

A Land Value Tax for England

Fair, Efficient, Sustainable



This report provides an analysis of how a system of land value taxation could work in England and addresses key issues relating to its practical implementation.

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“The economic case for a land value tax is simple, and almost undeniable. Why, then, do we not have one already? Why, indeed, is the possibility of such a tax barely part of the mainstream political debate, with proponents considered marginal and unconventional?”

Mirrlees Review, Tax by Design, Chapter 16

PREAMBLE

1. This report was commissioned by Caroline Lucas MP and written and researched by Andy Wightman. Its purpose is to develop the case for Land Value Taxation (LVT). The contents of the report do not necessarily reflect Green Party policy and any mistakes or omissions are the responsibility of the author.
2. Please note that there is some disagreement in LVT circles as to whether the term LVT should be used since it implies a tax. Many would argue that it is merely the recovery of economic rent and thus prefer the term Site Value Rating.
3. The use of the term LVT in this report is not to be taken as expressing any preference for one term over another. It should be stressed, however, that LVT does not imply a tax on land but a tax on land value.
4. The paper provides a very broad outline based on existing data and is intended to stimulate further debate and research into how LVT might be implemented. It is not to be read as a fixed prescription.¹

¹ More disaggregated data at the local level would enable a more detailed analysis of the impact of LVT.

INTRODUCTION

5. In Gordon Brown's first budget as Chancellor in July 1997, he said that he was "determined that as a country we never return to the instability, speculation and negative equity that characterised the housing market in the 1980s and 1990s....I will not let house prices to get out of control and put at risk the sustainability of the recovery." When he left office as Chancellor, house prices had trebled – fuelled by a boom in affordable credit.
6. Since the Lyons Inquiry published its report into Local Government finance in 2007, much has changed. In the aftermath of the credit crunch and in the midst of an ongoing financial crisis, housing is once again becoming a critical political issue – with a number of reports warning of the social and economic problems caused by an inflated housing (land) market.² Levels of private debt have risen as a consequence of the housing bubble. At the end of November 2012, outstanding personal debt in the UK was £1.42 trillion, 89% of which was secured (mortgage) debt.³
7. The result of fiscal policy in relation to land over the past 30 years has been significant inflation in land prices that has shifted the proportion of unearned wealth increasingly towards the south and east of England, as well as to an older demographic. This is unsustainable because it leads to significant stress on household budgets - which will become much worse when interest rates rise, a lack of affordable housing and a distortion of the UK economy by allocating capital away from productive investment in businesses and infrastructure and into land.
8. As should now be clear from experience in the USA, Ireland and Spain, the development of asset bubbles that lock economic value into capital assets is bad for the economy. Not only does it lead to a sequence of 'boom and bust', but it removes otherwise productive capital from being deployed in more useful investments.⁴
9. This paper outlines the background to Land Value Taxation (LVT) and provides data and analysis on how it could be introduced as a replacement for both National Non-domestic Rates (NDR) and the Council Tax (CT) across England. It argues that LVT is a land & property tax regime that is fair, affordable and efficient and could deliver a range of positive benefits such as moderating asset bubbles and redistributing economic activity to where it would be most beneficial to society.
10. Property wealth has contributed to growing levels of inequality across the UK. Figure 1 from the Office of National Statistics shows the average net property wealth for each 1% of the net property wealth distribution. The top 1% of the population has net

² See for example IPPR's "*No Place Like Home: The social impacts of housing undersupply on young people*" and the Griffith, M. 2011 *Hoarding of Housing: The intergenerational crisis in the housing market* Intergenerational Foundation, London. See also campaigns such as www.pricedout.org.uk

³ Source: www.creditaction.org.uk/helpful-resources/debt-statistics.html

⁴ The Mirrlees Review. Reforming the tax system for the 21st century. www.ifs.org.uk/mirrleesReview

property wealth of £15,040,000 whilst the bottom 33% has nothing. The top 1% own more net property wealth than the rest of the 99% combined.⁵

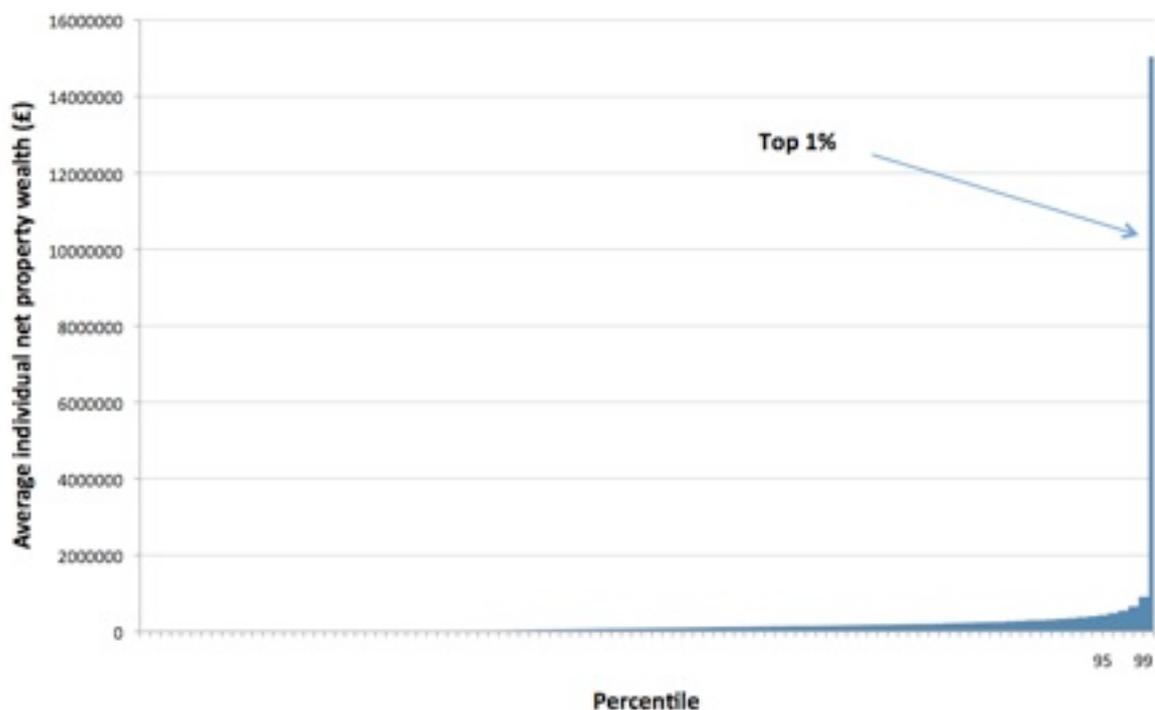


Figure 1 Average individual net property wealth by income percentile (£) 2012
Source: ONS

11. The paper provides a broad outline based on existing data and is intended to stimulate further debate and research into how LVT might be implemented in the UK. It is not to be read as a fixed prescription;⁶ rather, it builds on a number of recent studies exploring the merits of LVT.
12. The think tank Compass, for example, published *Don't Bet the House On It* in 2009 advocating LVT. The Institute for Public Policy Research published *Time for Land Value Tax?* - an important collection of essays by leading economists and political scientists - in 2005.⁷ A valuable history of LVT in Britain is provided by Owen Connellan in *Land Value Taxation in Britain: Experience and Opportunities* (2004).⁸
13. A growing number of economists have identified the need to design tax systems which support wider public policy goals. In 2010, the OECD published a report on tax

⁵ Data from ONS Wealth and Assets Survey 2008-2010. Thanks to the New Economics Foundation for access to the percentile data which is discussed more fully here <http://goo.gl/TPIfN> The spreadsheet with the data is available here www.andyweightman.com/docs/Propertywealth.xlsx

⁶ A more detailed analysis of the impact of LVT across England would be possible if the author had access to data captured at a more disaggregated level. Nevertheless, the conclusions that this paper comes to are valid on the basis of the data used.

⁷ See <http://compassonline.org.uk/publications/item.asp?d=1084> and www.ippr.org.uk/publication/55/1380/time-for-land-value-tax

⁸ Available from www.andyweightman.com/docs/landvaluetaxinbritain.pdf

policy reform that identified recurrent taxes on immovable property as being the least harmful in supporting economic activity.⁹

14. In 2011, the Mirrlees Review published the results of the most thorough analysis of the UK tax system for over 30 years. It concluded that the UK tax system is poorly designed and contributes to, among other things, an inefficient housing market and distorted savings and investment decisions. In relation to land and property taxation, the Review recommends the abolition of stamp duty land tax, council tax and non-domestic rates.
15. The Mirrlees Review was clear about the economic benefits of LVT:
16. *“The economic case for taxing land itself is very strong and there is a long history of arguments in favour of it. Taxing land ownership is equivalent to taxing an economic rent—to do so does not discourage any desirable activity. Land is not a produced input; its supply is fixed and cannot be affected by the introduction of a tax. With the same amount of land available, people would not be willing to pay any more for it than before, so (the present value of) a land value tax (LVT) would be reflected one-for-one in a lower price of land: the classic example of tax capitalisation.*
17. *Owners of land on the day such a tax is announced would suffer a windfall loss as the value of their asset was reduced. But this windfall loss is the only effect of the tax: the incentive to buy, develop, or use land would not change. Economic activity that was previously worthwhile remains worthwhile. Moreover, a tax on land value would also capture the benefits accruing to landowners from external developments rather than their own efforts.”¹⁰*
18. The Mirrlees Review concluded that:

“There is a strong case for introducing a land value tax. In the foreseeable future, this is likely to mean focusing on finding ways to replace the economically damaging business rates system with a land value tax.”¹¹

The report recommends that the Treasury undertakes this research into how a system of LVT could be designed to replace non-domestic rates and council tax in line with the provisions of the Land Value Tax Bill introduced by Caroline Lucas MP.¹²

⁹ OECD, 2010 Tax Policy Study No. 20 - Tax Policy Reform and Economic Growth.

www.oecd.org/ctp/taxpolicyanalysis/taxpolicystudyno20-taxpolicyreformandeconomicgrowth.htm

¹⁰ Mirrlees Review. The Taxation of Land and Property. Chapter 16, pg. 371.

¹¹ The Mirrlees Review. Tax By Design, Chapter 16 Conclusions.

¹² See <http://services.parliament.uk/bills/2012-13/landvaluetax.html>

WHAT IS LVT?

19. The idea of a land value tax can be difficult to comprehend, but it is quite simple.¹³ It is predicated on the fact that land has value for purely 'locational' reasons. This value is a reflection of the wider efforts of the community in creating the demand that makes a plot of land in central London, for example, many times more valuable than a plot of land on an abandoned coal mine in Yorkshire.
20. The value of land varies significantly depending on the location.— hectare of moorland in the Pennines, for instance, is worth far less than a hectare of land in the centre of London – and on the use that is permitted (agricultural land may be worth £6,000 per ha, but with planning consent be worth between £2 million and £4 million).
21. England already has a number of property taxes. The most prominent among these are the annual property levies - council tax and business rates - together with the transaction taxes -stamp duty land tax, inheritance tax & capital gains tax.
22. LVT is an alternative property tax with slightly different characteristics. Like business rates and council tax, it is levied annually. Like business rates, it is levied on the rental value of property but, unlike both council tax and business rates, it is levied solely on the unimproved site value of property. Therefore it falls on the owner rather than the occupier, and on the highest value use permitted on the site.
23. To illustrate what this means, consider that most property has a market value that comprises the site value (the value of the unimproved site) and the improvements, typically the buildings constructed on the site. A gap site in a row of terraced houses will, for example, represent the site value of most of the other houses in the terrace. Site values vary across the country and across any town or city. They are what make some sites valuable and in great demand, and others less so. Site values are what lie behind the term "location, location, location".
24. Thus, taking a familiar example of a house, the value of the house as determined by the price one would pay on the open market is made up of two elements. The first is the value of the building itself, and the second is the value of the land, including any garden, on which the house sits. The quality of the construction, the size of the rooms, and the specification of the interior fittings will determine the value of the building. The value of the land is a function of its location and the use to which planning laws permit the land to be put.
25. Land value taxation has had many prominent advocates. They include Winston Churchill who spoke eloquently in favour of it in a speech delivered in the King's Theatre in Edinburgh in 1909.

¹³ The term land value taxation is controversial since, according to many of its advocates, it does not involve any taxation but merely the collection of the rent owned to the community by the privilege of exclusive occupation of land. Alternative terms include Site Value Rating.

“If a railway makes greater profits, it is usually because it carries more goods and more passengers. If a doctor or a lawyer enjoys a better practice, it is because the doctor attends more patients and more exacting patients, and because the lawyer pleads more suits in the courts and more important suits. At every stage the doctor or the lawyer is giving service in return for his fees. Fancy comparing these healthy processes with the enrichment which comes to the landlord who happens to own a plot of land on the outskirts of a great city, who watches the busy population around him making the city larger, richer, more convenient, more famous every day, and all the while sits still and does nothing.

Roads are made, streets are made, services are improved, electric light turns night into day, water is brought from reservoirs a hundred miles off in the mountains – and all the while the landlord sits still. Every one of those improvements is effected by the labour and cost of other people and the taxpayers. To not one of those improvements does the land monopolist, as a land monopolist, contribute, and yet by every one of them the value of his land is enhanced.

Some years ago in London there was a toll bar on a bridge across the Thames, and all the working people who lived on the south side of the river had to pay a daily toll of one penny for going and returning from their work. The spectacle of these poor people thus mulcted of so large a proportion of their earnings offended the public conscience, and agitation was set on foot, municipal authorities were roused, and at the cost of the taxpayers, the bridge was freed and the toll removed. All those people who used the bridge were saved sixpence a week, but within a very short time rents on the south side of the river were found to have risen about sixpence a week, or the amount of the toll which had been remitted!”

Winston Churchill

Speech was reproduced in *Liberalism and the Social Problem*, Hodder & Stoughton, London, 1909

26. If we assume that a house is worth £100,000., what is the value of the land and what is the value of the improvements? One way of determining this would be to knock the house down and put the site on the market, with planning permission for a house of the same size and style as what was previously there. The price paid would be the land value. Another way is to assess the house for buildings insurance purposes. This is a routine process and the value of assessment will reflect the reconstruction costs. Deducting this assessment from the current market value will give the land value.
27. In practice, the valuation of land is a professional judgement based upon a range of information including the market value of land and buildings in a neighbourhood, assessments of reconstruction costs and extant planning permissions. The Valuation Office Agency (VOA) publishes baseline residential land values. In percentage terms the value of land can vary from between 30% and 80% of the total property value depending on locality.
28. Land value taxation is a system of public revenue based upon a levy on the annual rental value of land alone excluding any improvements such as buildings and other structures. It thus differs from the commonly perceived idea of a property tax, in that it only applies to that part of a property's value that derives from the site itself, hence the alternative term Site Value Rating.
29. The land value of any property is a 'locational' value created by the demands of the market for the best or most attractive sites. Unlike any investment in infrastructure or improvements made by the owner where the value thus belongs to the landowner, the value of the site is not generated by the owner of the site. Yet under the existing taxation regime, the owner currently enjoys that capital value.
30. The total value of land in England is approximately £1.8 trillion (see Table 1). That value currently forms the land element of the value of all property and represents a capital sum that is traded privately in the land market when property is bought and sold. The inflated prices of houses in the UK are not due to any increase in the value of the bricks, mortar and fittings, but rather to the inflation in land values that has occurred over the past few decades. It is this value that, instead of being traded as an asset, is taxed and paid to the community in the form of LVT.
31. To summarise, the key characteristics of LVT are that:

It applies to all land. Currently only business premises and residential property pay any property tax. Rural land is exempt as are certain categories of industrial and derelict land. This raises important issues regarding transitional arrangements which are discussed more fully in a later section. LVT applies to all land and provides both an incentive to use land productively and penalises those who seek to speculate or leave land idle.

It is payable by the owner of the land (not the occupier). LVT is a levy on land value that accrues to the owner of the land. Occupiers pay nothing since they derive no benefit from the land value of the premises they occupy.

It is levied only on the unimproved value (the land and not the buildings etc).

Improvements are not assessed. Activities such as extending a house, insulating a building, or improving the heating in a tenanted flat increase the value of the property but do not increase the value of the land. LVT thus encourages such developments, as they do not lead to a higher assessment. Investment by landowners in land and buildings should not be penalised. But if land values rise due to better transport links, demand for housing or public amenity, then that value belongs to the community and should not be captured by private interests.

32. The value of land is the unimproved market value at existing permitted use.

Land values are assessed according to market forces (demand for particular locations) and on the basis of what the use to which the land is permitted to be put.

33. If LVT is implemented in full, that is to say an annual rent is collected which represents the full annual value of the site, then there can be no capital gains in land value and no speculative activity. Capital which would otherwise be “invested” in land and property to secure asset growth can instead be available for more productive use which contributes to economic activity. It is the ability of LVT to not only provide a source of public revenue but to stimulate the economy and minimise inefficient use of land that marks it out as a particularly beneficial means of paying for public services.

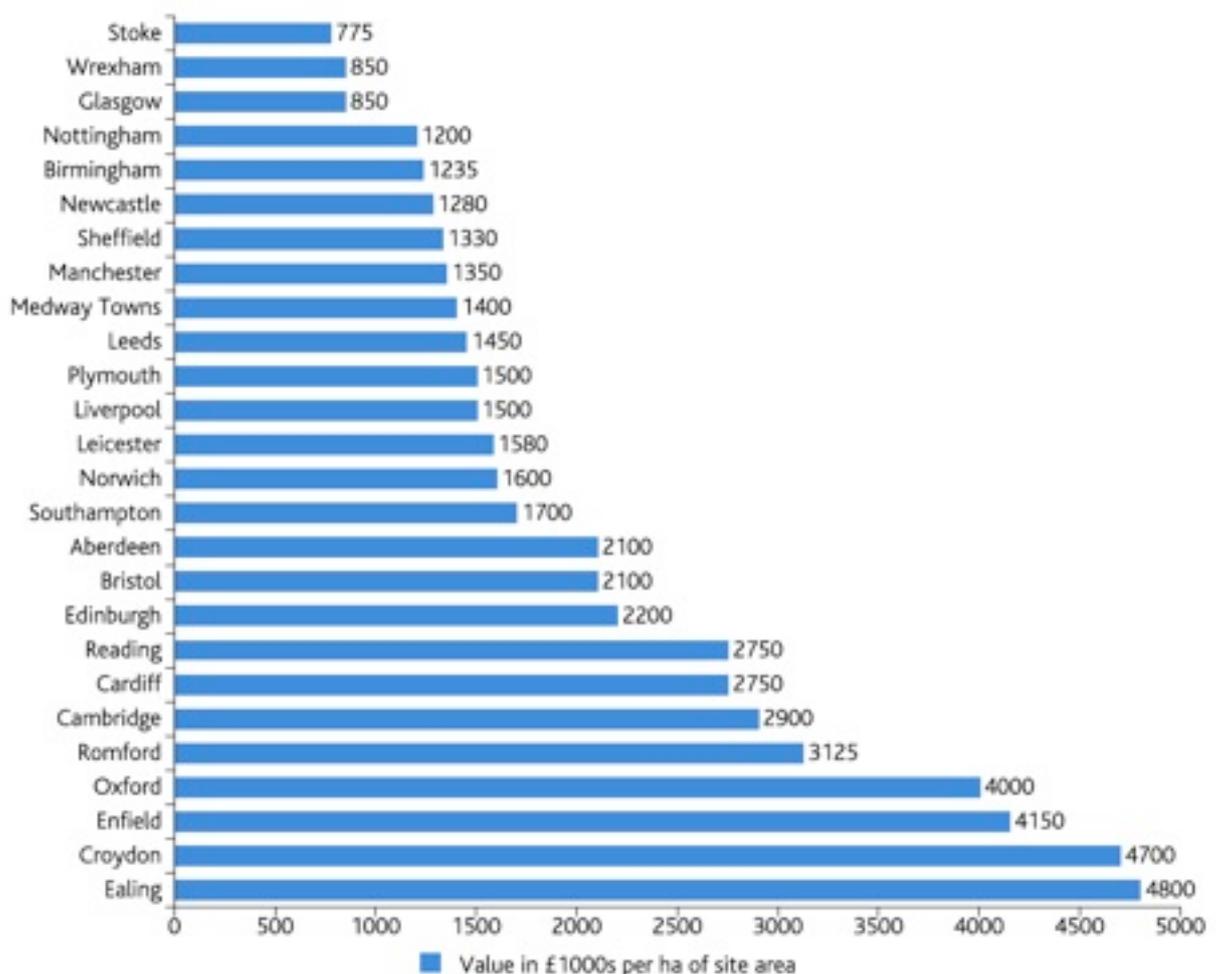


Figure 2 Value of land for residential development 1 January 2010 Source: VOA

34. The location of any identical house is what differentiates the price of any property and the difference is pure 'locational' or land value. For an identical house in Stoke and in Ealing, it is land value that explains why the Ealing house costs over six times as much as the one in Stoke. Figure 2 illustrates this difference between Stoke (£775,000 per ha) and Ealing (£4,800,000 per ha).
35. An illustration of the impact on the housing market can be seen from Figure 3. Over the quarter century since 1983, earnings and the cost of constructing houses have barely risen whilst the price of land has been through a period of boom and bust, leading to gross instability in the housing market and a distorted market for lending.

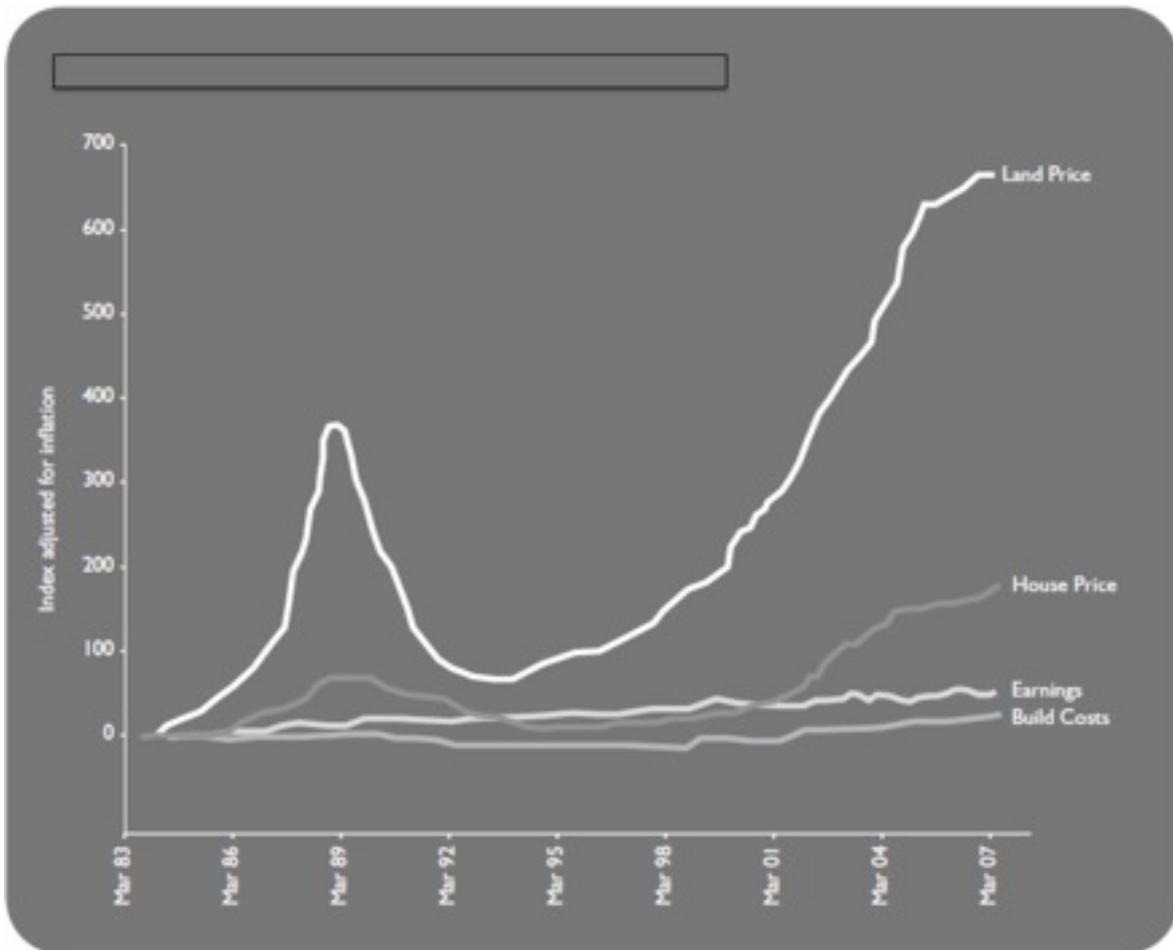


Figure 3. Index of housing market costs 1983-2007 Source: Compass, 2009

INTERNATIONAL EXPERIENCE

36. Land value taxation is currently in operation in a number of countries including Australia, New Zealand, Denmark, Estonia and parts of the USA. International experience in land value taxation was collated in an academic study in 2001, *Land Value Taxation Around the World*.¹⁴
37. The most advanced system of LVT is in Australia, where it is in use across all tiers of government. It is universal in Queensland and New South Wales and predominant in Western Australia. In 2010-11 state and local government raised over AUS\$ 33 billion from property-based taxes, accounting for 47.3% of all state and local government tax revenue.¹⁵ Australia has almost a century of experience with land taxes of various permutations within an English common law tradition.
38. In New Zealand, property taxes have formed the basis of local government revenue since European colonisation in 1840. The current system of LVT has its origins in the Valuation of Land Act 1896 which defined the concepts of improved and unimproved values of land. Over 50% of local government revenue is raised from property taxes, with the majority of local authorities using land value tax as the means to do so.¹⁶
39. Denmark implements LVT at the county and municipality levels of government, raising about 7% of local government revenue. The county rate is fixed at 1% while the municipalities set a further rate of between 0.6% and 2.4% with the two largest cities allowed to levy up to 3.9%. Interestingly, Danes are also subject to the land tax on land and property owned abroad, which means that there will be large areas of England and certainly Scotland which currently pay no local taxes (agricultural land is exempt from non-domestic rates) but which is assessed and levied by Danish municipalities.¹⁷
40. LVT was introduced in Estonia in 1993 and now, like Denmark, contributes around 7% of local government revenue. Central government levies a fixed rate of 0.5% and local government has flexibility to levy at between 0.3% and 0.7%.¹⁸
41. Finally, to Ireland, where a land and property bubble caused a major banking crisis and the collapse of the Irish economy in 2009. The Irish Government is currently implementing a new property tax to be levied on the basis of the banded capital values of property. While the Irish government has chosen not to adopt a land value tax, a considerable amount of research was carried out into the feasibility of a site value tax (equivalent to LVT). Two reports by the Nevin Economic Research Unit and

¹⁴ *Land Value Taxation Around the World* by Robert Andelson. Blackwell, Oxford.

¹⁵ *Property taxes continue to grow*. Property Observer 8 May 2012 <http://goo.gl/dpBmM> Also see, for example Land Tax page at New South Wales Office of State Revenue www.osr.nsw.gov.au/taxes/land

¹⁶ *Property Taxation in New Zealand* www.andywightman.com/docs/NZ_property_taxes.pdf

¹⁷ See Property Valuation and Taxation in Denmark

http://www.andywightman.com/docs/danish_propertytax.pdf and Danish Tax Notes by Dr Tony Vickers www.andywightman.com/docs/danishtaxnotes_vickers.pdf

¹⁸ See www.landvaluescape.org/archives/000074.html for notes on Denmark by Dr Tony Vickers and Tiits, 2006. Land Taxation Reform in Estonia www.andywightman.com/docs/Estonia_landtax.pdf

the Smart Taxes Network provide detailed analysis of how such a system could be introduced.¹⁹

42. There is no shortage of experience and expertise from a number of countries in both the technical and administrative aspects of implementing LVT. The Mirrlees Review noted that:

“We are encouraged by the considerable international experience of land valuation – in Denmark and in various US and Australian states, for example. A recent review of US evidence suggests that successfully implementing and administering a land value tax is feasible. We are not in a position to make such a judgement for the UK, but we propose that government should study the feasibility of such a tax.”²⁰

¹⁹ Collins and Larragy, Designing a Site Value Tax for Ireland, 2011 http://www.nerinstitute.net/download/pdf/eru_wp_designing_a_svt_nov_2011.pdf and Lyons, Residential Site Value Tax in Ireland, Smart Taxes Network <http://smarttaxfiles.files.wordpress.com/2012/01/site-value-tax-in-ireland-identify-consulting-final-report.pdf>

²⁰ Mirrlees, Tax by Design, Chapter 16.

BENEFITS OF LVT

43. The principal benefit of a system of land value taxation is that it does not discourage economic activity in the way that taxes on incomes and consumption do. As the Mirrlees Review argued, *“the incentive to buy, develop, or use land would not change. Economic activity that was previously worthwhile remains worthwhile.”*
44. What does change is that land lying idle will no longer be profitable to leave idle. LVT will encourage new capital investment rather than land speculation. Empty property will be brought into use at its true economic value. The housing market will, over time, stabilise and housing (both rented and owned) will become more affordable, thus liberating consumer spending that currently services private debt and enabling it to be used for more economically productive purposes.
45. LVT will have a positive impact on the private rented market. Because the tax is levied only on the site value and paid by the owner, investments in better quality housing and in improvements and energy efficiency will become the main drivers of better rental returns for landowners. Tenants will no longer pay council tax and will benefit from a more competitive market in better quality housing stock. Above all, LVT has the potential to address much of the current distortion in the housing market.
46. As illustrated above, the land market for housing, commerce, agriculture and industry is a critical component of a healthy economy. Yet, over the past 30 years, it has been distorted by the growth of private credit leading to a land bubble that, as it deflates, is already causing financial problems for homeowners, property developers and the wider economy. The entry costs to, for example, farming for young farmers and to housing for young families are not only prohibitive but are causing increasing social and economic tensions.
47. Businesses don't fare much better and the Mirrlees Review is particularly critical of business rates.

“Another effect of business rates in practice arises from the treatment of unused or undeveloped land, on which business rates are levied at reduced or zero rates. This provides a clear and perverse incentive to use land inefficiently. Indeed, this has led to a rash of garish press headlines about property-owners demolishing property in order to avoid business rates. This puts the issue in rather stark perspective. If property is subject to tax and land is not, then, if the property is not being used, a tax incentive for demolition is created. If empty or unused property is taxed at a lower rate than property being used, then a tax disincentive to use it is created. An LVT avoids these problems. Taxing non-domestic property is inefficient, and should not be part of the tax system.”²¹

48. Other economists have highlighted the wider incentives and benefits of LVT in relation to public investment in infrastructure. John Muellbauer, Professor of Economics at Oxford University argues that,

²¹ Mirrlees Review. The Taxation of Land and Property. Chapter 16 pg. 376.

*The tax falls ultimately upon ownership, and not on development nor on business activity. It captures part of the benefits accruing to land owners from public investment or the private investment of others. It thus underwrites the funding of public investment, since the rise in land values that a worthwhile project engenders will automatically generate a rise in tax revenue to fund the project. This should encourage better public investment decisions not only regarding individual projects, but the scale of such investment.*²²

49. LVT is progressive and fair. The levy is progressive as it takes into account the disparity in land values across localities, regions and England as a whole, and is designed over time to reduce and possibly eliminate speculation in land. LVT is a system of revenue generation which dampens and ultimately eliminates speculative activity in land markets, stabilises the economy, stimulates economic activity, reduces inequalities in wealth, encourages more efficient land markets and allocation of land, lowers land prices, increases the availability of productive capital and promotes optimal and productive use of land.

50. According to the Mirrlees Review, much of the blame for the failures in the land market are caused by a property tax system that is not fit for purpose:

*“In the UK poor tax design contributes to an inefficient housing market, distortionary taxation of financial services, excessive reliance on debt finance, employment levels lower than they need be and distorted and inefficient savings and investment decisions. The review sets out a long term strategy for reform, and in doing so speaks to immediate policy priorities.”*²³

51. In the most comprehensive review of the UK tax system in more than 30 years, the Mirrlees Review was unequivocal:

“The economic case for a land value tax is simple, and almost undeniable. Why, then, do we not have one already? Why, indeed, is the possibility of such a tax barely part of the mainstream political debate, with proponents considered marginal and unconventional?”

This is such a powerful idea, and one that has been so comprehensively ignored by governments, that the case for a thorough official effort to design a workable system seems to us to be overwhelming.”

²² Muellbauer, 2005. Property Taxation and the Economy. In Maxwell & Vigor (eds.) Time for Land Value Tax? IPPR, London.

²³ Press Release 14 September 2011 available at www.ifs.org.uk/pr/mirrlees_sept11.pdf

IMPACTS OF LVT

52. There are two principle property taxes used in England.

The **Council tax** (CT) is an annual tax set by local authorities based upon the eight valuation bands into which domestic properties were placed on 1 April 1991. These valuations have never been revised. The valuation of domestic property was based upon the market value of the whole property (land & buildings).

National Non-domestic Rates (NNDR) or Business Rates is a tax on most non-domestic property (agriculture and forestry, for example, are exempt). It is based upon the Rateable value which is equivalent to the open market annual rental value of the property. A national levy (45.8p for 2012/13) is then applied to arrive at the tax sum.

53. In addition there are transaction taxes such as inheritance tax, stamp duty land tax and capital gains tax all of which are levies imposed on land and property when it is sold or inherited. In practical terms, the easiest way to think of LVT is that it is just like the council tax or business rates (an annual levy on property) except that it applies to all land (with some minor exceptions – see Table 1), is levied solely on land (excluding improvements) and it is payable by the owner. The first task in assessing the potential of LVT is to determine how much land is allocated to different uses across England and how much it is worth.

54. The total capital land value of England is £1.841 trillion (Table 1). This is equivalent to around £110 billion in annual rent.²⁴ LVT therefore has the potential in the long term to contribute around 25% of the total public expenditure in England.²⁵

	Hectares	£ per ha land value	Total land value £
Business property	86,895	328,0453	£285,055,000,000
Residential	715,284	2,047,760	£1,464,729,766,246
Agricultural	8,925,000	£10,000	£89,250,000,000
Woodland	1,295,000	£1,000	£89,250,000,000
Inland water	343,620	£0	£0
Urban greenspace	106,550	£0	£0
Other greenspace	1,247,612	£1,000	£1,247,612,000
Infrastructure	327,237	£0	£0
Other	185,173	£1,000	£185,172,921
ENGLAND	13,232,271		£1,841,762,551,167

Table 1 Land values across land uses in England (see Annex I for data sources)

²⁴ On the basis of a 6% discount rate or return to capital.

²⁵ Total managed expenditure for England 2010-11 is £450,978,000,000. Table 9.1, Public Expenditure Statistical Analyses 2012. HM Treasury Cm 8376

This paper is concerned with the possibility of introducing LVT as a replacement for the council tax and non-domestic rates.²⁶ Since the council tax and non-domestic rates currently raise a potential total of some £44 billion, LVT needs to raise around 40% of the existing annual rental value locked up in England.²⁷

55. In terms of the value of residential land, this varies across England, as illustrated in Table 2. Over 46% of the total residential land value of England is in London, and the South East (column E) and yet these two regions account for only 33.95% of the council tax collected across England (column F). They have the highest average land value element of house prices (44.31% and 42.85% - column C) but at 0.5% and 0.33% respectively, these two regions also have the lowest council tax rate expressed as a percentage of property values (column D).

	A	B	C	D	E	F
North East	£1525	£145,000	25.96%	1.05%	2.20%	4.22%
North West	£1474	£161,000	29.28%	0.92%	7.44%	12.02%
Yorkshire & Humber	£1411	£163,000	29.85%	0.87%	5.71%	8.62%
East Midlands	£1495	£170,000	28.75%	0.88%	5.02%	8.20%
West Midlands	£1420	£180,000	40.35%	0.79%	8.51%	9.53%
East England	£1490	£251,000	47.71%	0.59%	15.47%	12.27%
South East	£1475	£293,000	44.31%	0.50%	23.30%	19.36%
London	£1304	£397,000	42.85%	0.33%	22.92%	14.59%
South West	£1504	£225,000	34.34%	0.67%	9.54%	11.38%

Table 2 Council tax, mean house price and land values in England (See Annex I for data sources)

Col A – Mean Band D council tax. Col B – Mean house price. Col C – Mean land value as % of mean house price. Col D – Council tax as % of mean house price. Col E - % of England’s land value. Col F - % of England’s council tax yield.

56. A specific example of the disparity is illustrated in Table 3. A Band D house in Stoke where the average house price is £100,912 pays **more** council tax than a Band D house in Kensington and Chelsea where the average house price is £1,362,838.
57. Council tax is regressive because it fails to reflect the disparity in house prices and land values, both within any given locality and across England as a whole. The main factor behind the disparity in house prices is land value, and since LVT is assessed on land value, it provides a fairer and more progressive form of property taxation.

Locality	Mean house price	Band D council tax 2012/13	Council tax change
Stoke	£100,912	£1,183.46	+ 3.49%
Kensington	£1,362,838	£1,075.52	Frozen for 4 th year

Table 3 Council tax and house prices in Stoke & Kensington (see Annex I for data sources)

²⁶ Many advocates of LVT also propose that it should also over time replace Stamp Duty Land Tax and Inheritance Tax.

²⁷ According to *Collection rates and receipts of council tax and non-domestic rates in England 2011-12*, National Statistics & CLG Statistical Release 27 June 2012, the total potential collectable council tax was £22.7 billion and non-domestic rates £21.3 billion.

TRANSITION TO LVT

58. If LVT were to be introduced, it would represent a major change in the way that land and property is taxed. Based upon the experience of other jurisdictions such as Denmark, Estonia and Australia, the system would be straightforward to implement in technical and administrative terms.
59. Once firmly established, LVT poses no uncertainties to new buyers of land and property. LVT assessments are based on the market values of land at its highest permitted use. Thus for anyone entering the land market, the land value element of the price they offer becomes the basis for the LVT assessment and is predictable. In this way, LVT is transparent for new purchasers of land and they can make an informed judgment about what price to pay taking account of the annual LVT liability.
60. However, it is important to note that the levy would apply to land that is currently not assessed (e.g. derelict land and farmland) and some owners would be faced with a very different property tax regime compared to the existing council tax and non-domestic rating regime. In addition there are some categories of owners, such as those who are asset-rich but income-poor, whose liability will change significantly. It is thus an intrinsic part of any proposal for the introduction of LVT that there be a significant transition phase during which time owners can adapt to the new regime and land markets can respond to the changed fiscal environment. Many of the objections to LVT are not in fact objections to the system itself, but to the impact it will have if the introduction and transition are badly designed.
61. Given that land values currently form part of the capital assets of landowners, it is not practical, fair or feasible to introduce LVT overnight. The key to successful adoption of LVT is the design of an effective transition programme. This will allow land markets to adjust to the new tax and provide owners with a predictable, certain and phased introduction to the new arrangements. A transition scheme should involve a 10 year phase in whereby existing taxes (NNDR & CT) are phased out by 10% and LVT is phased in by 10% each year. It could also, for example, include some or all of the following elements.
 - LVT only becomes payable when property changes ownership.
 - Owners have the right to elect to remain paying NNDR or CT for a period of up to ten years or until the property is sold.
 - Certain classes of owners, such as the asset rich but cash poor, are entitled to defer all LVT payments until sale or transfer of the property in exchange for a capitalised sum (similar to Capital Gains Tax or inheritance tax) to be paid on transfer or death.
 - Owners are entitled to value their own property for LVT on the basis that the Local Authority has the power to acquire it for this price if and when it is sold.

The next two sections look at how LVT could replace both NNDR and CT and the impact this could have on existing owners.

LVT AS REPLACEMENT FOR COUNCIL TAX

62. In 2012-13 the Council tax requirement (the amount budgeted to be raised by the council tax) is £26,714,602,395. Were LVT to be implemented overnight, there would be significant winners and losers.
63. It would be both impractical and unfair to introduce such a dramatic change too quickly. LVT captures a proportion (or potentially all) of the land value element of property. Currently this value is held by landowners as capital assets, many of whom will have paid for it when buying houses, offices or other types of property.
64. The housing market (in reality the land market) has resulted in inflated house prices across the country and disproportionately in London and the South East. The introduction of LVT must be carefully planned since the very announcement that such a regime is planned will begin to send signals to the market and result in adjustments and corrections.
65. It is anticipated that LVT could take up to two years to plan for, up to two years to legislate for, and a further two years or so to prepare for implementation (valuations will need to be carried out, for example). There is therefore ample scope for the market to both anticipate the changes and for those owners who wish to adjust their expectations and make plans for their future property ownership.
66. The most significant transitional arrangement, however, should be a ten year phased introduction. In each year, LVT would be introduced by an additional 10% and existing taxes reduced by 10%. Table 4 illustrates the **average** impact on households in different regions of England in **Year One** of a ten year transition to LVT. Given that any introduction would take around six years, these figures relate to the impact seven years from any commitment to introduce such a system. The burden of LVT beyond then will be dependent upon a number of factors including;
- the response of the market
 - the LVT rates adopted by local authorities
 - the transition arrangements put in place
 - local variation in land values
67. The figures are based upon a national rate of LVT of 1.83p in the pound of land value designed to raise an equivalent sum to the existing council tax. In practice, the rate could be split between a mandatory national rate (to deal with variation in the national land market) and a local rate set by local authorities. It is not possible to speculate what this rate might be and any forecasting beyond Year One is therefore unreliable.
68. The analysis shows that for all the green Bands/regions there would be a reduction in local property tax bills and only six regions (Bands G & H in East, London & South East) would experience increases of more than 10%.

		NE	NW	YOR	EM	WM	EAST	SE	LON	SW			
		LVT and council tax £											
A	CT	1017	983	941	997	947	993	983	869	1003			
	LVT	947	925	889	940	900	975	947	850	955			
B	CT	1186	1146	1097	1163	1104	1159	1147	1014	1170			
	LVT	1106	1080	1038	1099	1051	1140	1107	993	1116			
C	CT	1356	1310	1254	1329	1262	1324	1311	1159	1337			
	LVT	1270	1242	1194	1264	1211	1319	1277	1148	1286			
D	CT	1525	1474	1411	1495	1420	1490	1475	1304	1504			
	LVT	1436	1407	1354	1432	1374	1503	1452	1308	1459			
E	CT	1864	1802	1725	1827	1736	1821	1803	1594	1838			
	LVT	1763	1729	1665	1761	1690	1856	1790	1614	1796			
F	CT	2203	2129	2038	2159	2051	2152	2131	1884	2172			
	LVT	2098	2062	1986	2101	2019	2231	2143	1938	2212			
G	CT	2542	2457	2352	2492	2367	2483	2458	2173	2507			
	LVT	2484	2460	2376	2511	2425	2736	2598	2371	2583			
H	CT	3050	2948	2822	2990	2840	2980	2950	2608	3008			
	LVT	3063	3056	2959	3125	3034	3493	3278	3019	3236			
		reduction		increase <1%		1-5%		5-10%		10-15%		15-20%	
		Table 4 Year One LVT compared to Council Tax Bands for English Regions (See Annex I for data sources)											

69. On the basis of this analysis, 83% of the households across England would receive reduced bills. Only 204,630 (0.88%) of households in Band G (East) and in Band H (East, South East and London) would receive increases of over 10% with the maximum being 17.2% for Band H properties in the East.²⁸

²⁸ It is important to note that the changes indicated in Table 4 relate to averages for each region. Within each region there will be significant variation from one locality to another.

LVT AS REPLACEMENT FOR BUSINESS RATES

70. The Valuation Office Agency (VOA) publishes valuation data on retail, office, and industrial land across the regions of England and breaks this down into the total sums collected for each different business type (e.g. offices, car parks, amusement parks, wine bars & windmills). So it is known where the business rate revenue comes from, but there is no data on either the extent **of land** covered by different business types, or of how much land is allocated even to a broad retail/commercial breakdown. The VOA only publishes an aggregate property report and the raw data is only made available commercially. Thus, for the purposes of this study, it not possible to determine **land values by region or business type**.
71. In 2011-12, business rates were scheduled to raise £21.3 billion.²⁹ Table 5 illustrates the average current NNDR and LVT at 8.5p in the pound reduced by an estimated 10% reflecting the contribution of agricultural and forestry businesses together with derelict and vacant land. There will be a shift from high to low land value areas of the country, but the data is not currently available to make such a regional assessment.
72. The real impact of LVT on businesses is where it is applied across **all land uses** and where the impact of regular revaluations and high levels of poundage (over 40p in the pound) has historically meant that businesses pay a disproportionate share of local property taxes.

	Rateable value (£ million)	Average NNDR £	LVT at 8.5p £
North East	2,119	11,838	10,650
North West	6,618	11,614	10,458
Yorkshire & Humber	4,726	11,374	10,243
East Midlands	3,542	10,924	9,837
West Midlands	4,877	11,273	10,152
East England	5,550	12,882	11,600
South East	8,480	14,322	12,816
London	16,246	24,171	21,765
South West	4,688	10,379	9,346
ENGLAND	56,846		

Table 5 NNDR replaced by LVT from existing NNDR tax-base (See Annex I for data sources)

²⁹ *Collection rates and receipts of council tax and non-domestic rates in England 2011-12*, National Statistics & CLG Statistical Release 27 June 2012.

IMPLEMENTATION OF LVT

74. For a workable system of LVT to be implemented, three of the key tasks that need to be undertaken are:

- A survey of land use
- A survey of landownership
- A valuation of land

Land use

75. The mapping of land uses and the attribution of permitted use to all the land in England is a realistic task using modern geographic information systems and digital mapping. An example of what is possible is the privately produced National Land Use Map produced by The Geoinformation Group (Fig. 4) and the Generalised Land Use Database (GLUD) published by the UK Government's Communities and Local Government Department in February 2007 (see Fig. 5).



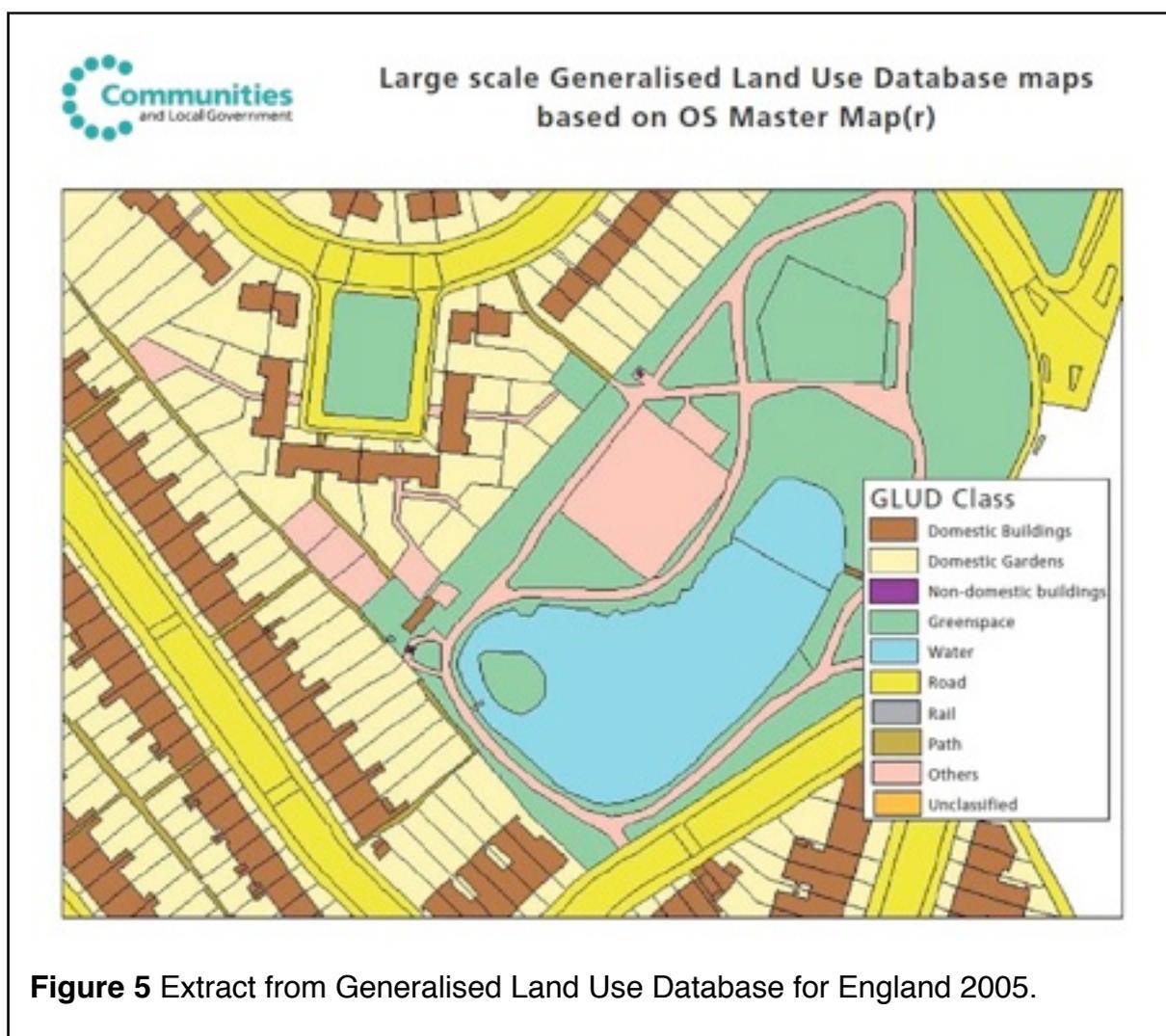
Figure 4 National Land Use Map. www.geoinformationgroup.co.uk

Land ownership

76. Land value taxation is paid by the owners of land. Mapping the ownership of land across England might appear to be an ambitious undertaking but three points are worth noting.

77. Firstly, the identification of boundaries and ownership for the purposes of taxation is a less onerous task than that of land registration for legal ownership purposes and can

thus be done using existing Land Registry records supplemented by an ownership survey.³⁰



78. Secondly, it is worth remembering that the Inland Revenue managed to survey over 10.5 million units of property covering 56 million acres of land in under five years in preparation for the implementation of Lloyd George's Finance (1909-10) Act 1910. This mammoth task was carried out with pen and ink, paper maps and notebooks, one hundred years ago. An example of the maps that were drawn up is reproduced in Fig. 6 for Hamilton in Lanarkshire, Scotland.
79. Thirdly, the Land Registry of England and Wales had registered over 23 million properties covering more than 12.2 million hectares – or around 79% of the land mass of England and Wales.³¹ The task of conducting a cadastral survey of the remaining 20% is a practical proposition.

³⁰ A survey of landownership for taxation purposes is referred to as a "cadastral survey" and each unit of property is termed a "hereditament".

³¹ Land Registry Annual Report and Accounts 2011-12, pg. 7.

Valuation of Land

80. In order to determine LVT on any parcel of land, it must be valued on the basis of its current permitted use. For the vast majority of land, that use will be the existing use but for some, such as vacant land, the permitted use may be residential, commercial or other such classification approved by the local authority.



Figure 6 Finance (1909-10) Act 1910. Inland Revenue Survey of GB & Ireland

81. Valuing land separately from the buildings upon it is not technically challenging for professional valuers. In a pilot study conducted by Glasgow City Council in 2009, the practical implications of LVT were considered and “no insurmountable issues” were identified.³² In an Oxfordshire study it was reported that, “the trial proved relatively easy to undertake from a practical point of view. The apparent lack of any obstacles to the professional assembling of the raw data is extremely encouraging.” and “valuations based on the undeveloped value of the land present no special problems to a professional valuer.”³³

³² Glasgow City Council, Local Taxation Working Group: overall findings. Glasgow City Council 25 June 2009, Item 6 para 4.18.

³³ Oxfordshire County Council, 2005. The Oxfordshire Land Value Tax Study. Oxfordshire County Council and Vale of White Horse District Council pg. 17 & pg. 2.

82. Regular valuation is vital to accurate LVT assessments. Business premises are already valued every five years and there is no reason why residential and other land cannot also be valued regularly.
83. All that needs to be done to value land alone is to adopt the familiar Residual method based upon the following process:
- valuation of the property (market price of land and buildings)
 - less depreciated replacement costs of the buildings
 - equals land value.
84. Valuations can be carried out on groups of properties with similar characteristics to arrive at land values based upon available sales data. To simplify things further, an allocation can be made which represents the ratio of land value to property (land + buildings) to arrive at a percentage. Such allocations can be determined for specific categories of property with similar characteristics in specific locations.
85. Land values are determined by assessing the land and capital improvements separately and **on the basis of market values**. This can be done in a variety of ways. One is the method of residual valuation mentioned previously whereby the overall value is reduced by the value of the improvements. Typically, the price of a house exceeds its replacement costs (i.e. the costs of rebuilding). The difference is the value of the land.
86. Market data can also be used to determine the value of unimproved land in any use category. With categories of land such as residential and retail property, land values will vary little from one parcel to the next and a process known as Computer Aided Mass Appraisal (CAMA) can be used to derive land values over large uniform areas. Where uniformity breaks down, individual valuations will be required and if these are disputed, appeals should be allowed. One additional mechanism that might be considered is self-assessment, whereby owners make their own declaration of land value on condition that this is the price at which the local authority has the right to acquire the property for if it should be exposed for sale.

QUESTIONS ABOUT LVT

What about residential tenants?

87. Owners of land pay LVT. Those tenants that currently pay council tax will no longer be liable for it. This represents a saving for tenants. Because LVT is levied on land values and not improvements, landlords will have an incentive to improve properties since any value added will be exempt from taxation. Landlords will be unable to pass LVT onto tenants since there is competition in the rented sector and landlords investing in better quality accommodation will be rewarded with higher rents. In the housing market as a whole, LVT should encourage more land to be brought into use, much of which can be used to meet the demand for new homes – both owned and rented. Thus, even in areas of high demand, supply should respond more efficiently than it does currently.

What about people on low incomes living in large properties?

88. Transitional arrangements can be introduced that will allow property owners who are asset rich but cash poor to defer payment of LVT until death or sale. Other possibilities include the power to elect to remain with existing council tax regime until the end of the transition period or until sale of the property. Such schemes will need to be carefully designed, but in the longer term, LVT will discourage the under-occupation of housing and promote downsizing. The reluctance to downsize is one of the market failures in the current housing market.³⁴

What about farmers?

89. Farmland is currently exempt from business rates, although farmhouses are liable for council tax. Farmland has traditionally been viewed as a good speculative investment due to the availability of European Union subsidies (which become capitalised into land values), the absence of business rates and a range of taxation provisions such as inheritance tax exemption and capital gains tax exemption. Farmland in the UK is forecast to rise in value by 36% by 2016, beating forecast growth for gold, ten-year UK Government bonds and houses in the most expensive parts of London.³⁵

90. Farmland is increasingly treated as a financial investment rather than the economic basis for agriculture. Inflated land prices do nothing to help young people enter a career in agriculture. They do nothing to assist tenant farmers who are faced with higher and higher rents. For too many families, tenants and young people, a farm is now unaffordable without a very large loan from the bank.

91. All land will be assessed for LVT on the basis of its unimproved annual rental value. LVT will reduce land prices over time and enable private capital to be diverted from servicing loans and rents to productive investment in farming businesses. LVT will apply to farmland as it does to all other land but will be phased in over ten years on the same basis as with all other land.

³⁴ See, for example, Hoarding of Housing. The intergenerational crisis in the housing market. Intergenerational Foundation, October 2011.

³⁵ Market Survey Agricultural Land, Savills Research 2012

What about hope value?

92. LVT is assessed on the annual rental value of land in its unimproved state. In the current land market, land is often acquired in the hope of making speculative capital gains. Land is valued for LVT purposes according to its most valuable permitted use. For agricultural land on the urban fringes, hope value often pushes prices far beyond agricultural values, even in the absence of any planning consent for any other use.
93. In such circumstances, existing agricultural land will be valued as agricultural land, but since the land market determine land values for specific sites, any inflated hope value will become the basis for LVT assessment. As with all new acquisitions of land, purchasers are fully aware of the consequences in advance of the price they offer for land, namely that the percentage of the price paid by the buyer that is attributed to the land value is assessed for the annual LVT. If this is deemed to be too much on any particular site, then purchasers will look elsewhere or reduce their offer.
94. The long-term beneficial impact of LVT is to move from a land market dominated by speculative capital gains and the inflated land values that are associated with it, to one based on productive economic use, where land values reflect the economic productivity of the site.

What about leaseholders?

95. Liability for LVT falls on the owner of land (the freeholder) but where there are leaseholders on long leases, then an apportionment will need to be calculated to cover the value of the unexpired portion of the lease.

CONCLUSIONS AND RECOMMENDATIONS

96. LVT provides a basis of public revenue that would:
 - be coherent, principled and fair
 - treat all land on an equal basis
 - eliminate inefficient allocation of land
 - eliminate speculative gains arising through unproductive activity
 - promote affordable access to housing and other vital land-based assets.
97. LVT is practicable and can be implemented. The basic elements necessary - land use, landownership and valuation data - are all either in place or can easily be mobilised. There is international experience dating back over 100 years in valuation and administration.
98. A transition phase of ten years would be an inherent part of a programme of LVT. A phased introduction will provide transparency and confidence and will allow land markets to adjust.
99. Modelling suggests that in Year One, 83% of households in England will pay less in LVT than they currently pay in council tax and only 0.88% of households will experience increases of more than 10%.
100. It is likely that most businesses will pay less in LVT than they do under the business rates regime.
101. Agricultural land and forestry land will pay local taxes for the first time in a phased programme of introduction. So too, will the owners of derelict and vacant sites.

ANNEX 1

DATA SOURCES

Table 1	
Land use hectares	Generalised Land Use Database 2005 (Census ward level GLUD 2005 Tables www.communities.gov.uk/publications/planningandbuilding/generalisedlanduse
Land values (£)	<p>Land values derived from Valuation Office Agency, Property Market Report 2011 (VOA, 2011) and, in particular:</p> <p>Business property land value derived from total rateable value (table 2.3c, CLG/ONS Local Government Financial Statistics England 2012), multiplying this by 10 (assuming rateable value is 10% of capital value) and dividing by 2 (assuming land value = 50% capital value).</p> <p>Residential land values are derived from Table 563 Housing market: Average valuations of residential building land with outline planning permission available at www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/housingmarket/livetable/ These are multiplied by GLUD residential & domestic garden area in each region to derive a regional total residential land value and averaged for Table 1.</p> <p>Agricultural land value is an estimated value derived from VOA, 2011.</p> <p>Woodland is an estimated value from various private sector market reports.</p> <p>Other greenspace value is a nominal value in the absence of any detailed information in GLUD 2005 tables on what this land represents.</p>
Table 2	
Column A	ONS/CLG, Council tax levels set by local authorities in England 2012-13, 21 March 2012. Table 4.
Column B	ONS Statistical Bulletin House Price Index, July 2012, Table 2.
Column C	Derived from Table 1 residential land values broken down by region expressed as % of Column B.

Column D	Column A divided by Column B
Column E	Regional breakdown of residential land value calculated from same source as Table 1.
Column F	Council tax and non-domestic rates - amount collected 2011-12, Table 6. www.communities.gov.uk/publications/corporate/statistics/collectionrates201112
Table 3	
Mean house prices from	Q.3 2011 prices from Table 581 www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/housingmarket/livatables/
Table 4	
Council tax statistics	As Column A Table 2.
Land Value Tax	Average LVT rates for each region and Council tax band are calculated as follows. Average LVT is derived from Table 1 regional land values multiplied by a 1.83p in the £ LVT rate divided by no. of dwellings in each region. The spread of LVT liability across the Council tax bands is based upon the average house price being in Band D and median house prices in original 1991 Council tax banding (with Band H being considered 5 times Band D average house price). The Year One LVT is then calculated by the formula (Council tax x 0.9) + (LVT x 0.1)
Table 5	
Rateable value	National Non-domestic rates to be collected by local authorities in England 2011-12 (Sheet - NNDR1 form returns for billing authorities in England 2011-12). 1910477.xls from www.communities.gov.uk/publications/corporate/statistics/nondomesticrates201112f
Average NNDR	Amount collected divided by hereditaments. Source as above.

ANNEX II

REFERENCES AND FURTHER READING

Most of these documents are available for download from www.andywightman.com/lvt

Andelson, Robert (ed.), *Land value taxation around the world*, Blackwell, Oxford, 2000.

Collins, M. L. and Larragy. A. *Designing a Site Value Tax for Ireland*. ERU Working Paper ERU WP 2011/1, 2011

Connellan, Owen, 2004. *Land value taxation in Britain: experience and opportunities*. Lincoln Institute of Land policy, Cambridge, MA.

Glasgow City Council, *Local Taxation Working Group: overall findings*. Glasgow City Council, 25 June 2009.

Griffith, Matt, 2011. *Hoarding of housing: The intergenerational crisis in the housing market*. Intergenerational Foundation, London.

Harrison, Fred, 2006. *Wheels of Fortune*. Institute for Economic Affairs, London.

Lichfield, N. and Connellan, O. *Land Value Taxation in Britain for the Benefit of the Community: History, Achievements and Prospects*. Lincoln Institute of Land Policy, 1997

Lyons, R. Residential Site Value Tax in Ireland. *An analysis of valuation, implementation and fiscal outcomes*. Smart Taxes Network, 2011.

Maxwell & Vlgor (eds.) *Time for Land Value Tax?* IPPR, London.

McGill, Greg and Plimmer, Frances, 2004. *Land value taxation: An investigation into practical planning and valuation problems*. FIG Working Week paper. Athens, Greece, May 22-27, 2004.

Mirrlees, James et al, 2011. *Tax by Design: The Mirrlees Review*. OUP, Oxford.

Muellbauer, 2005. 'Property taxation and the economy'. In Maxwell & Vlgor (eds.) *Time for Land Value Tax?* IPPR, London.

OECD, 2010 Tax Policy Study No. 20 - *Tax policy reform and economic growth*.

Oxfordshire County Council, 2005. *The Oxfordshire land value tax study*. Oxfordshire County Council and Vale of White Horse District Council.

Pennington, Jenny, 2012 *No place to call home: The social impacts of housing undersupply on young people*. IPPR, London.

INTERNET RESOURCES

A range of publications on LVT are available at www.andywightman.com/lvt

The following websites contain useful further reading material:

Coalition for Economic Justice www.c4ej.com

Henry George Foundation www.henrygeorgefoundation.org

International Union for Land Value Taxation www.theiu.org

Labour Land Campaign www.labourland.org

Land Matters blog by Andy Wightman www.andywightman.com/lvt

Land Value Tax Campaign www.landvaluetax.org

LandValueScape www.landvaluescape.org

Liberal Democrats ALTER Campaign <http://libdemsalter.org.uk/en/>