# Residential Site Value Tax in Ireland

An Analysis of Valuation, Implementation & Fiscal Outcomes

# By Ronan Lyons, Identify Consulting\* For Smart Taxes Network

# December 2011

<sup>\*</sup> Thanks are due to Daft.ie, for permission to use their extensive 2006-2011 datasets, and to Justin Gleeson at the National Institute for Regional & Spatial Analysis, NUI Maynooth, for assistance with mapping. All errors are those of the author. The address for correspondence is: <a href="mailto:ronan@identify.ie">ronan@identify.ie</a>.

# **Contents**

1.	. Introduction to Site Value Tax	3
	1.1 Economic rationale	3
	1.2 Features of SVT	4
	1.3 SVT in other jurisdictions	4
2.	. Contours of residential site values in Ireland	6
	2.1 Methodology	6
	2.2 Regions & Data	7
	2.3 Issues	8
	2.4 Calculating per-acre values	9
	2.5 Refining this method	11
3.	. Information and Implementation in Ireland	14
	3.1 Interim SVT	14
	3.2 Allaying common concerns	14
	3.3 Information within the system	16
	3.4 Full Implementation	17
	3.5 Extending Site Value Tax	18
4.	. Budgetary impact	19
	4.1 International Context	19
	4.2 Ireland's Fiscal Context	19
	4.3 SVT compared to alternatives	19
5.	. Appendix – Case study properties	21
	5.1 Limerick city-centre one-bed terraced	21
	5.2 Limerick city-centre one-bed apartment	21
	5.3 Limerick city-centre two-bed terraced	21
	5.4 Limerick suburban two-bed semi-detached	21
	5.5 Limerick suburban three-bed semi-detached	22
	5.6 Limerick suburban four-bed detached	22
	5.7 Limerick rural four-bed bungalow	22
	5.8 Adare four-bed bungalow	22

## 1. Introduction to Site Value Tax

This section outlines the economic rationale and other key features of site value taxation.

Site Value Tax is a charge on the unimproved value of land, i.e. it is not directly affected by physical capital built on the land (such as buildings or other improvements). It is instead a tax purely on the value of location. It is expressed as a percentage of the value of the site and is typically payable annually. As outlined below, the idea of a Site Value Tax (SVT) on the value of a plot of residential land has a long pedigree in economics.

To start with an example, suppose a three-bedroom semi-detached property in one particular location is worth €140,000. The build cost is €125,000, while the plot size of 0.03 acres is worth €15,000. This means the value of an acre in that location is approximately €500,000. A Site Value Tax of 2% per annum would mean a €300 tax for this property (2% of €15,000). A two-bedroom or four-bedroom property on the same site would be subject to the same tax bill, as they differ in value only by the 'built capital' and not by the underlying value of the land.

#### 1.1 Economic rationale

It is a basic principle of economics that taxes typically distort economic outcomes. For example, if a large proportion of an additional hour of overtime is taken in tax, workers will be less prepared to do overtime than if the tax burden were smaller. In economic terminology, labour supply responds to taxation and the work foregone due to taxation presents society with a deadweight loss. The same principle applies to the supply of other 'factors of production' such as machinery or buildings, whose supply can vary.

The supply of land, however, is fixed and thus a parcel of land cannot be 'withdrawn from supply'; it can merely lie idle. Thus, SVT cannot affect economic outcomes: it is not distortionary. For example, Harrisburg, the capital of Pennsylvania, has a land value tax. Between 1980 and 1995, that tax helped reduce the number of vacant city centre structures from 4,200 to fewer than 500, increasing the population by 10%. For the same reason, SVT, if implemented properly, would not be passed on to tenants through higher rents, because rents depend on tenants' willingness to pay and not on landlords' costs.

A further economic rationale for SVT comes from the fundamental reason that land values vary. Much of the value of a site is created purely by its designation as residential, not agricultural, land, i.e. at the stroke of a pen. More generally, land values vary with the value of surrounding amenities. These amenities are typically public goods, either directly (i.e. provided by the Government with taxpayer money) or indirectly (i.e. amenities created by the populations living there, such as social capital, or a rich market for jobs, services or cultural activities). All these amenities incur costs of maintenance or costs of opportunity. Therefore, if public goods create private value, the fairest way of paying for their maintenance is to recoup some of that value from those who benefit.

Put another way, a Site Value Tax is not a tax in the conventional sense. It is better thought of as a maintenance charge for the value of amenities enjoyed by landowners and residents. In the 1870s, Henry George, one of the earliest proponents of SVT, described the value of land as being created by the community and therefore its rent belongs to the community.

.

<sup>&</sup>lt;sup>1</sup> Source: <u>http://www.earthrights.net/docs/success.html</u>

#### 1.2 Features of SVT

There are three further features worth highlighting about SVT. Firstly, by charging the value of land rather than the total value of the property, the tax does not penalise those who maintain or improve their properties. Under tax systems where the total market value of the property is taxable, actions such as maintaining protected structures or making improvements (improving energy efficiency, for instance) are in effect penalised. Under SVT, they are encouraged.

More generally, the system promotes the best use of land. This highlights the second key feature: that Site Value Tax is a tax on land-hoarding and other unproductive uses. Derelict sites and land banks at the edge of towns that are zoned residential would be subject to the same tax per unit of land as those with homes built on them. This strongly disincentivises wasteful use of scarce land.

Wasteful use of land includes hoarding it for speculative purposes. Because SVT penalises this, it can contribute towards the minimisation of bubbles and crashes in the residential property market. Because of the annual charge involved, productive investment in residential property, i.e. where it is rented out to tenants, would be encouraged, while holding vacant property in anticipation of future gains in value, as occurred extensively in Ireland during the 2000s, would be discouraged. Under SVT, savings would be directed away from such rent-seeking activities towards more productive investment. This penalty for hoarding can be strengthened by giving tax credits per person, as outlined in Section 3.2.

#### 1.3 SVT in other jurisdictions

A number of countries and cities currently use some form of land or site value tax. Five, including some that are taxes on land other than sites, are outlined below. After that, one case – that of Denmark – is explored in more detail.

- Estonia: In Estonia, a national land tax has been paid on almost all land since 1993 (with some exceptions such as embassies and cemeteries). While the tax is administered by the Estonian Tax and Customs Board, it accrues wholly to local government authorities, who have the right to exempt owner-occupiers up to certain plot sizes. The SVT is up to 2.5% of taxable value and is paid twice a year.<sup>2</sup>
- **Taiwan**: the system in Taiwan applies to all land except land for residential use. Plots are subject to rates that vary from 1.5% to 5.5%. Land value tax receipts were stable throughout the period 2007-2009 and represent about 4% of total tax receipts in Taiwan.<sup>3</sup>
- Harrisburg, USA: Pennsylvania's capital, Harrisburg, is one of a number in the state that taxes land directly. Since 1975, it has taxed land at a rate six times the rate of tax that is levied on buildings.
- Hong Kong: All land in Hong Kong is held from the Government by way of a "land grant" and all land-owners pay a rent to the Government in return for the use of the land. The Government rent is calculated at 3% of the rateable value of the property, where the rateable value is an estimate of the annual rental value of the property on a specific date.<sup>4</sup>
- New South Wales, Australia: In New South Wales, landowners are liable for tax on all land held at midnight on 31 December of the previous year. The main exemption is for principal

<sup>3</sup> For more, see Micheál Collins, "Implementing a Site Value Tax in Ireland", DEW Conference 2011

<sup>&</sup>lt;sup>2</sup> Source: http://www.fin.ee/index.php?id=81575

<sup>&</sup>lt;sup>4</sup> Sources: http://www.rvd.gov.hk/en/faqs/rent\_a.htm#4, http://www.landsd.gov.hk/en/gov\_rent/rent1.htm

place of residence. Land tax is calculated on the combined value of all the taxable land you own above the land tax threshold (\$387,000 in 2011). The rate of tax is \$100 plus 1.6% of the land value between the threshold and the premium rate threshold (\$2,366,000 in 2011) and 2% thereafter. In 2009, land tax contributed 12% of all tax revenues in New South Wales.<sup>5</sup>

**Denmark**: In Denmark, there is a system of three property taxes, one on land, one on property and one specifically on commercial property. All three taxes go to local government. The land tax is based on the market value of land, with an option for deferred payment for those over the age of 65. The rate is set by the particular local authority and varies from 1.6% of the value of the land to 3.4%. There are also ceilings for the annual increase in the land tax paid (7% during the 2000s). Since 2003, property-level valuations have been carried out every two years, with indexation in the intervening years. These valuations are done by central government.

A staff of 210 administers the system for Denmark, which has 1.9 million properties. (The 2011 Census reported that Ireland has 2 million households.) Landowners can appeal a valuation within three months and 85% of appeals are resolved informally. In 2002, 2% of property valuations were appealed, of which just 6,000 (0.3%) ended up being arbitrated formally; only ten ended up in the Courts system. The entire valuation system in Denmark costs about €20 million to run per year, about 1.5% of the total amount of annual land value tax revenues, which are approximately €1,300 million.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Source: http://www.osr.nsw.gov.au/taxes/land/rates/

<sup>&</sup>lt;sup>6</sup> Sources: "Development of Danish Valuation System", Maria Hjortenberg & Anders Muller, Danish Ministry of Taxation & "Site Value Rates in Denmark", Joern Jensen (Chair, Appeal Board of Outer Districts of Frederiksberg and Copenhagen), Urban Forum, Trinity College, Dublin (2010)

#### 2. Contours of residential site values in Ireland

This section presents estimates of the contours of the value of residential land in Ireland.

One of the principal obstacles to the introduction of a Site Value Tax is its informational requirements. Authorities that have implemented some form of land value tax often provide either calculators for self-assessment or alternatively engage in periodic valuation exercises through a specific agency, as is the case in Denmark. Reflecting these issues, the 2009 Commission on Taxation<sup>7</sup> had the following to say about Site Value Tax in Ireland:

We consider that there is a sound economic rationale for considering the introduction of a land or site value tax if the problems – outlined below – associated with the practical aspects of its implementation could be addressed...

We consider that, if a land value tax policy proposal were pursued, it would take a number of years to become established and would involve a long and sustained challenge for policy-makers to inform the community of its benefits and to implement the proposal. We therefore recommend that a land or site value tax should not be pursued at this stage.

The Commission's stance reflects the fact that up to now, Ireland's property market information infrastructure is weak compared to other countries. For example, there has been no accessible register of individual property prices or bids and the Central Statistics Office only established an official national house price index in 2011. Meanwhile, the longest running index of house prices (which dated back to 1996) was abandoned in early 2011, due to the illiquid nature of the property market at that time.<sup>8</sup>

Nonetheless, it is possible to overcome the bulk of the information deficit in relation to land and property values across Ireland using information that is at hand. The first step is to calculate the value of a particular class of property (e.g. a three-bedroom one-bathroom semi-detached house) for each of a set of districts across Ireland. Then, given a fixed cost of construction of that property, it is possible to estimate the value of the site.<sup>9</sup>

#### 2.1 Methodology

The method employed in the analysis here is known as hedonic price regression. Effectively, each property is a collection of attributes (in particular location, time, property type, number of bedrooms and number of bathrooms) and the hedonic methodology uses large samples of properties to calculate the value associated with each attribute. Each property's price can be thought of as being made up by a location component, a size component, a type component and a

<sup>8</sup> The Department of the Environment publishes statistics in house prices that date back to the 1970s. However, there is no mix adjustment or correction for changes in location, quality or other attributes so this is best thought of as a simple average, rather than an index for comparing house prices over time.

<sup>&</sup>lt;sup>7</sup> Source: http://www.commissionontaxation.ie/Report.asp

<sup>&</sup>lt;sup>9</sup> There are two sets of figures on the per-square-metre cost of construction in Ireland. The first, by the Society of Chartered Surveyors estimates that construction in Dublin is approximately one third more expensive than elsewhere in the country. The second, by Bruce Shaw, does not indicate any regional variation in construction costs. Regional variations in cost, while ignored in this study, can be easily incorporated.

residual (the gap between the actual price and the predicted price which reflects unknown or unmeasured factors).<sup>10</sup>

For example, suppose the reference point is a three-bedroom one-bathroom semi-detached house in Lucan, valued at €200,000. Evidence from the Irish property market over the period 2006-2011 shows that adding a fourth bedroom increases the price by 30%, whereas if the house is detached, rather than semi-detached, this adds a further 25%. Given that the focus here is on location, attributes such as property type or size can be viewed as controls. What is important for a Site Value

Tax is the effect of moving one particular property around the country. If the three-bedroom home in Lucan were moved to Stillorgan, its value would increase from €200,000 to €350,000, whereas if it were moved to Newtownforbes in County Longford, its value would be €100,000. Provided the costs of building this standardised property do not vary significantly across the country, this variation in prices by area reveals variations in the value of the underlying site and thus of land.

Results from these regressions thus enable the calculation of the value of a particular bundle of attributes (e.g. a four bedroom, two-bathroom bungalow in the second quarter of 2011) across all locations that are included in the analysis. The regression analysis is carried

#### Why not use information directly on sites?

Given the data-source used, an alternative would be to use ads for sites, rather than ads for properties. However, the bulk of residential land has already property on it, so there is a risk of bias in using only those sites that are vacant now. Secondly, the information available on the factors that affect the value of vacant sites is of a significantly poorer quality than the information available on the factors that affect values of residential properties. For these reasons, the method described here has been used.

out in two stages, to exclude outliers potentially skewing the estimate of property values in a particular location. After the first stage, an estimate is made of the predicted price for each property. Where this differs substantially from the actual price, the property is excluded from the final analysis. This ensures that results are not skewed by outlier properties.

#### 2.2 Regions & Data

The aim of the regressions is to produce an estimate of property prices for each of a set of locations around the country, controlling for factors like property type and size. Therefore, each property needs to be put into a particular location. The locations included in the analysis are the 4,500 electoral divisions (EDs) and enumerators areas (EAs) maintained by the Central Statistics Office and NUI Maynooth's All-Ireland Research Observatory (AIRO).<sup>11</sup> This level of granularity is critically

<sup>&</sup>lt;sup>10</sup> For more on the precise methodology used, see Ronan Lyons, "Why do People Live Where they Do? Empirical Insights into the cost of accommodation and Return on Real Estate", Working Paper presented at the 2011 Annual Spatial Economics Research Centre Conference, LSE, http://www.spatialeconomics.ac.uk/SERC/events/special.asp#12052011

It may be possible with future research to further divide areas according the CSO's 18,000 'Small Areas'. See Lyons, "East, West, Boom & Bust: The Distribution of House Prices in Ireland, 2006-2011" (January, 2012), available at <a href="http://www.nuim.ie/nirsa/research/working">http://www.nuim.ie/nirsa/research/working</a> papers.shtml

important to the fair implementation of SVT, both on an interim basis and on a full permanent basis (see Section 3).

The data used for the analysis are property advertisements listed on the property website Daft.ie. Between January 1 2006 and December 31 2011, almost 650,000 properties were advertised for sale on the website and each advertisement comes with rich property-specific information on type, number of bedrooms and number of bathrooms, as well as an asking price. There is also rich information on the property's location and it is possible to assign the geo-location of the particular property with a high level of accuracy. Those known at townland/village level or better are judged to be in the correct ED and included in the analysis, while others are excluded. Where there were an insufficient number of observations for a particular ED, these were merged with neighbouring locations until sufficient sample sizes were obtained.

#### 2.3 Issues

How valid is the use of asking prices? Clearly, this analysis depends on asking prices reflecting underlying property values. There are two specific objections that might be raised to an analysis based on asking prices. The first is that more unrealistic asking prices in certain locations since 2008 could bias the estimate of that location relative to other locations. As outlined above though, the regression methodology specifically controls for changing market conditions, using quarterly dummy variables to capture anything varying over time in Ireland's property market. Thus, asking prices for one district would have to be systematically out of line relative to its neighbours in the same direction at all points in the market cycle since 2006. This is a strong claim for which no suggestive evidence exists. Indeed, comparisons of asking and closing prices suggest that there is a very strong correlation between the two: the correlation in county average asking and closing prices is of the order of 99%.<sup>12</sup>

What if we do not know actual site values? The second issue is that there may be concerns that estimate of the value of a site would be incorrect if asking prices on average were unrealistic. However, a key point to make in reference to the interim SVT in particular is the actual site value is not of critical importance if the Government knows two things: firstly, approximately how much revenue it requires from SVT (e.g. €500m or €2.5bn; see Section 4) and secondly, the total acreage of residential (or, on an interim basis, number of households). This is because if these two pieces of information are known, the average tax per acre (or household) is known. Once that is known, the only other piece of information that is required is the distance of each district from the average, which is given by the regression method.

In relation to the tax base for SVT, this analysis uses Census 2011 information that there are 2 million households in the country. However, the proper unit for SVT is not the household, it is the acre. The Department of the Environment is developing a system called DevPlanGIS, to be launched in early 2012, that will produce statistics on the total acreage of land that is residential, commercial, industrial or other uses.<sup>13</sup> As a starting point though, the 2006 CORINE Land Use study suggests that there are about 270,000 acres of continuous and discontinuous urban fabric. If non-residential uses

<sup>&</sup>lt;sup>12</sup> See Lyons and McIndoe-Calder, "Price signals and bid-ask spreads in an illiquid market: The case of residential property in Ireland, 2006-2011" (forthcoming, March 2012), available at http://www.centralbank.ie/publications/Pages/default.aspx

For an outline of DevPlanGIS, see <a href="http://per.gov.ie/wp-content/uploads/Niall-Cussen.pdf">http://per.gov.ie/wp-content/uploads/Niall-Cussen.pdf</a>

of urban land account for up to one third of his total, this suggests that residential SVT would apply to about 200,000 acres of land in Ireland.

# 2.4 Calculating per-acre values

Throughout the period 2009-2011, Ireland's residential property market was hugely illiquid and, given this uncertainty, it would be unwise to place too great a reliance in small differences in regional estimates. This is particularly the case given that there is currently no fundamental agreement on how the value of land should be calculated. Different methods produce very different estimates of the per acre cost of land currently.

For example, the typical four-bedroom semi-detached property in Enniskerry, County Wicklow had in late 2011 an asking price of €635,000. With the build cost for such a property at about €250,000, this suggests a 500 square metre plot size is worth €385,000 and thus the suggested per acre value is over €3.1m. Alternatively, this type of property currently rents for €1,360 per month, giving an annual rental income of €16,300. This in turn suggests an underlying value to the property of €272,000 (based on a 6% yield). Current build costs of €250,000 mean that the plot value is €22,000, suggesting a per-acre value of just €180,000. Lastly, this type of property was valued at the peak at €1.2m. Subtracting the 2007 build cost of approximately €350,000 gives a plot value of €850,000 and a cost per-acre in Enniskerry in 2007 of €6.8m. If land values have fallen by 90%, that would suggest a per-acre cost now of about €680,000.

To develop a fair measure of the approximate relative value of land across the country, a basket of properties was compared, comprising weighted averages of the price of five stylised properties: a one-bedroom apartment, a two-bedroom terraced property, a three bedroom semi-detached house, a four-bedroom bungalow and a five-bedroom detached house. The weights reflect the occurrence of different bedroom numbers over the period 2006-2011, with for example three-bedroom properties having a weight of 36%, while one- and five-bedroom properties had weights of 6%.

This gives an average property price, controlling for differences in what types of properties occur in each area, for late 2011. Given the importance of yield/rental calculations for underlying property value, a similar exercise was carried out on the daft.ie lettings database, giving an average rental for late 2011. Applying a 6% yield rule gives an alternate estimate of the average price per district.

Taking the average of both these prices gives a price per district that reflects the distribution of prices within an area and across sales and lettings segments, as of late 2011. A percentile ranking is calculated for each district based on this average price, which allows each area to be put into one of ten bands, based on where that area's population's property ranks in the country. These contours of land value in Ireland in late 2011 are shown in the maps at the end of this section.

As outlined above, these methods help understand the relative prices. It may be useful to establish likely broad site values, given the extremely illiquid market conditions. Agricultural land sets the floor for land values across the country. In 2010, the average price per acre was €9,000 according to Knight Frank, with prices significantly below this only in the West/Northwest region – and that figure

-

<sup>&</sup>lt;sup>14</sup> See RIAI Cost guidelines, 2006.

(an average of €5,400) was based on just nine sales. <sup>15</sup> Thus, the floor for land values is likely to be close to €10,000 per acre. Residential land will have a higher value.

According to the Daft.ie Report, family homes are cheapest in Counties Leitrim, Longford and Roscommon (i.e. Band 10 includes these areas). Ads for sites for sale on daft.ie from late 2011 suggest that the floor for residential plots (of one acre or less) with planning permission is closer to €20,000 an acre. Properties in towns such as New Ross are among those that are about two thirds of the way through the price distribution in Ireland (i.e. Band 7). Even allowing for a significant discount from advertised prices, rural sites valuations in New Ross run at about €50,000 per acre, while sites in the town may be worth twice that amount.

Dundalk town is an example of a location where standardised property prices are about one third of the way through the distribution (i.e. Band 4). Site valuations in late 2011 there were of the order of €300,000 to €500,000 per acre in the town. Lastly, central Dublin, including Pembroke Ward areas in the south city, are among those that are at the top of the price distribution (i.e. Band 1). Per acre valuations of residential land in prime areas would be greater than €1m and could be as high as €10m for small well-located plots.

This cross-check with current ads for sites assists with giving broad parameters for interim estimates of site values. As an interim measure (see Section 3.1), flat charges per acre within each of the ten bands can be used, for example properties in Band 1 would pay based on a per-acre site value of €2,000,000. The table below outlines the approximate land values per acre suggested by the analysis above. As is to be expected, the values across the bands do not increase linearly, but rather exponentially.<sup>16</sup>

Likely site values and potential interim SVT charges, by value band					
Band	Per acre	Per acre	2% SVT charge	2% SVT charge	
	Lower bound	Upper bound	on Property A	on Property B	
1	€2,000,000	€10,000,000	€1,200	€4,960	
2	€1,000,000	€2,000,000	€600	€2,480	
3	€500,000	€1,000,000	€300	€1,240	
4	€300,000	€500,000	€180	€744	
5	€200,000	€300,000	€120	€496	
6	€100,000	€200,000	€60	€248	
7	€50,000	€100,000	€30	€124	
8	€40,000	€50,000	€24	€100	
9	€30,000	€40,000	€18	€75	
10	€20,000	€30,000	€12	€50	

It also gives the estimated annual SVT bill for two types of property, based on a 2% Site Value Tax using the lower bound as an interim site value. Property A is a two-bedroom terraced home on a plot of 120 square metres (3% of an acre). Property B is a four-bedroom detached property on a plot of 500 square metres (12% of an acre). Those in italics reflect property types that would be uncommon to that band. It is worth reiterating at this point that the level of taxation does not

-

<sup>&</sup>lt;sup>15</sup> See 2011 Knight Frank report: http://ganlywalters.ie/resources/FarmsMarketReport2011.pdf

<sup>&</sup>lt;sup>16</sup> For more on this relationship, see Joern Jensen, op.cit.

depend on the accuracy of these bands, provided both the total desired level of revenue and the number of acres/households liable for the tax is known.

The appendix spreadsheet outlines where each Census district ranks across each of the three metrics, as well as the overall band it is placed in for this analysis. It should be stressed again, however, that provided the Government knows approximately how much it needs to raise from the tax and the total amount of residential land in the country, the precise level of the per acre value is not important, once the relative distribution is known.

# 2.5 Refining this method

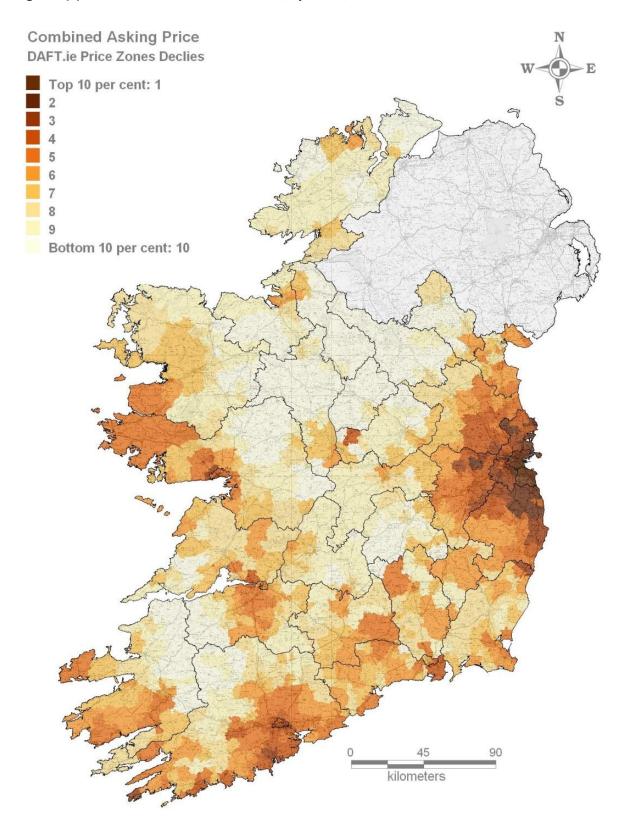
Clearly the estimates above are based on round numbers and averages. As is outlined in the following section, this is sufficient for an interim Site Value Tax but a full implementation would need to take account of a number of other factors, to capture the huge variation in the value of residential land around the country.

One of the advantages of a Site Value Tax is that if implemented fully, it offers a means for local government to fund amenities that improve quality of life for its residents, because these amenities improve the underlying site value and thus the tax-take. Examples include new transport or education facilities. Research suggests that properties within walking distance of a train station are 3-5% more expensive on average than those more than five kilometres away. Similarly Site Value Tax also offers compensation for those living near "disamenities" such as landfills or energy facilities, which can have a negative effect on site values.

\_

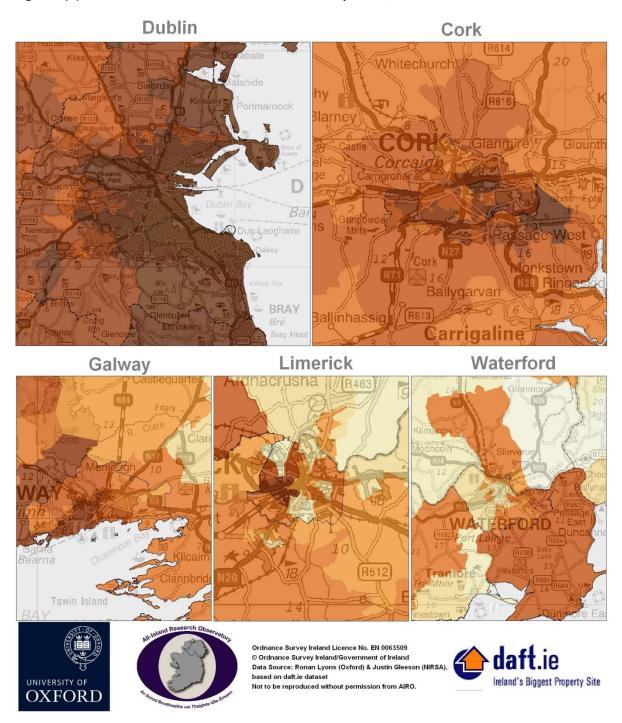
<sup>&</sup>lt;sup>17</sup> See Lyons, "Why do people live where they do?", op.cit.

Figure 1(a): Contours of site value in Ireland, by decile, 2006-2011



Source: Identify Consulting analysis, using Daft.ie datasets and with the assistance of the National Institute of Regional & Spatial Analysis, NUI Maynooth

Figure 1(b): Contours of site value in Ireland's cities, by decile, 2006-2011



Source: Identify Consulting analysis, using Daft.ie datasets and with the assistance of the National Institute of Regional & Spatial Analysis, NUI Maynooth

# 3. Information and Implementation in Ireland

This section outlines how the Government might put in place a Site Value Tax in Ireland, using existing information to hand.

As mentioned previously, the Commission on Taxation 2009 report outlined its support for the idea of Site Value Tax in theory but expressed concerns about the resources required to implement it in practice. To quote from their report again:

The application of a land value tax ... would require a single register of land owners that clearly identifies the land owner, where the site is located and a valuation system that can apply a valuation to the site... In technical terms this involves the development of what is known as a cadastre – a comprehensive mapped register of all properties including details of ownership, precise location, dimension and value of all individual parcels of land. The development of a cadastre to form an accurate basis for a land value tax would, in Ireland, require co-operation between a number of public bodies.

The focus of this analysis is Site Value Tax, one specific implementation of a land value tax, i.e. on residential property. This section outlines how the implementation of SVT could occur in Ireland in two phases, given the current information that is available.

#### 3.1 Interim SVT

The previous section outlined the results of a robust economic methodology applied to a rich dataset of the residential property market in Ireland. The analysis assigned each Electoral Division in the country to one of ten bands of site value in the country, based on the use of rich property market information from the period 2006-2011.

This represents an efficient and equitable starting point for SVT in Ireland and could be introduced on a self-assessment basis relatively quickly as follows. The Revenue Commissioners issue a tax bill to the registered owner, based on the band a particular property is in and using a particular starting point for site size (one for urban areas, one for rural areas). By also issuing a one-off tax credit to property owners to cover the costs of validating the site size, the first year could see a significant improvement in the information available to policy makers in relation to residential property in Ireland.

To facilitate payment, both on the interim and full SVT, the Revenue Commissioners could offer a system of at-source payments for property owners who are PAYE workers, with payroll deductions each month, week or fortnight as appropriate. To allay fears that this interim methodology would leave taxpayers with unfair tax bills, the Revenue Commissioners could also commit to issue refunding tax credits, in the case of over-billing in the interim period when the full system is implemented. The fiscal implications of this interim tax are discussed in Section 4.

#### 3.2 Allaying common concerns

This section outlines how SVT can be modified to handle various concerns about the impact of its introduction. Two relate to its fairness, in particular stamp duty and high wealth but low income households, while two relates to the incentives SVT creates in relation to density of residences.

What about those who paid stamp duty? One common argument against a property tax in Ireland is that many people paid significant amounts of stamp duty when purchasing their current property, over the period 2004-2008 in particular. An additional factor is that many of these buyers are now in negative equity due to the collapse in property prices.

The solution to this is to offer tax credits according to the principle of grandfathering. This gives those who have paid stamp duty in recent years tax credits to offset their property tax bill upon introduction. For a given stamp duty bill, the amount of tax credits varies by how long ago the purchase occurred, i.e. older transactions are discounted by more. The table to the right outlines one example of how a stamp duty bill of €25,000 might be grandfathered in, based on an annual

Table: Credits relating to stamp duty bill of €25,000				
Year	Tax credits			
2011	22500			
2010	20250			
2009	18225			
2008	16403			
2007	14762			
2006	13286			
2005	11957			
2004	10762			
2003	9686			
2002	8717			

discount rate of 10%. The tax credits could also be weighted by number of properties, if policy wants to give greatest relief to those who bought owner-occupier houses.

With grandfathering, time limits can be set for properties covered by credits (e.g. only properties bought since 2002 are eligible), and for the how long they can be used (e.g. all tax credits given at the introduction of SVT expire in 2020). For the purposes of local government funding, transfers from central government in lieu of SVT that would be paid would mark a phase-out of much central government funding (for more, see Section 4).

What about elderly couples with no income? Part of the motivation behind SVT is to encourage land and property to be used as effectively as possible from society's point of view. This means that while nobody is required to move property over the life cycle, they do have to pay society to reflect the costs they impose. A significant contributor to urban sprawl in Ireland is the tendency for owner-occupiers to live in their 'family home' until death. Nonetheless, even though this imposes costs such as greater commutes on younger families, it is possible to facilitate elderly couples, with significant wealth in their property but low levels of annual income, to stay in their homes, while still paying SVT. Principally, this would involve the local authority placing a lien on the property, entitling it to the income owed (plus interest) on the ultimate sale of the property.

Does SVT encourage over-development? Given that SVT is based on the plot size, and not on the buildings on that plot, it encourages the most effective use of that plot. Particularly in high value plots, this creates an incentive to put greater numbers of people on that plot, e.g. by replacing houses that have gardens with apartment blocks. Some reallocation of land is to be expected. However, ultimately SVT needs to work within a given local authority development plan. SVT depends on solid planning regulation. This includes specification of the minimum space per person (both built and green space) and bans on bedsit accommodation, regulations in relation to property height and size, the nature of development in an area and the protection of listed structures.

Are people expected to live on no land? Every human has a land footprint and one argument against SVT is that it places an unavoidable tax burden on all citizens. The intention of SVT is to recoup some of the benefit created by society from its members. Furthermore, the fixed supply of land means the burden of the tax falls on land-owners, not residents, meaning that the tax burden is avoidable if households choose to rent.

However, it is possible to shift the burden from occupied sites to unoccupied ones. One of the principal strengths of SVT is how it discourages wasteful uses of land such as hoarding for speculative purposes, pointless rezoning, or derelict buildings or sites. A green space allowance, issued to each resident in a site, would strengthen this and shift the burden of taxation from family homes to empty plots of residential land. Under standard SVT, two identical plots of residential land, one inhabited by a family of four, the other left idle, are both liable to the same annual charge (say €500). Given that one plot is being left idle, this charge could be viewed as disincentive enough. However, the case could also be made that the plot with the family of four is being used more effectively and should be rewarded as such. A green space allowance, in the form of a tax credit, would achieve this. For example, the tax rate could be increased such that the charge was €625 per year for each of the two plots. A per person tax credit of €50, reflecting a green space allowance of 50 square metres per person (this could vary by local authority), would reduce the bill for the family, while generating the same revenue by taking more income from empty land banks.

Does SVT punish rural families on larger sites? Rural plots for family homes can be up to twenty times larger than urban plots. Thus, even allowing for differences in site values, with SVT strictly applied, rural homes may pay more in tax than homes in areas with greater public services and other amenities. The green space allowance discussed above would partially correct for this. An alternative would be to cap the plot size, given low density locally. For example, in a predominantly agricultural ED only the first half acre would be treated as the residential plot, limiting tax liability.

Overall, though, large rural sites are conscious choices on the part of those buying the site and impose costs on the rest of society. These costs are particularly relevant for public service provision: consider the cost of providing emergency health services (including ambulances) or primary education where a population of four million is concentrated in towns relative to the same population all living in rural sites spread across the country.

#### 3.3 Information within the system

In designing a permanent SVT system, it is worthwhile to document the information that is available across the Irish system. There are four main sources of official information relating to residential property and sites in Ireland: the Land Registry; the Revenue Commissioners; GeoDirectory; and local authorities and the Department of the Environment.

Land Registry (under the Property Registration Authority of Ireland): The Land Registry dates back to the late 1800s and is Ireland's comprehensive system of land registration. It includes a database of folios and of maps, covering 93% of the land area of the country although notably significant parts of Dublin are not covered. The folios comprise a record of land ownership across the country and each deed filed in the Registry includes details about the property, including its approximate extent in hectares, based on Ordnance Survey maps. Folios and maps are maintained in electronic form. The Land Registry does not have information on property values.

**Revenue Commissioners & the Property Services Regulatory Authority** (PSRA): the Revenue Commissioners have information on all property transactions, through returns for stamp duties. Their records include the address of the site, the parties involved, the price paid and the stamp duty paid. Their records do not include the size of the site or any attributes of the property transacted. Records are available in a computerised format back to 2000/2001. In accordance with the Property

Services (Regulation) Bill 2009-2011, the Revenue Commissioners will be sharing this information with the PSRA, so that the latter can publish an online house price register, including addresses, prices paid and dates of sale. This is expected to be launched in June 2012.

**GeoDirectory** (An Post and Ordnance Survey Ireland): GeoDirectory is a system managed by An Post, a semi-state organisation, which gives every building in Ireland a unique identifier, a verified address in a standardised format, and a precise geocode. It is the official database of addresses in Ireland and is updated with new properties as they are constructed.

Local Authorities & the Department of the Environment: local authorities, including county, city and town councils, have two main sources of relevant information for Site Value Tax. The first are the Development Plans, which involve an understanding of the nature of aggregate land use in in each authority area. The second are planning permission applications and approvals, which have information on the location of dwellings, their size and the size of the site. The Department of the Environment is collecting the information from the various local authorities into one central store, DevPlanGIS, which will be mapped and available to the public from early 2012.

# 3.4 Full Implementation

It is a relatively straightforward exercise, using modern GIS technology, to connect up information on an individual property or site held across various Government agencies and departments. The sole requirement is that there is one overlapping piece of information in each, typically the specific address of the property or the geographic location (in longitude/latitude or similar) of the site. Indeed, such an exercise underpins the analysis outlined in Section 2, as properties listed on Daft.ie are allocated to electoral districts or enumerator areas on a map of Ireland through Geodirectory.

It is relatively straightforward, even without a well-developed system of postcodes, to connect the different sets of information. Technologically, this involves overlapping different layers of maps, each with different information. The baseline map is the Department of the Environment map, outlining which parts of the country are residential, commercial/industrial or other use. The second layer is the Land Registry map, which divides the residential land in Ireland into plots of a particular size. The third layer is the Geodirectory map, which uses geographical coordinates to associate Land Registry plots with particular addresses. The final layer is the Revenue Commissioners/PSRA layer, which associates transactions (with dates and prices) with particular addresses.

Overlaying these four layers would join up plots in Ireland with their characteristics and prices. Further information on amenities, ranging from the location of energy, transport and education facilities to labour and consumer market amenities, can be easily overlaid on top as required. It is possible, though, that some information required for thorough analysis of site values, such as property type or number of bedrooms and bathrooms, may not be digitised immediately in the Land Registry records. Information from the PRTB or from the Daft.ie dataset could be used on significant subsamples, although as suggested above it may be more efficient to allow self-assessment.

17

<sup>&</sup>lt;sup>18</sup> For example, the Meath 2007-2013 report estimated that 1,513 hectares of land zoned residential were undeveloped (see page 46 of <a href="http://bit.ly/qQsW8w">http://bit.ly/qQsW8w</a>). Under SVT, all this land would be liable for tax unless it was dezoned.

# 3.5 Extending Site Value Tax

The exercise above concerns only the application of Site Value Tax to residential property. As the supply of land is immobile regardless of its use, Site Value Tax could easily be extended to commercial and industrial land as a replacement for commercial rates. As discussed in more detail in section 4, the general principle is that SVT replaces other tax revenues.

As mentioned above, "artificial areas" comprise approximately 1.8% of the 17.4 million acres of land in the Republic of Ireland, or about 310,000 acres, when land for transport, leisure, sport and other "artificial" purposes are included. The remaining 17 million acres, more than half of which is pasture, could also ultimately be brought within a land taxation regime, where benefits created by geography and demography are sustainably funded through local taxation revenues.<sup>19</sup>

-

<sup>&</sup>lt;sup>19</sup> See, for example, the 2006 CORINE Land use study, available at <a href="http://www.epa.ie">http://www.epa.ie</a>

# 4. Budgetary impact

This section outlines the budgetary impact of SVT in Ireland and how it compares to alternatives.

#### 4.1 International Context

According to the June 2008 OECD Public Management Review, "Ireland: Towards an Integrated Public Service", in 2004 local government comprised almost 45% of all public expenditure, one of the highest proportions in the OECD, but less than 3% of all revenues, one of the lowest in the developed world. Taxes comprised just one fifth of their revenues. There is clearly a disconnect between raising and spending money at the sub-national level in Ireland. In 2010, local government in Ireland spent €4,656m. Almost €2bn of this was funded by central government grants, while €1,360m was raised through local charges (commercial rates).

Typically, property taxes generally and land value taxes in particular are local government revenues. In the US, recurring taxes on immovable property form 11% of all tax revenues, while in Canada and the UK they contribute 9%. In Australia and New Zealand, they contribute between 5% and 6% of all tax revenues. In Western Europe, the contribution is typically lower (1.5% in 2008). In Ireland in 2008, recurring taxes on property contributed 2.6%, all of which was in the form of the commercial rates discussed above.

#### 4.2 Ireland's Fiscal Context

Ireland's National Recovery Plan (2010) and the current Programme for Government (2011) both commit to the introduction of a Site Value Tax in Ireland. The 2011 Medium-Term Fiscal Statement outlines the priorities and projections in relation to Exchequer spending and revenues over the period 2011-2015.<sup>20</sup> A key paragraph from this relates to tax revenues:

The tax system must therefore be redesigned so that it is based on more substantive – less cyclical – forms of tax revenue. Significant structural adjustments to the tax system, including the introduction of the new Universal Social Charge, are underway and the impact of that, in the context of the volume of income tax receipts collected in the first three quarters of the year can be seen.

Given the stable and equitable nature of SVT, and given proportions raised in other countries, it is reasonable to assume that the Government would expect to generate at least 5% of all its revenues from property tax. Gross government revenues are projected to be about €57,000m in 2015. This suggests that a target level for 2015 of revenue from property taxes (including those on commercial property) is €2,850m. Roughly half of this would come from SVT applied to commercial and industrial sites, replacing the €1,360m raised through rates in 2010.

## 4.3 SVT compared to alternatives

The remaining €1,400m would be raised through residential SVT. While the exact tax base won't be known until the publication of DevPlanGIS by the Department of the Environment in 2012, Section 2.3 estimated that about 200,000 acres would be liable for residential SVT. The interim SVT based on ten bands presented in Section 2.4 would raise €1.25bn if levied on all 2 million households in the country in the 2011 Census. This represents an average charge of €625 per household.

<sup>&</sup>lt;sup>20</sup> Source: http://finance.gov.ie/documents/publications/presentation/Fiscalstat.pdf

It should be remembered though that SVT is levied on property owners, not on residents: it is a charge on the wealth associated with being able to avail of particular amenities, not necessarily for accessing those amenities. Also, crucially while the figure of two million households above includes vacant dwellings, it excludes empty land-banks and other plots that are zoned residential. The full implementation of a Site Value Tax on all residential land would reduce the burden on the average owner-occupier household.

The Medium-Term Fiscal Statement outlines that, compared with 2011, €4.65bn in new tax revenues need to be raised by 2015. The Department of Finance expects organic growth in existing revenue streams to contribute €1.4bn, meaning that €3.25bn needs to be raised through fresh taxation measures. Revenues raised through SVT applied to both residential and commercial property would be replace those raised through commercial rates and stamp duties on property transactions, as well as the 80% windfall tax on land banks. Thus, if a full SVT on commercial and residential land raised close to €3bn, this would constitute about €1bn in new revenue streams (i.e. after subtracting current revenues from rates and stamp duty).

Can Ireland not raise other taxes instead? Ultimately, there are only three types of taxes: those on incomes, those on consumption and those on wealth (including property). Those who argue out of hand against a property tax such as SVT are in effect stating that the €3.3bn in new revenue streams should could entirely from some combination of income taxes or consumption taxes. There are strong considerations in relation to competitiveness and equity to avoid excessive increases in both.

- Income tax: Ireland has some of the highest marginal rates of taxation in the OECD, with earners above €40,000 typically facing all-in marginal rates of more than 50%.<sup>21</sup> Budget 2011 left the highest marginal rate at 52%, the sixth highest in the OECD, while the top rate applies earlier, relative to average earnings, than almost any other developed country. There is very little scope to increase income taxes further without having a detrimental effect on Ireland's competiveness, particularly as the bulk of new investment in Ireland is in services, where skill is the single biggest input.
- Consumption tax: Consumption taxes are regressive, hitting poorer families harder. The 2010 VAT system was the equivalent of a 16% tax on disposable income for poorest households, while taxing richest households less than half this proportion. According to the 2008 edition of the OECD's Consumption Tax Trends. As of January 1 2012, the Government has increased VAT to 23%, meaning that Ireland now has the highest consumption tax in the developed world outside the Nordic countries the impact of this increase, and any further increases, will be hardest felt by poorest households.<sup>22</sup>

Given the equity and competitiveness concerns raised by income and consumption taxes, it is clear that avoiding implementation of a recurring charge on property is of limited use. Failure to implement a property tax means either missed fiscal targets or sacrifices to competitiveness and equity. The implementation of SVT should be viewed as a substitute to these alternative taxes. If implemented successfully, a higher rate of SVT on a broader class of land could be introduced to replace income and consumption taxes.

<sup>22</sup> Sources: <a href="http://www.oecd.org/document/20/0,3746,en">http://www.oecd.org/document/20/0,3746,en</a> 2649 33739 41751636 1 1 1 1,00.html and <a href="http://www.esr.ie/vol42">http://www.esr.ie/vol42</a> 2/06%20Tol%20article ESRI%20Vol%2042-2.pdf

<sup>&</sup>lt;sup>21</sup> Source: <u>http://www.oecd.org/document/60/0,3746,en\_2649\_34533\_1942460\_1\_1\_1\_1,00.html</u>

# 5. Appendix - Case study properties

This appendix outlines how a Site Value Tax might work for eight properties in County Limerick.

This appendix examines eight sample properties in County Limerick, to show how an interim residential Site Value Tax might work in practice. The interim Site Value Tax system used is the one outlined in Section 2, i.e. where 2% of the lower estimated site value of that band is taxed annually.

#### 5.1 Limerick city-centre one-bed terraced

Property (1) is a one-bedroom two-storey terraced property of about 50 square metres in Limerick City Centre (Market electoral district). It is without a back garden and its plot size is approximately 25 square metres (or 0.006 of an acre). As there are no other properties on this site, this property would contribute the full amount for that site.

The "Market" electoral district, like most of Limerick city, is estimated to be in Band 5 of site values (between €200,000 and €300,000 an acre). A 2% Site Value Tax on a site of 0.006 acres would translate into an annual payment of €24 (or €2 monthly with at-source deductions).

# 5.2 Limerick city-centre one-bed apartment

Property (2) is a 40sq.m. one-bedroom apartment on one floor, situated in a three-story building containing six units in Market electoral district, in Limerick city centre. The building has a site footprint of 85 square metres, and the total square meterage of its six units is 250sq.m. Property (2) is then estimated to have a site of (40/250)\*85, or 13.6 square metres (0.0034 acres).

The "Market" electoral district is estimated to be in Band 5 of site values (between €200,000 and €300,000 an acre). A 2% Site Value Tax on a 0.0034 acre site would translate into an annual payment of €13.60 (or €1.13 monthly using at-source deductions).

## 5.3 Limerick city-centre two-bed terraced

Property (3) is two bedroom, two bathroom, mid-terraced property over two floors with a back extension. Its floor area is 95 sq.m. and it is located in the "Dock B" Electoral District of Limerick City. The building has a small front garden and a back yard, and the property's total site footprint is 105 square metres (0.026 acres).

"Dock B" electoral district is estimated to be in Band 6 of site values (between €100,000 and €200,000 an acre). A 2% Site Value Tax on a 0.026 acres would thus translate into an annual payment of €52 (or €4.33 per month with at-source deductions).

#### 5.4 Limerick suburban two-bed semi-detached

Property (4) is a two-bedroom semi-detached property in "Ballincurra A" electoral district. It is spread out over two floors and also includes front, back and side gardens. Its plot size is 180 square metres (0.045 acres).

"Ballinacurra A" electoral district is estimated to be in Band 5 of site values (between €200,000 and €300,000 an acre). A 2% Site Value Tax on a 0.045 acre site would thus translate into an annual payment of €180 (or €15 per month with at-source deductions).

#### 5.5 Limerick suburban three-bed semi-detached

Property (5) is a three-bedroom semi-detached property in "Singland B" electoral district. It comprises 85 square metres of accommodation over two floors, including a front and back garden, its plot size is 121 square metres (0.03 acres).

"Singland B" electoral district is estimated to be in Band 5 of site values (between €200,000 and €300,000 an acre). A 2% Site Value Tax on a 0.03 acre site would thus translate into an annual payment of €120 (or €10 per month with at-source deductions).

#### 5.6 Limerick suburban four-bed detached

Property (6) is a four-bedroom detached property in the Castletroy area of Limerick, which is in the "Ballysimon" electoral district. The property comprises 210 square metres of accommodation over two floors, including a garage. There are also significant gardens to the front and back, meaning its plot size is 280 square metres (0.07 acres).

"Ballysimon" electoral district is estimated to be in Band 5 of site values (between €200,000 and €300,000 an acre). A 2% Site Value Tax on a 0.07 acre site would thus translate into an annual payment of €280 (or €23.33 per month with at-source deductions).

# 5.7 Limerick rural four-bed bungalow

Property (7) is a four-bedroom bungalow near Barringtonbridge in the Clonkeen electoral district in rural Limerick. The property is situated on 0.75 acres of land.

Clonkeen electoral district is estimated to be in Band 8 of site values (between €40,000 and €50,000 an acre). A 2% Site Value Tax on a 0.75 acre site would thus translate into an annual payment of €600 (or €50.00 per month with at-source deductions).

#### 5.8 Adare four-bed bungalow

Property (8) is a four-bedroom bungalow in Adare, in the "Adare South" electoral district in rural Limerick. The property is situated on 0.5 acres of land.

Adare South electoral district is estimated to be in Band 4 of site values (between €300,000 and €500,000 an acre). A 2% Site Value Tax on a 0.5 acre site would thus translate into an annual payment of €3,000 (or €250 per month with at-source deductions).