_2-Q_1 .

³ Technically, this overstates the revenue foregone because some of the revenue not collected (from the extra output Q_2-Q_1) did not exist prior to the policy.

FIGURE 2: A MARKET WHERE A TAX BREAK IS INTRODUCED



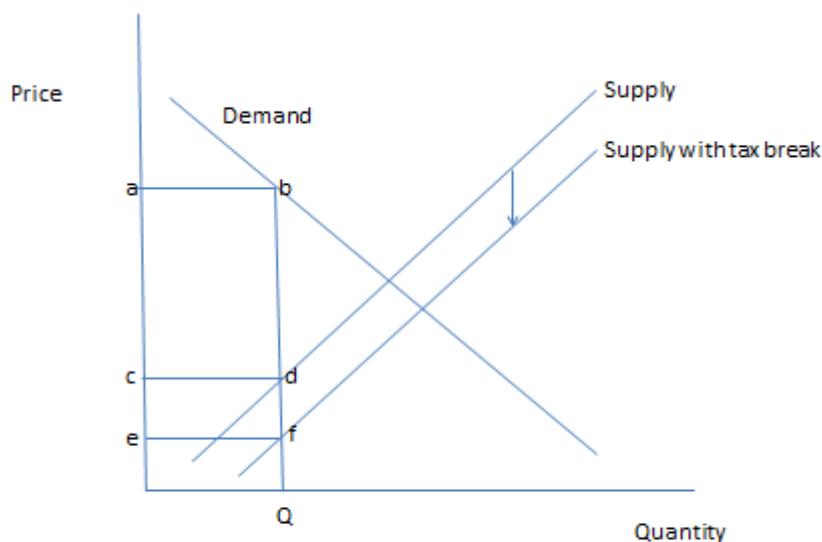
In most markets price and quantity would be determined by the intersection of supply and demand but in the market depicted in Figure 3 this is not the case. Instead, supply is restricted to be at a level denoted by Q. It could be that this is the quantity which the planning system has decided as being optimal.⁴

If quantity is restricted to be level Q, the price is not determined by the intersection of supply and demand. Instead, Q is supplied but the suppliers (in this case developers) know that they can charge a price which is determined by the demand curve and which is denoted by “a” in the figure. The total revenue earned by the house-builders is the rectangle abQ0. The rectangle abcd captures the supernormal profit that is earned by the developers collectively and it can exist because of the planning restrictions. If the price was just “c”, the marginal developer would just earn normal profits, with normal profit defined as the level of profit at which no further entry into the market occurs. The planning system creates a barrier to entry and so the developers who have planning permission get to earn supernormal profits.

The market which is depicted in Figure 3, although highly simplified, captures some of the features of Ireland’s housing market in particular the apparent failure of supply to respond to excess demand. We have not as yet attempted to understand why this is occurring but, for now, let us continue to assume that there is some blockage in the market that restricts output to level Q. Policy-makers could decide that Q is too low a level of housing output. They could introduce a tax incentive for developers in an effort to stimulate demand.

⁴ Even when conditions such as the planning system are not binding, it is typically the case that the supply of housing is relatively inelastic in the short-run. Hence, the analysis presented in Figure 3 (and in Figure 4 below) can also be viewed in terms of possible short-run reactions to the introduction of tax breaks.

FIGURE 3: A MARKET WHERE SUPPLY IS RESTRICTED AND A TAX BREAK IS INTRODUCED

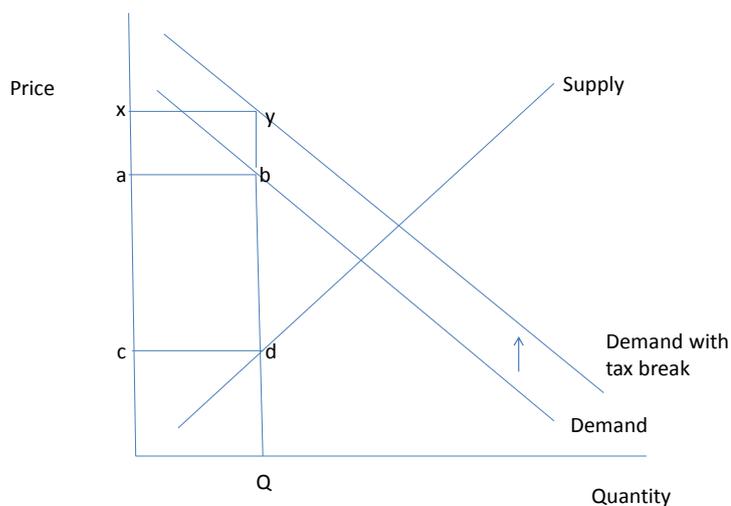


In Figure 3, the impact of the tax incentive is again captured by the downward shift in the supply curve. At each level of output, a lower price is needed to entice supply into the market. Ordinarily, the effect of the tax break would be to move the level of output to where the demand curve intersects the new supply curve. As can be seen from the Figure, this would result in an increase in supply. However, in the case of the market depicted in Figure 3 where supply is constrained to be Q, the effect of the tax break turns out to be quite different from what was intended.

With housing supply forced to remain at level Q, the developers still produce this amount and still charge a price of “a”. Before the tax break, the supernormal profit accruing to the developers was abcd and they continue to earn this profit. However, as a result of the tax break, they also keep the rectangle cdef. In this situation, the effect of the tax break is merely to transfer tax revenue from the state to developers with no effect on housing supply. The policy re-distributes away from those who would otherwise have benefitted from government spending or tax reductions.

Although the focus of this report is on supply-side tax breaks, the model used in Figure 3 can be readily used to examine the impact of a demand-side tax incentive when supply is constrained. We do this in Figure 4.

FIGURE 4: A MARKET WHERE SUPPLY IS RESTRICTED AND A DEMAND-SIDE TAX BREAK IS INTRODUCED



As was the case in Figure 3, housing output is constrained to be at level Q . In the absence of any tax incentives, Q houses would be sold at price a (as determined by the demand curve) and developers earn supernormal profits of $abcd$. The effect of a tax break on the demand side of the market (such as mortgage interest relief) is to shift the demand curve upwards, as house buyers are now willing to pay higher prices. In a market with no constraints on supply, housing supply would respond to the increased demand and a new equilibrium would be reached where supply and demand intersect. However, in the market depicted in the figure this is not possible.

With supply constrained to be Q in Figure 4, the effect of the demand-side tax incentive is merely to increase the price at which Q houses are sold – the price rises from a to x . All of the revenue foregone by the government is transferred to developers – $axyb$. There is no benefit to house buyers because the price which they pay net of the tax break is still a .

Section 4: Possible sources of market failure in the housing market

In Section 3, we have demonstrated that the reason behind a shortage of housing supply could be critical in determining the effects of any tax break. For this reason, we will outline in this section four possible reasons for a lack of supply in Ireland's housing market and we will reflect on whether the reasons outlined are consistent with the type of circumstances shown in Figure 3. Given the scope of the current study, we do not aim to demonstrate conclusively that any of the four reasons is in operation or is the dominant reason for sluggish housing supply. Instead, our more limited goal is to show that a fuller understanding of the problems with housing supply is needed before any tax break would be considered.

The four factors which we will discuss are as follows: planning; infrastructure; finance for builders; regulations and the cost of building. As will be seen, we argue that each of the first three factors produces circumstances that are consistent with Figure 3. The fourth factor is qualitatively different from the other three but even in the case of regulations and the cost of building, it is not clear that a tax break would be the optimum solution.

4.1 Planning

Barker (2006) in her assessment of the UK housing market includes the planning system among constraints on housing supply and she outlines a number of reasons why planning can be so contentious: loss of open spaces and the changing nature of localities; the potential impacts on property values of existing residents; pressure on local infrastructure and services. She also describes how the planning system can be used to slow down development and how the complexities and timescales can work to dissuade potential developers. Referring back to the discussion on finance, complex planning systems can create a need for substantial financing and so there is a potential interaction in Ireland between planning and the financing situation which could block developers.

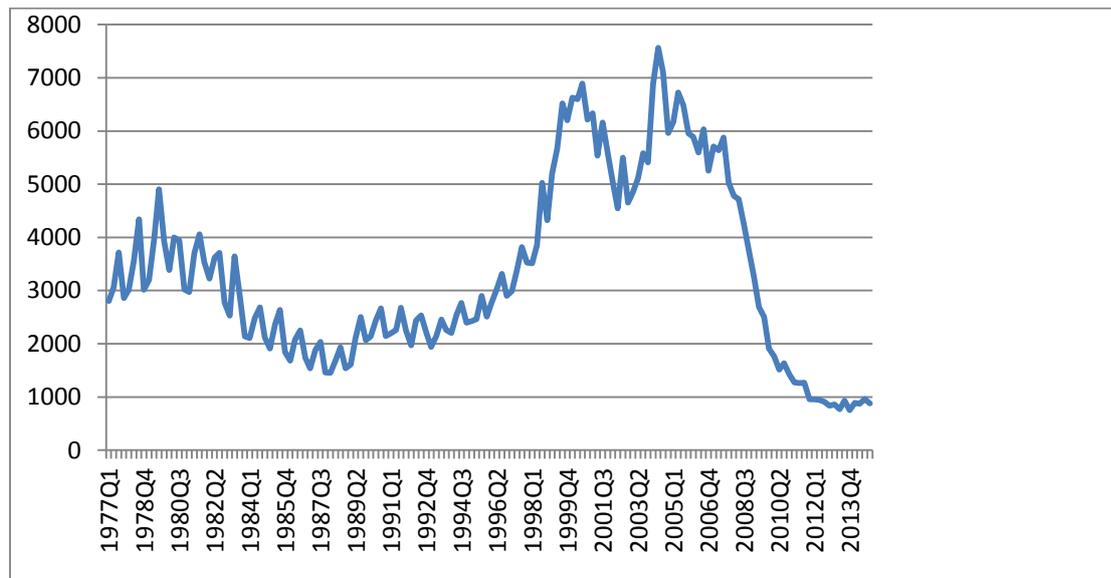
Some interesting papers have emerged which provide quantitative evidence to back up the qualitative remarks in Barker (2006) on the link between restrictive planning regimes, housing supply and price.⁵ Quigley and Raphael (2005) look at land-use regulations across a sample of over 400 cities in California. They show how stricter land use regulations led to fewer houses being built and higher house prices. Ihlanfeldt (2007) found similar results for Florida, as did Glaser and Ward (2009) for Boston. Hilber and Vermeulen (2015) look at the UK and ask how prices react to income growth across local property markets. They observe bigger price responses where supply constraints exist. Finally, Saiz (2010) also looks at the effect of increased demand in the housing market in the US. While he finds that a 10 percent increase in demand leads to a 6.5 percent increase in price in general, the corresponding price increase in cities with no regulatory barriers and available land is just 0.6 percent.

From these international studies, it is clear that restrictive planning environments can impact upon housing supply and house prices. We are not in a position to establish whether this factor is in operation in Ireland but we will consider two relevant pieces of information. First, in Figure 6 we show the trend in planning permissions granted from the beginning of 1977 to the end of 2014. It

⁵ The references in this paragraph were brought to our attention by Lyons (2015)

can be seen from the figure that the current rate of permissions is at its lowest level for thirty seven years. It could be the case that there is a large bank of unused permissions but the low amount of permission being granted currently gives rise to the possibility that the availability of land with planning permission could be acting to restrict the quantity of housing being supplied. As with the financing argument above, those who hold land with planning could have monopoly-like power and so the supernormal profits shown in Figure 3 could apply.

FIGURE 6: PLANNING PERMISSIONS GRANTED FOR DWELLINGS Q1 1977 TO Q4 2014



Source: CSO

As a final note with respect to planning, we note interesting results from Lyons (2015). Lyons has created a dataset on planning applications and permissions across Ireland’s local authorities covering the period 1990 to 2013. Among a range of interesting pieces of analysis, he examines which local authorities are more likely to refuse planning permission. Of the thirty five local authorities listed, the six authorities with the highest refusal rates are either in County Dublin or in the adjacent counties (Fingal, Meath, South Dublin, DLR, Wicklow and Kildare). To the extent that refusal rates are indicators of stricter planning systems, Lyons’ finding is consistent with greater supply restrictions and higher price pressures in and around Dublin. Again, this points to quantity restrictions being a potentially important feature of the housing market, along the lines shown in Figure 3.

4.2 Infrastructure

Barker (2006) lists infrastructure under factors which can constrain housing supply and provides as examples water and transport. At the time her report was being prepared, the construction of over 40,000 dwellings in the southeast of England was being delayed as a result of infrastructure shortcomings despite planning permission having been granted. According to Barker, this problem arose in the UK partly because the agencies responsible for transport and social infrastructure were often more concerned about maintaining existing infrastructure as opposed to developing new infrastructure.

Evidence that this may be an issue in Ireland was presented in *The Irish Times* late last year (30 December 2014). Reporting on the work of the Dublin Housing Supply Taskforce⁶, the article stated that “inadequate water, sewage and transport infrastructure is holding back the development of about 20 large sites across Dublin that could provide 50,000 new homes”. Once again, this is a factor that would tend to operate as a quantity restriction and so the potential impact of a tax break in terms of stimulating supply is likely to be limited.

4.3 Finance

All business activity requires finance for investment and the financing needs in construction can be considerable. The length of the process from site identification through planning, construction and sale can be considerable so without strong financial backing, it can be difficult for developers to maintain their activities.

The Irish financial sector experienced a classic property-related credit boom in the period immediately preceding 2007. Since then, there has been extensive deleveraging across the Irish economy. Given the extent to which the financial sector has been reducing its balance sheet, there has been much discussion as to whether this has resulted in the presence of credit constraints for certain parts of the real economy. If house-builders with viable projects are being restricted in their access to credit, this leads to a market failure whereby the number of builders in operation is restricted. In this way, the circumstances of Figure 3 apply.

It is difficult to provide conclusive evidence on this point but we will draw on the work of Lawless et al (2014) to provide some insights into financing conditions in the property sector. The goal in that paper was to gauge whether there is a “fundamental” level of credit across a range of sectors in Ireland based on economic conditions and then to compare this fundamental level to the actual level prevalent in the market.⁷ If actual levels in a given sector were below the fundamental level, this would suggest that credit was likely to grow. Similarly, if the fundamental level exceeded the actual level, a decline in credit to the sector was more likely.

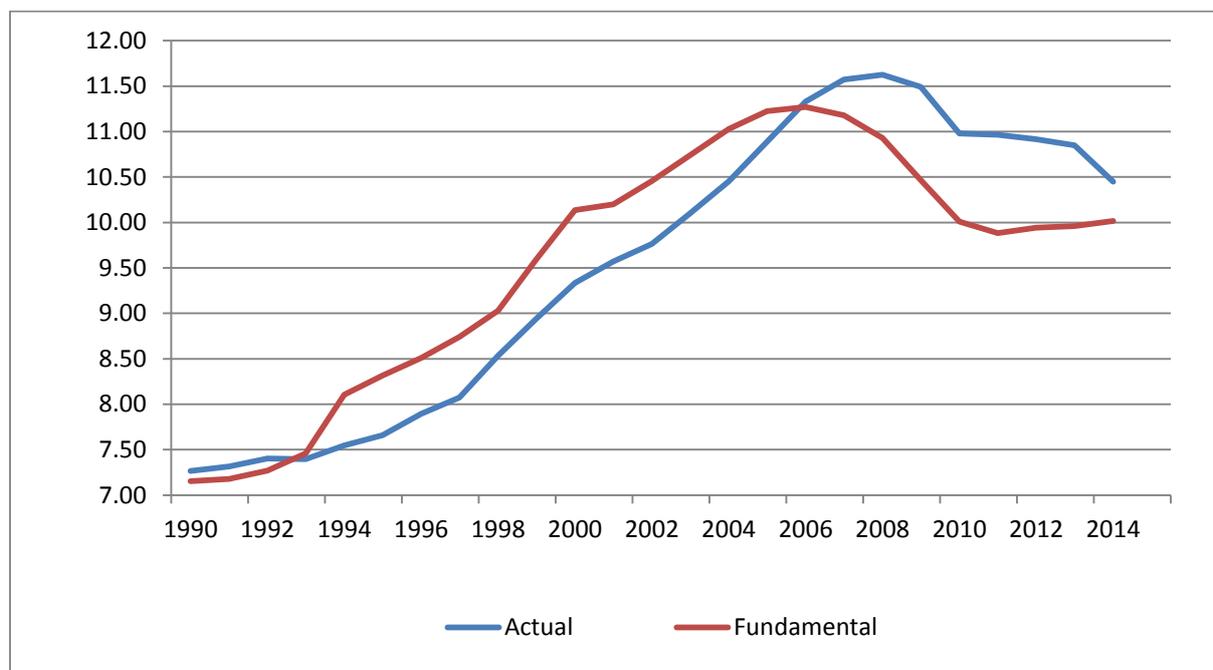
Lawless, McInerney, McQuinn and O’Toole (2014) estimate sectoral credit demand levels in the Irish economy. The approach uses the same methodology as Lydon, McQuinn, O’Brien and Sherman (2011) and links the demand for credit to output and other relevant factors in each sector. A long-run “fundamental” level of credit in each sector is generated by specifying credit demand as a function of output in the sector, total GDP in the economy and the interest rate. The current level of credit in each sector is then compared to this fundamental level to establish if the sector is under or over leveraged relative to historic norms.

⁶ “The Housing Supply Coordination Task Force for Dublin was established as an action of the Government’s Construction 2020 – A Strategy for a Renewed Construction Sector. The Task Force was established in 2014 and comprises of the Department of the Environment, Community and Local Government, the four Dublin local authorities (Dublin City, Fingal, South Dublin and Dún Laoghaire-Rathdown), NAMA and other agencies, with the Chief Executive Officer of South Dublin County Council as chair. The immediate focus of the Task Force is to address supply-related issues to the delivery of housing units in the Dublin region.” Quoting from www.environ.ie.

⁷ A more accurate way to assess this issue arguably is to model “new lending” as opposed to the stock levels, however the data isn’t available on a sufficiently long time-series basis to estimate such a relationship in a sufficiently rigorous fashion.

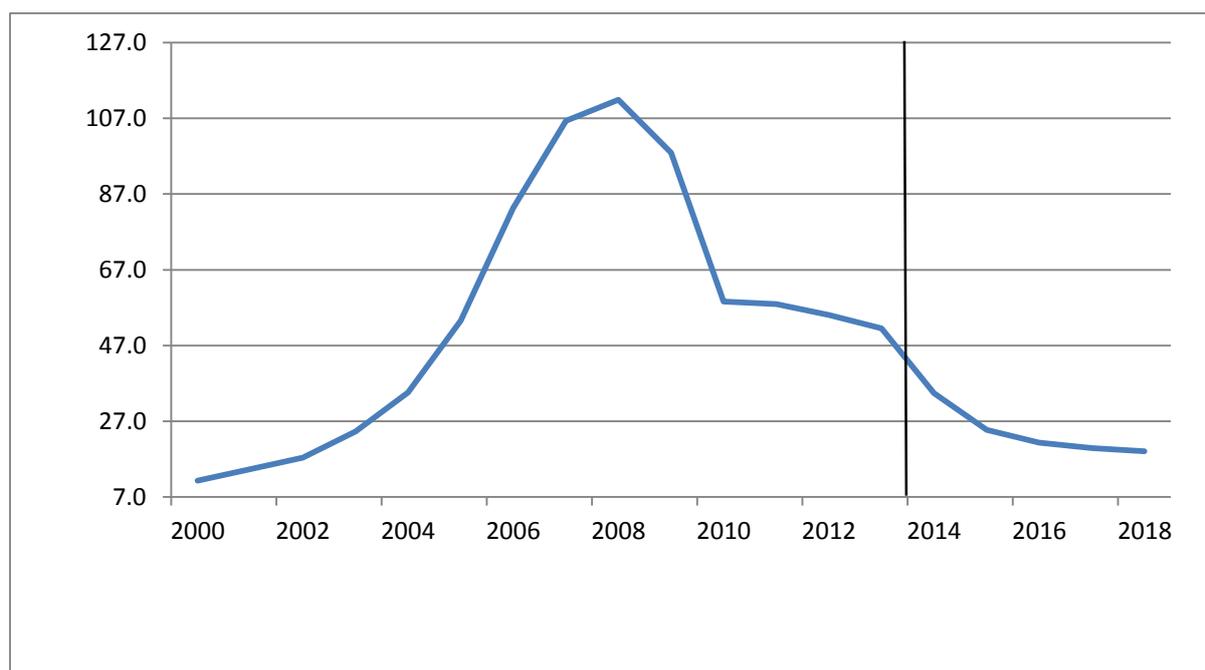
Inspection of the long-run results for total property-related credit in Figure 4 (full regression results can be obtained from Lawless, McInerney, McQuinn and O’Toole (2014)) reveals that, the actual levels of credit began to outstrip the fundamental relationship from about 2005 onwards. The gap between the two series increased thereafter indicating the sizeable credit bubble which existed in the property market. More recently, the gap between actual and fundamental levels of credit has narrowed considerably.

FIGURE 4: ACTUAL AND FUNDAMENTAL LEVELS OF PROPERTY CREDIT (LOGS): 1990 - 2014



Lawless, McInerney, McQuinn and O’Toole (2014) also generate forecasts of the property credit levels. These forecasts are based on an error-correction framework, whereby any gaps between actual and fundamental credit estimated in the long-run estimates are expected to be unwound over time, with the speed at which this occurs captured by the error correction term. The short-run results also control for lagged changes in credit, changes in sectoral output and total GDP. The forecast, which is out to 2018, uses future sectoral output levels from ESRI Medium-Term Review 2013-2020 (FitzGerald and Kearney, 2013). The results, presented in Figure 5, indicate that increases in future levels of property credit in the Irish market are set to be quite modest.

FIGURE 5: ACTUAL (2000 – 2014) AND FORECAST (2015 – 2018) LEVEL OF PROPERTY CREDIT (EUROS BILLIONS)



In general, the results from Lawless et al (2014) suggest that lending to the property sector could well be subdued both currently and into the medium-term. This would have the effect of restricting potential markets entrants. Many of those engaged in building houses in Ireland during the boom left the business but may not be able to re-enter as a result of the financing situation. Apart from the a possible general reluctance to lend to the construction industry, many of those who were previously involved in the construction industry may have poor credit records thereby lessening further their capacity to raise financing.

A further dimension of the financing issue has recently been explored by the Department of Finance (2015) and this relates to the mix of financing sources. During the boom, developers in Ireland could expect close to 100 percent senior debt financing from banks. As reported by the Department, this proportion has now reduced to between 60 and 70 percent for “shovel-ready” projects and there is a need to find alternative sources of finance for the remaining 30 to 40 percent. Alternative sources of funds are entering the market with providers of mezzanine finance partnering with banks to finance the gap between equity and senior debt in viable development projects. Also, the Irish Strategic Investment Fund has recently launched a €500 million joint venture with KKR that will provide up to 90% finance for residential construction projects.

However, the move away from the earlier model of financing presents challenges for developers. For example, partnering with third party equity holders requires a sharing of returns and control which may be unfamiliar to many developers. In that context, finance may be available but may not be accessed to the full extent in the short term in which case development will remain below the optimum.

4.4 The cost of building

Lyons (2015) presents data on the costs of house and apartment construction and how these have risen in recent years as a result of building regulations. He describes how data from the National Housing Construction Cost Index (published by the Department of the Environment) only accounts for the costs of labour and materials and so misses the cost increase associated with regulatory changes. The changes which Lyons notes are as follows: increased minimum sizes; greater required energy efficiency; costs related to the 2014 Building Control (Amendment) Regulations. Taking these changes into account, Lyons suggests that building costs have risen by 300 percent in 1997 – the NHCC approach suggests an increase of just 70 percent.

The increase in costs as shown by Lyons has significant impacts on profitability and so may contribute to the sluggishness in housing supply. According to Lyons, it would have cost about €100,000 to build a three bedroom semi-detached house since 1997 and such a house would have sold for €120,000. In 2015, it would cost €400,000 to build the same house but it would sell for just €270,000.

These figures are certainly suggestive of a difficulty in the housing market and on the assumption that the figures are correct supply will remain subdued unless house prices rise further. If this is the only problem in the housing market and if there are no quantitative restriction of the type discussed above, it suggests that prices will rise in time and that extra supply would be forthcoming. However, this would also imply that house prices would settle at high levels and so the cost of housing would remain high.

In these circumstances, the effect of a tax break for developers would look more like Figure 2 above as opposed to Figure 3. The transfer of tax revenue from the state to the developers could be viewed as the state paying (on behalf of home-owners) the cost associated with stricter building regulations. The question for the government in this situation is whether it makes sense to impose costly regulations which must then be funded by the Exchequer.

Section 5: Conclusions

Although there is a general consensus that housing supply is more sluggish than would be desirable right now, there is less clarity around the precise reasons for this sluggishness. We have identified four possible reasons: lack of finance; the planning system; lack of infrastructure; building costs. It could be that all four factors are present and to varying degrees.

Through our analysis of the effect of tax breaks, we would argue that any tax breaks aimed at developers will have little effect on supply if the first three factors above are the dominant factors in constraining house and apartment building. The uncertainty around whether these factors are operating or not creates a risk that any tax breaks would simply lead to a transfer of tax revenue from the state to developers without any significant effect on supply.

The situation would be different if building costs are the primary reason for the slow pace of new house and apartment building. In this situation, a tax break could have an effect on output. However, any tax break would amount implicitly to the government paying the price of strict regulations. While this might be acceptable, it might be suggested that the regulations be reviewed to assess if the cost is appropriate relative to the benefit. It might also be argued that the presence of any tax break would remove any incentive for developers to be innovative in response to regulations and to develop (or import) new approaches to construction.⁸

Whatever the source of the sluggishness, our analysis suggests that caution should be exercised in the use of tax breaks in the residential property market. Such a view is informed by Ireland's past experience in this area also (see Appendix 2).

⁸ The low rate of innovation and high labour intensity of house-builders in the UK is a theme in Barker (2006). She seems to imply that the scope for innovation is significant and this could apply in Ireland also.

Appendix 1: Implications for the Department’s Guidelines on the Evaluation of Tax Expenditures

Under the Department’s Guidelines, a key question to be asked in ex ante evaluations is “what *market failure* is being addressed?” (page 3). The definition of “market failure”, as provided in the Guidelines, is “a situation where an imperfection in the market mechanism prevents the achievement of economic efficiency” (page 5). Examples of factors which give rise to market failure are positive and negative externalities, monopoly power, information asymmetries and public goods.

The Guidelines go on to caution that “in the absence of a market failure, interventions will lead to inefficiency and deadweight” and urge that “evaluations should carefully seek to identify the market failure in question”.

Based on the analysis contained in the body of the report, it is clear that the property market is an unusual market and that care must be taken in deciding whether any impediments to the operation of the market constitute market failures which should be addressed through tax policy or through public spending.

In the property market, the State imposes impediments on supply through the planning system and through building regulations with the aim of countering other possible sub-optimal outcomes. These regulations act to restrain developers and have the effect of preventing the market mechanism from working. For this reason, excessive planning and regulations can be viewed as “market failures” but, unlike monopoly power or externalities, they are engineered by the state to restrict the operation of the market.

As discussed in the report, there are reasons to believe that planning and regulations are acting to constrain housing supply. It was demonstrated how the introduction of tax relief in those situations will lead to significant deadweight losses.

It was also shown in the report that infrastructural deficiencies can limit housing supply and this again can be viewed as a “market failure”. As was the case with planning and regulations, a tax incentive in this situation will lead to deadweight losses. The more appropriate way of dealing with this issue is to tackle the infrastructural deficit directly. This is in line with the question asking whether tax expenditure is the best approach to address the market failure. This would appear not to be the case in this instance.

Appendix 2: Previous Evaluations of Property-related Tax Expenditures

There have been a number of evaluations undertaken previously on behalf of the Department. One of the main evaluations was undertaken by Indecon and published in 2006. Although the majority of schemes evaluated were not residential property the report included analysis of an incentive to refurbish rented residential properties. Under the scheme tax relief was available for expenditure on the refurbishment of certain rented residential accommodation throughout the country. The study found very low awareness and take-up of the scheme and that at a time of rapidly rising house prices owners were investing in refurbishment to ensure quality lettings and to capture capital appreciation. Thus, Indecon were of the view that there was no market failure to justify the incentive.

Based on the evaluation of a wide range of incentives the Indecon report included a series of recommendations for property based tax incentive schemes. These were:

- 1) All such schemes should require full disclosures of key information to the Exchequer by investors/promoters via a certification scheme or other mechanism to enable the full cost and impact of the scheme to be monitored;
- 2) Introduction of any new tax incentives should be informed by a formal assessment of the likely costs and benefits;
- 3) When an incentive is justified the option of direct expenditure as an alternative to tax incentives should be considered;
- 4) Any tax incentive scheme introduced should have a defined lifespan of a maximum of 3 years and extensions should only be considered after evaluation of the results of a formal cost-benefit appraisal;
- 5) Developers/investors in a tax incentive scheme should be responsible for securing independent certification that the conditions of the schemes have been met;
- 6) Restrictions on capital allowances which focus exclusively on shelters for rental income rather than on personal income should be refocused;
- 7) Consideration should be given to introducing a cap on total annual allowances which can be claimed by any individual;
- 8) Differing allowances in any tax incentive scheme should be introduced depending on whether these allowances are being claimed at corporate or personal tax rates.

Similarly Goodbody Economic Consultants undertook a review of area-based tax incentive renewal schemes (published in 2006) and found that overall the tax costs were high relative to the outputs achieved. Although the Rural Renewal Scheme did result in higher output the strength of the housing market at the time the review was undertaken meant that there was substantial deadweight and much of this output would have occurred anyway. Furthermore the scheme was found to have adverse equity impacts.

The Urban Renewal Scheme had a positive impact on dereliction and enhanced housing output in target areas. In the absence of significant funding being raised the scheme was considered to be less successful in delivering social and community benefits. In addition, the tax benefits of the scheme accrued to relatively high income earners. This coupled with the fact that only a small number of sites were tax designated meant the scheme had strong negative income distribution effects. The view of the consultants was that the scheme was successful, it kick-started developments in a number of areas and focused development on inner-city location. However, at the time of the report, 2005-2006, the success of the scheme and the strength of the economy meant that the deadweight content was relatively high in individual projects and had reduced the need for the scheme going forward.

The Town Renewal Scheme was found to be less successful than the Urban Renewal Scheme, with a large number of developments at designated sites un-commenced. The tax incentives under the scheme were insufficient to offset the perceived risk in undertaking development in a small town. Where activity did take place the results were in line with those achieved under the Urban Renewal Scheme. There was also substantial cross-over in terms of scale between areas designated under the Urban and Town Schemes. With regard to dead weight the consultants found that this was lower than for the Urban Scheme as the higher risks in towns with lower populations made the tax incentives more crucial to development.

Finally as with the review of property-based tax incentives the report on area-based schemes contained a series of recommended changes to the structure of the schemes if they were to be re-introduced. These changes include:

- a) Targeting the schemes in areas or towns for which there is evidence of development activity, but where problem sites are being neglected;
- b) Giving priority to urban areas identified as Gateways and Hubs in the NSS and to towns and cities that host RAPID areas;
- c) Ensuring that adequate resources are applied to the management of the schemes;
- d) Incorporating structures to share experience and promote good practice;
- e) Introducing measures to control abuse of schemes;
- f) Ensuring that designated sites have a prospect of being serviced;
- g) Establishing the scheme for a sufficient duration to allow developers to respond;
- h) Increasing the level of owner-occupation in the housing output mix;
- i) In order to incentivise owner-occupation, granting 100 per cent relief to owner-occupiers over ten years and restricting investor relief to 50 per cent; and
- j) Improving the equity and cost effectiveness of the schemes by allowing the relief in relation to a proportion of expenditure only.

More recently, an ex-ante evaluation of the Living City Initiative for urban regeneration in the pilot cities of Limerick and Waterford was undertaken by Indecon. To overcome gaps in information and data the consultants undertook a series of consultations and surveys. Based on analysis the report contained four key conclusions:

- 1) The economic benefits from the proposed initiative outweighed the economic costs involved. The consultants found that there could be direct employment benefits, a positive cost benefit ratio, and positive impacts on economic activity in the designated areas. However, for benefits to be maximised some perceived barriers to take-up needed to be addressed such as difficulties in obtaining funds to finance building refurbishment costs and some specific details of eligibility for the relief;
- 2) The focus of the initiative and its' timing are aligned with the requirements of the economy;
- 3) In order to achieve the benefits from the initiative there would be a cost to the public finances but this was estimated to be small;
- 4) The Scheme would require EU approval under state aids.

Based on the recommendations in the cost benefit analysis Budget 2014 extended the schemes to areas in need of regeneration in Cork, Galway, Kilkenny and Dublin, in addition to the pilot cities of Limerick and Waterford.

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