June 18, 2015

The Commission on Local Tax Reform
Verity House
19 Haymarket Yards
Edinburgh, EH12 5BH

Dear Committee Members,

On my own behalf and on behalf of the Scottish Land Revenues Group (SLRG, at http://s420649894.websitehome.co.uk/SLRG/) of which I am a founding member, I wish to submit the case for replacing the existing Council Tax and Business Rates systems with a charge based on the value of land alone.

This is the system known as "Land Value Taxation". But since the system is based on the value of the community-created benefits enjoyed by users of land in different locations, different rent payments are ethically grounded on the *benefit* principle. As such payments would be *fees* rather than taxes. However, as indicated in my study (attachment #1) of a switch to land values for local authority revenues, the change would generally also accord with the *ability-to-pay* principle.

I am submitting three documents in support of my recommended reform.

Attachment #1 is the same paper that Peter Gibb and I submitted in 2006 to Sir Peter Burt's Scottish Local Government Finance Review Commission. The data are from 10 years ago but still a good indication of the scale, nature, and distribution of the efficiency and equity benefits obtainable today from the reform we recommend.

Attachment #2, a paper I presented in February 2015 at a conference organised by the SLRG, highlighting the ultimate incidence of taxation and the considerable potential size of unearned land rents when accompanied by a lifting of deadweight taxes on earned incomes.

Attachment #3 is my May 2015 paper with Fred Harrison, highlighting the sizable gains the Scottish Government can obtain from our proposal if introduced at both local and national level (noting that much of local finance comes from central government and that your Commission's remit refers to taxation at "both local authority and national levels"). It would not only convert a substantial and potentially chronic fiscal "black hole" under full fiscal autonomy into substantial surplus; it would also dynamise the economy and address the main and most unjustifiable causes of poverty and inequality.

I would also highlight that in 2008, Glasgow City Council conducted a pilot survey to consider the beneficence and practicability of implementing "LVT" in the east end of Glasgow. The conclusions were almost entirely positive.

Yours faithfully,

Roger J Sandilands
Emeritus Professor of Economics
University of Strathclyde

June 18, 2015

Attachment #1

Submission of Professor Roger Sandilands to:

The Commission on Local Tax Reform
Verity House
19 Haymarket Yards
Edinburgh EH12 5BH

This attachment is the same paper that Peter Gibb and I submitted in 2006 to Sir Peter Burt's Scottish Local Government Finance Review Commission. The data are from 10 years ago but still a good indication of the scale, nature, and distribution of the efficiency and equity benefits obtainable today from the reform we recommend.

A Note of Advice

prepared at its request for the

Committee of the Local Government Finance Review

by

Professor Roger Sandilands
Department of Economics
University of Strathclyde

and

Peter Gibb
Secretary
Henry George Foundation

CONTENTS

13th April 2006

Foreword

The subject of this Note of Advice is an investigation and discussion of certain questions surrounding the reform of Council Tax and Non-Domestic Rates in Scotland. The specific reform under test is the basing of tax assessments on locational value (land or site value) alone, disregarding the value of buildings and other improvements. The main arguments in favour of such an evolutionary reform of the present system are made elsewhere.

Terms of Reference

The Note of Advice has been prepared and is presented jointly by its two authors. It has been prepared at the request of the Committee of the Local Government Finance Review. The terms of the request are set out in its letter of 7th March 2006.

The Committee wrote separately to the authors, but in identical terms, "seeking advice on the points raised", and alerted each to the other request. Having discussed the matter with its Secretary, we understand that the Committee would be happy to receive a joint submission. Having fully considered the questions which have been put to us, we do not find ourselves at any substantial variance in the framing of a response. Accordingly, we are submitting this Note of Advice jointly prepared.

The opinions expressed herein are our own, for which we accept joint responsibility, and are not necessarily the opinions of our sponsoring institutions.

Further Advice

We would be very pleased to have the opportunity to meet with the Committee again to present and discuss the present paper.

In addition, this Note of Advice, in responding to the Committee's questions – along with the work underlying its preparation – raises much that might usefully be the subject of further investigations. Should the Committee wish to pursue any of these matters further, or indeed pose questions on other matters, we would be willing to provide further advice.

Introduction

The Committee's letter sets out eight questions. This Note seeks to respond in a manner we hope will be useful to the Committee. However, given (1) the inadequacy of much of the present Scottish statistical data, (2) the constrained timeframe available for our response, and (3) the restricted resources which, in the circumstances, we were able to bring to bear, we are aware that our responses are not as full or as authoritative as ideally we should have liked. However, we are confident as to their general reasonableness.

This Note considers only the single (but primary) reform of changing the basis of assessment. For the purpose of clarity, other desirable reforms which have been proposed by the authors in earlier submissions, and which could also impact on the matters raised by the Committee's questions, are ignored here. We have, therefore, assumed a conservative approach to the permissible limits of reform, retaining all features of the existing system unless there was a consequent need to do otherwise. As a result of this approach the primary reform we advocate becomes less effective –

its beneficial capacity hindered by counteracting retained features; but perhaps its introduction becomes for the same reason less challenging in political terms.

Amendment or Replacement?

You have asked us to express our views on domestic taxes, having regard to whether the Council Tax might be 'amended' or 'replaced' (letter p1). We suppose this request is a response to the earlier evidence presented by Peter Gibb and Fred Harrison[1]. That evidence framed its advocacy in terms of the 'evolution' of the existing systems, rather than their wholesale 'replacement' (or indeed piecemeal modification).

However, as regards *outcomes* following successful reform – to which all your specific questions are addressed – the particular route to reform would largely be inconsequential. The question of amendment verses replacement – the *process* question of 'evolution' – is a separate one, which should be considered with particular regard for matters of practicality, best value and political expediency.

Questions and Answers

The Committee's questions are reiterated below with our answer to each following on.

Question One

As far as local taxation of the scale of Council Tax is concerned, what is wrong with basing valuation on the capital value of a property? It seems to us these values take account of 3 main elements:

(i) amount of land;
(ii) value of the land owing to proximity to good quality services; and
(iii) value of building.

We understand supporters of LVT argue that it is right to base a tax upon components (i) and (ii). That leaves (iii), but it could be argued that most dwellings fall within a relatively narrow price range anyway (given that around 65% of properties fall within Council Tax Bands A to C). What practical difference would it make to replace property values with site values? For instance, would you be able to offer an informed estimate as to the number of households that would be likely to find that their local tax bills went either up or down by more than £100 following a change to site valuation?

[1] The Henry George Foundation has presented evidence to the Committee on three occasions: (i) (written) The Response of the Henry George Foundation to the Public Consultation and Ingoing Inquiry of the Local Government Finance Review Committee dated 29th July 2005. (ii) (written) Notes Submitted as Evidence dated 14th November 2006. (iii) Oral Evidence to the Committee at its hearing on 14th November 2005.

Response to Question One

Why not 'Whole Property' Capital Value?

There are several arguments against basing property tax on the 'whole property' capital value. We rehearsed many of these in our earlier evidence. At the request of the Committee we are prepared to re-present those arguments with greater cogency and, if necessary, detail. In broad terms the arguments are concerned with matters of ethics and human relationship, practicality and social order, and efficiency and economic progress.

The practical differences

There are two types of consideration that indicate that there will be quite significant differences in households' local tax bills under a land-value based Council Tax compared with the existing system. This is both despite and because 65 percent of properties currently fall within bands A-C.

1. Within each of the bands A-C (and within other bands too), there are properties that are larger and better than the average for their band, but fall within the valuation band because they are located in less desirable (hence cheaper) locations. The relatively low land value offsets the relatively high improvement (or building) value. And vice versa (poor quality house in expensive neighbourhood). The minority of properties that are high quality in poor locations will benefit, sometimes substantially, from the switch to the reformed Council Tax; and vice versa.

2. Much more importantly, the ratio of land value to overall property value is, on average, progressively higher the higher the overall property value. (This positive correlation, while not perfect, is very high.) With the existing system of Council Tax, property value for assessment is the value of the 'house' – which is really the price of the land (benefit of a location) plus the house (bricks and mortar). Two identical houses in very different neighbourhoods can sell for very different prices, with the difference reflecting the difference in location (land or site) value.

On average (with exceptions as under (1) above), properties in Council Tax band A lie in areas with low land value. However, the cost of the bricks and mortar for new-build or renovation is very little different there than in other parts of the city or country. A small newly built single flat in such an area (price £40,000 (1991 value), say) will have only a very small ratio of land to building value. In the same Band A, an older, deteriorated but larger flat (price also £40,000) will have a somewhat larger land:building ratio. The ratio could easily vary, in an area that is predominantly a Council Tax band A area, from close to zero to as much as 50 percent on very poorly developed land (and 100 percent if the land is a vacant site with planning permission that is unused by the owner).

Win or lose £100?

To answer your specific question about the number of properties whose tax liability might change by more or less than £100 under the proposed reforms, we have prepared an estimate of Council Tax liability for 2006-7 under a reformed Scottish system based on land value assessment. The estimate is set out in detail in Appendix A. Our findings are summarised in the table below.

Table 1: How land value tax reform could change Scottish Council Tax bills

PERCENTAGE OF HOUSEHOLDS	Council Tax Band	Number of Households (2003-4)	Present Household Council Tax Bill	Household Council Tax Bill After Reform	CHANGE IN TAX BILLS
24%	A	542,000	£752	£246	£506 *reduction*
25%	B	562,000	£877	£523	£354 *reduction*
16%	C	358,000	£1,003	£750	£253 *reduction*
12%	D	280,000	£1,128	£1,020	£108 *reduction*
12%	E	286,000	£1,427	£1,427	£48 *increase*
6%	F	148,000	£1,630	£2,029	£399 *increase*
4%	G	98,000	£1,881	£3,626	£1,745 *increase*
<1%	H	11,000	£2,257	£6,345	£4,088 *increase*

Figures extracted from 'Table A1: An estimate of Council Tax liability for 2006-7 under a reformed Scottish system based on land value assessment' (see Appendix A)

Key findings

Under a land value assessment-based reform of local taxation in Scotland:

1.74M households (76%) could receive a Council Tax bill more than £100 lower than they do at present.

257,000 households (11.5%) could receive a Council Tax bill more than £100 higher than they do at present.

(The variance in actual bills between the present and the reformed systems might differ from these figures. Reform could in fact be tuned for political ends, by the application of some measure of rate adjustment or weighting mechanism – but with consequential losses in equity and efficiency, and a general diminution of the beneficial outcomes of reform.)

A commentary on what the table reveals

Under the proposed reform many local tax bills would change. The majority would fall, some substantially. A minority would rise, many substantially.

We find that under a reformed system of Council Tax based on location (land or site) values, average households in bands A-D would be better off. These four bands represent 1,742,000 households, or over 76% of the Scottish total. On average these households would enjoy a reduction in their bills greater than £100, and most of them considerably more than that.

Meanwhile, the average household in bands E-H would be worse off. These four bands represent 443,000 households, or 24% of the total. Within that range, those in band E (286,000 households, or 12.5%) would on average be only £48 a year worse off. Bands F, G and H – the top 11.5% of household property wealth – would receive significantly increased bills.

An aside on rates

Simplifying greatly, but in order to give a general idea of the difference between the two systems – unreformed and reformed – we may note the difference in the rates. If, on average, the land/building ratio is 40%, then a revenue-neutral land value based system would imply a Council Tax rate that is 2.5 times the present rate.

The present Council Tax rate can be roughly estimated as follows. First take the average price of a house in Scotland (currently about £125,000) and multiply that by the current number of Council Tax households (2,284,102) to obtain an estimate of the capital value of Scotland's housing stock (£285,512m). Dividing the Council Tax revenue (£1,839.9m) into this capital value gives a present Council Tax rate of 0.74% of aggregate property value (land plus bricks and mortar). The reformed rate is then estimated as 2.5 times that, or 1.85% of the capital value of taxable residential land.

A comment on progressivity

It can be seen that there is a far greater progressivity in the reformed system than in the existing one. This is a simple reflection of the significantly higher value of locational benefits which are enjoyed by some properties and not others, and which are at present directly capitalised into increasing house prices.

The present system of Council Tax while slightly progressive, is not very much so. Two factors contribute to its lack of progressivity: firstly - and this is systemic and deliberate – its banding system, with its floor and ceiling; secondly, the 'masking' effect resulting from the inclusion of the value of improvements (bricks and mortar) in tax assessments. (As already stated only the second of these is immediately removed in the reformed system discussed here.)

But by reforming the system to base it on land values, an added dimension of progressivity is introduced. Within the present system of Council Tax a ratio of three to one separates the highest bill from the lowest (ignoring reductions, etc.). Under the proposed reformed system this increases, 'naturally', to twenty-six to one.

Weighting could be applied to the reformed system at the cost not least of progressivity

Transitional arrangements

Transitional arrangements would need to be put in place to enable the comfortable implementation of the reform. It might be politically expedient to design those arrangements in order that a *maximum* number of taxpayers can be given an *immediate* initial reduction in their bill of a quantum which could not be regarded – by taxpayers, media, or political opposition – as inconsiderable. A figure of £100 might be adequate. A higher figure might be possible. Commensurately, arguments for an immediate substantial increase in bills for bands G and H might be found to be sustainable. Subsequent stages in the transition would extend further reductions to some taxpayers.

The adoption of such transitional arrangements would mean that although the full political benefits of enabling a very substantial reduction in many households' tax bills would be not be secured for one administration alone, neither would the potential political difficulties consequent to increasing bills not fall as an immediate impediment to reform nor be borne only by the reforming administration.

The softening of the rises in tax bills should be concentrated at the lower end of its effect. First priority should be given to dealing with exceptional cases of rises within bands A-C and the minority of such cases in band D. This would address any potential difficulties within the lowest 76% of the population in terms of total property wealth. Second priority should be given to ameliorating the general increases that will occur within bands E-H, and that be done with progressive attention towards the lower end of that range.

A last thought in condemnation of the present system

Close consideration of the present system introduces doubts even about its credentials as a property tax. In fact, with the present system, it can be strongly argued that there is little meaningful relationship between property value and bill. This might be considered odd for a so-called 'property tax'. But that criticism's validity endures because of three things: the obsolescence of valuations (by over half a generation); the ordering of property in bandings, with the forcing of a value floor and ceiling; and the imposition of a system of weighting. These three features combine to render the present system of Council Tax no more than a collection of eight proportional tax bills allocated by order of historic property value and factored by an imposed total tax take income requirement.

The present system of Council Tax is not sophisticated, nor intelligently framed, and it cannot allow for the 'smart' socio-economic consequences to flow from its operation that we can expect from modern taxation systems.

Question Two

How would the beneficial behavioural effects claimed of LVT be achieved if local tax bills did not change substantially following a change to site valuation? For example, what evidence is there that, under either scenario above, householders would be much more likely than now to optimise the value of their property? It can be argued that strong demand already exists for home improvement – as demonstrated by the recent success of DIY stores and the difficulty that often exists in getting tradesmen to undertake home improvement work.

Response to Question Two

If Tax Bills Did Not Change Substantially

It will be clear from our answer to Question 1 that following reform the way in which liability would fall for paying for local taxation will significantly change. Council Tax bills will change for many, in many cases substantially. A similar change (though for several reasons one with less immediate impact on bills) would occur with the reform of Non-Domestic Rates.

This would in itself bring behavioural changes. The reduction in bills in less advantaged areas will increase the attractiveness of living and being economically active there. With lower total costs of occupation, there will be less disincentive in such areas to maintain and improve property.

Optimising Land Use, Encouraging Improvement

With a location (land or site) value-based system of Council Tax and Non-Domestic Rates, assessments would be based on market evidence of the optimum permitted use value of the site. That is, assessments would be based on the maximum economic use to which the site can be used within the constraints of planning, environmental and other regulations[2]. Sites that are sub-optimally utilised will bear a tax that is a higher percentage of the value of the land plus improvements; and vice versa. Thus a land value system encourages fuller use of scarce land. Taxes on improvements, meanwhile, would be lifted (apart from VAT on the cost of improvements) under a full land value system. This would encourage improvements, whether via DIY or via tradesmen. Of course improvements do occur today. This is partly encouraged by the failure to revalue properties more frequently. But a shift to a full land value based Council Tax and Non-Domestic Rates would further increase the incentive to invest in, maintain and improve property.

Under the present system there are exemptions and losses in Council Tax take associated with derelict houses sitting on valuable land, as well as on vacant land itself. The greater Glasgow urban landscape is tainted by the problems to which this feature of the system contributes. The current system is a disincentive to bringing valuable land into use – the reformed system would be an incentive to it. The existing system contributes to unnecessary urban sprawl and the associated infrastructure and transport costs. The existing Council Tax system is a contributing threat to the green belt.

Currently properties are only re-banded upwards upon sale, and then only if the increase in value when a property is sold is sufficiently different from the general increase in prices since 1991. They can be re-banded downwards if part of the building is demolished (and, note, not rebuilt – encouraging a delay in rebuilding and sub-optimal use), or if the physical state of the local area changes significantly.

Not Just the Amount of the Bill

So the amount of bills will indeed change, and that will change behaviour. However the *quantum* of a tax is only one of the major factors which can cause behavioural effects. Another factor is the *basis* of the tax – what it is, exactly, that is being taxed. Simply by shifting the basis of assessment, here from whole property onto land value, will cause behavioural changes.

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[2] For more on optimum permitted use see Appendix B – in particular page B I.

So for instance, a household which is considering renovating its deteriorating cottage will find there is one less disincentive to put in the household economic balance (ie. a substantial rise in their Council Tax come the next revaluation) when deciding on a course of action. On balance, more cottages will be renovated.

Taxpayers in the main act rationally and in their own interests. Taxpayers avoid paying taxes when they can. Under a land value reformed system, a Council Tax payer seeking to minimise their tax liability will reflect on their capacity and need to enjoy the benefits of any particular location over another. Looked at the other way, taxpayers will find extra incentives to locate their home and business in locations which give them what they need, but no more. This is simply a parallel process to that of selecting a house for purchase on the market. Under a reformed system housebuyers will be able better to target the balance of their resources at the provision of needed accommodation (capital purchase price / rent) and the enjoyment of location (ongoing Council Tax liability). Run-down areas will be brought up; hotspots will be given extra capacity and find their heat reduced.

A Further Thought of the Value of Home Improvements

With regard to the point about DIY home improvement: while house maintenance and the keeping of good decorative order will safeguard property value, it is a fact that only a minority of so called ‘home improvements’ effect property ‘improvement’, in the eye of the market or professional valuer. Most such work we do in our homes actually falls into the category of home *alterations*; they concern and affect more superficial matters merely, of style, preference and taste. Such activity cannot in general be considered as beneficial improvement of the housing stock because it is clear that very little such work actually adds market value to a property.

Question Three

How would the value of land in a particular location owing to its proximity to local services be valued and how robust would such valuations be? It has been stated to us, and was a feature of the Vale of White Horse pilot, that GIS systems could plot the location of properties accurately and quickly. However, would this not work only for the purposes of determining the size of plots? How would the value of the land itself be factored in? Would a balance not have to be struck between:

- simplicity – meaning that valuations might not accurately reflect differences in relative land values between one area and another; *and*
- accuracy – meaning that the valuation process would be more complex, expensive and subject to appeal?

If so, how might or should that balance be struck?

Response to Question Three

Seven methods for appraising land value are described in detail and compared by Ted Gwartney, MAI in Appendix B.

Professional valuation officers and estate agents currently examine both the physical state of a property and its location, taking account of market prices for similar or

comparable properties. Where a parcel of land is currently vacant they can likewise infer its market value, both from the prices of similarly located vacant sites and by comparing the whole value of similar houses in different locations.

As they say in Spanish: “Quien puede mas puede menos”: he who can do more can do less. A valuation officer can calculate the site value more easily than the value of the building. Adjacent buildings are often much more heterogeneous than the value of adjacent land. Hence cadastral (land) valuations could be done more frequently and less expensively if site values alone were required.

Question Four

What examples exist of methods for apportioning LVT liability in relation to flats and tenements?

Response to Question Four

Methods for appraising the apportioning of liability in relation to flats and tenements are described in Appendix B, particularly pages B III-IV.

In principle flats and tenements are valued according to market values. Sometimes ground floor flats sell at a premium over upper floor flats in similar condition; sometimes at a discount. To the extent that these differences are due to situational differences, the proportioning of the overall liability of a building to the ground rent, or land value-based tax, can be adjusted similarly.

Land value-based tax (based on optimal permitted use) is, as stated above, influenced by planning restrictions. Thus a block may not have consent for sub-division, and as such may be worth less than, say, four times the value of a similar block that has been given permission.

Roger Sandilands Gives an Example of the Current Problem

An interesting example of the distortive effects of the current Council Tax system on land use, is from my own street in Glasgow. (But similar examples can be found all over Scotland.)

In my road there are eighteen identical houses in a Victorian terrace. Some are as originally constructed and remain undivided; some are divided into two units; some into three or four units.

Those still in one unit are in band G, paying £2,021 Council Tax. Those divided into two units are in bands F and E, paying £1,752 plus £1,482 = £3,234. Those in three units pay E, E, and D, or £1482 + £1482 + £1213 = £4,177. And those which have been divided into four units pay C, D, D and D, or £4,717.

In this road the per capita council tax is less skewed than these totals. However, at least one comparison between an undivided unit (band G) with one family of four persons and the house next door with two units (band F) with two couples, shows that the per capita tax is £505 vs £808. Yet they are each occupying the same amount of space and enjoying the same local amenities.

Under a land value-based system of Council Tax all of these buildings, divided or not, occupying identical space in a similar location, would pay the same total tax. Those

properties with more people sharing a location would attract less tax per person than those houses with a lower occupancy rate. In our judgement this is as it should be.

Question Five

What would be the practical effects of taxing the owner of land, rather than the occupier? Would occupiers actually benefit or would they simply pay more in rent in return for the transfer to their landlord of the obligation for paying local tax? Might it not be more difficult to collect a local tax from an owner not resident on the land than from the occupier?

Response to Question Five

In principle, the market rent is what the market will bear. So in the current situation a tenant paying the market rent plus the Council Tax would tend to pay the same total as a tenant in a similar property whose landlord agrees to pay the tax itself. In the latter case the 'rent' would simply be adjusted upwards to equalise the rent for similar properties.

Just as with the existing system, a reformed Council Tax could be formally levied on the occupier rather than the owner. If the land is vacant there is no occupier and so the owner would have to be levied direct. An owner who does not pay can have the land seized in lieu.

At one of our meetings with your Committee, the chairman readily acknowledged his familiarity with the (Samuelson) textbook theory of the incidence of a land tax as falling entirely on the net rent the owner receives. The supply of land being fixed, the demand schedule (with a tax imposed on rent) shifts down the vertical supply schedule.

Question Six

Supporters of LVT often argue that land cannot be hidden or moved. To what extent is this argument more true of LVT than it is of other forms of property tax, including Council Tax?

Response to Question Six

Perhaps the matter becomes clearer if we consider the question as one of the visibility of land *value* against bricks and mortar *value – rather than a comparison of the apparent visibility of the property elements themselves*. Location (land or site) value is evident and determinable without the (physically or personally) intrusive assessment requirements of the existing system.

The present whole-property system of Council Tax depends on assessing whether, for example, central heating has been installed, attics converted, kitchens extended into the garden, conservatories added, etc. These require physical inspections – and frequent ones if revaluations are to be kept up to date. (Of course this reminds us that the true and proper cost of maintaining the existing Council Tax system is distorted by the fact that the cost of maintaining up-to-date valuations has not been incurred since 1991.)

And also we see that those elements are movable in the sense that they can be added or subtracted by the owner. The land, however, is fixed, easily visible, and immovable: its location is a matter of external relation, and is its most evident characteristic; its extent very easily determined in negotiation backed by powers of seizure over unclaimed land.

Question Seven

1. Are non-domestic rates not already very much like a LVT? Would you be able to offer an informed estimate as to the proportion of cases where NDRs would be significantly different to now if they were based on site value?

Response to Question Seven

Non-domestic rates are based on the location (land) value plus the value of the buildings and fixtures, and other considerations. They are therefore more like the existing system of Council Tax than the reformed system proposed. They are subject to the same objections in terms of principle, incentive effects, efficiency, and assessment costs.

Question Eight

How would the beneficial behavioural effects claimed of LVT be achieved if local tax bills did not change substantially following a change to site valuation?

Response to Question Eight

See Response to Question 2.

Conclusions

In this Note of Advice presented to the Committee of the Local Government Finance Review we believe we have provided further evidence for the case for introducing a reformed Scottish system of local taxation based on land value assessment.

But we find our work has raised further questions. For instance:

- what is the direct effect on the household's wallet of the provision of good local infrastructure and services?
- – and what then should be the basis of payment for any benefits received?
- should and how might taxes be designed to achieve positive outcomes beyond simply raising revenue?
- – and – in pursuit of dynamic solutions to problems thrown up by *which* agendas (eg. housing affordability, rural development, urban regeneration, poverty) – what might those outcomes be?
- how, in *any* transaction in society, should disparity between liability to pay and 'ability' to pay be defined and resolved?
- in any tax system what is the ethical basis and political benefit of 'weighting'?
- in any tax system when are the benefits provided by 'banding' outweighed?
- what might be the effects – societal and macro-economic – of different approaches to regional equalisation and the question of balance of funding?
- beyond the *generalities* and *averages* of this Note, *who specifically* would be the winners and losers of land value assessment reform?
- – and specifically how might such change impact on the broader economic environment and performance of Scotland?
- how might reform positively help business and enterprise?
- how might reform contribute to the sustainable development agenda?
- *and,* who might support such reform and why, and how and why might more come to do so?

We would be pleased to be of any further assistance to the Committee.

Professor Roger Sandilands
Department of Economics
University of Strathclyde
Sir William Duncan Building
130 Rottenrow
Glasgow
G4 0GE

ph 0141 548 4367
e r.j.sandilands@strath.ac.uk

Peter Gibb
Secretary
Henry George Foundation
212 Piccadilly
London
W1J 9HG

ph 0207 377 8885
e gibb@HenryGeorgeFoundation.org

Appendix A

An estimate of Council Tax liability for 2006-7 under a reformed Scottish system based on land value assessment

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Foreword

The task has been to estimate notional average Scottish Council Tax bills for the present fiscal year under a reformed system in which all of its features remain unchanged (including total tax take) except for the basis of assessment being land value. The exercise demonstrates consequential changes in how liability for payment might fall upon the population of taxpayers. The exercise does not seek to extend that population by including land not presently taxed under the system: nor does it take any consideration of the current provisions for discounts, exemptions and benefits, the revenue effects of which it assumes remain the same.

Introduction

In the absence of detailed and comprehensive land value data an allocation method[3] of appraising land values has been used. There is a positive but not perfect correlation between assessed whole property value and locational (site or land) value.

Market and local conditions, among other factors, limit the detailed accuracy of the results produced by the approach. However the retaining, in our calculations, of the existing banding system, and our use of band averaging in estimating value, will have countered such effects. We acknowledge the masking effect of using averaging, especially when drawing conclusions with regard to the *identity* of winners and losers under reform. The difficulty compounds the problem created by the extended use of 1991 assessment data. However we are confident that the *ratio* of those winners and losers will be broadly accurate.

The *actual amounts* of estimated reduced and increased bills relate to an unweighted assessment of land values. This maximises the tax's progressivity. The existing Council Tax system is extensively weighted, reducing progressivity. Weighting could be applied in a reformed system to ameliorate the extent of the reductions or increases, in a targeted manner. It should be noted that using land values as the basis of assessment *in lieu* of whole property values, in itself - by virtue of the relative value ranges – increases the progressivity of a reformed system over the existing one.

Our application of the method here is relatively primitive and unsophisticated: however the results have been reviewed using other assessment methods and have proven sufficiently robust and reliable for the needs of the present study.

For the present purposes the estimates allow us to draw general conclusions and make broad statements concerning likely consequences of reform. They allow us to

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[3] See Appendix B for a review of land value appraisal methods. Pages B VIII-IX describe the Allocation Method.

refine our evaluations of the proposals. They certainly provide sufficient foundation for targeting and framing further investigation.

Table A1: An estimate of Council Tax liability for 2006-7 under **a reformed Scottish system based on land value assessment**

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
COUNCIL TAX BAND	ALLOTED LAND / BUILDING RATIO	MEDIAN (WHOLE) PROPERTY VALUE (1991) (£)	LAND VALUE ALLOCATION (1991 VALUES) (£)	NUMBER OF HOUSEHOLDS (2003-4) ('000s)[ii]	BAND LAND VALUE (GLOBAL) (£'Ms)	BAND'S PROPORTION OF TOTAL NATIONAL RESIDEMTIAL LAND VALUE (%)	TOTAL (LAND) REVENUE REQUIRED FROM THE BAND (£'Ms)	BAND TAX BILL (PAYABLE PER HOUSEHOLD) (£)	BAND TAX BILL (ii) (2006-7)) **PRESENT Council Tax**
A	25 /75	20,000	5,000	542	2,710	6.3	133.0	**246**	752
B	34 / 66	31,000	10,540	562	5,923	13.9	294.1	**523**	877
C	38 / 62	40,000	15,200	358	5,442	12.7	268.7	**750**	1,003
D	40 / 60	51,500	20,600	280	5,768	13.5	285.6	**1,020**	1,128
E	42 / 58	69,000	28,900	286	8,265	19.3	408.3	**1,427**	1,379
F	44 / 56	93,000	40,900	148	6,053	14.2	300.4	**2,029**	1,630
G	46 / 54	159,000	73,140	98	7,168	16.8	355.4	**3,626**	1,881
H	50 / 50	265,000 [i]	130,250	11	1,433	3.3	69.8	**6,345**	2,257
TOTALS				2,284	42,759	100.0	2,115.5		

[11]	**REDUCTION / INCREASE** IN TAX BILL (2006-7) UNDER REFORMS (£)	-506	-354	-253	-108	+48	+399	+1,745	+4,088

Notes to the table

i Band H has no upper limit. It is not possible, therefore to express a true median figure. The figure given in the table is considered conservative, given the direction of the curve within which the figures fit: the figure given for the median of H is as higher from that band's lower limit as the preceding band G's median is as lower from its upper limit.

ii =(7) x £2,115m = 2003-04 Council Tax income + 15%, as estimate of 2006-07 income

Description of the method

The figures[4] are set out below in table B1.

Average land values were allocated from existing Council Tax bands [col.1]. We have used a curve[5] constructed to relate average site values and average property band values – describing a dynamic land/building ratio. The curve was inferred using local market data applied intuitively using expert knowledge in the land economy, development and valuation fields. (This work was assisted by a director of a national UK firm of surveyors specialising in residential valuation.) The curve allows us to interpolate land value ratios [col.2] and apply them to the median whole property values (1991) for each banding [col.3]. (For further information about the distribution of land value and proportional land value appraisal see Appendix B Table B2 and the associated text.)

Thence we have calculated a figure for average land value for property in each band [col.4]. We have assumed the same number of units [col.5] will be in each band under a reformed system. (In reality there will be shifts between the bands, for the reasons mentioned above.) Then we calculate the total land value in each band [col.6], in 1991 values, and the percentage of the total of Scotland's land value in each band [col.7].

In 2003-04, Council Tax income was £1,839.9m. We have adjusted this figure upwards by 15% (to £2,115.5m) to take approximate account of subsequent increases in average bills. We have then allocated revenue requirements from each banding [col.8] - the total land revenue to be collected from each band under a land value system in which the total revenue is the same as the estimated 2006-07 Council Tax income.

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[4] Figures are from the Scottish Executive, *Scottish Economic Statistics, 2005*, Edinburgh November 2005.

[5] Because of the prevailing situation in the residential land market, acting on its intrinsic 'imperfection', and because of the effects of the averaging approach which has been used, the curve which has been constructed does not reflect the extremes of value which will and do occur at both ends of the range.

That total band figure was then divided by the number of households in the band [col.5] to give the reformed band tax bill average per household [col.9].

We give average Scottish Council Tax bills for each band for the current year (2006-07) so we can make comparison with the present system [col.10]. The estimated reduction or increase in average household bills for each band, after reform, is then calculated [11].

In other words, we are estimating the comparative effects of a *revenue-neutral* LVT system on households in each band.

Analysis of the Results

It can be seen that under the proposed reform where would be a considerably greater number of winners than losers. Some 1.742M out of a total of 2.284M Scottish households – 76% – would be better off under the proposal. Some of these households would be very substantially better off. In general lowest bandings would benefit most[6].

A further 12.5% of households would experience small rises in their bills – of the order of this year's annual rise (4%). 11.5% of households would experience greater – in many cases substantially greater – rises. These rises would occur in all but an insignificant minority of cases in the top bands.

The direction and extent of the change from the existing system is as expected. The current system fails, significantly, to equitably reflect the relative benefits and disadvantages of properties as a result of the community-created value of their location – presently capitalised by property owners as unearned income.

[6] There is a positive but imperfect correlation between average household income and Council Tax banding. On average those with higher incomes enjoy property in higher bandings. This is simply to point out that property wealth is an increasing element in most taxpayer's total wealth. With modern, quality, equity release schemes that wealth is not illiquid. There may be a moral dimension to the taxing of bricks and mortar wealth to the point that equity is reduced and family accommodation potentially threatened. However there is no such dimension in the case of taxing locational wealth, in the circumstances that a less beneficial / lower taxed location is available.

There are of course exceptions to the income rich / property wealthy correlation. Those should be treated within the system as exceptional cases: the exceptions should not define the system.

Appendix B

Methods of Appraising Land Value

by

Ted Gwartney, MAI

Ted Gwartney was for 12 years the Assessment Commissioner of British Columbia, Canada, in charge of an annual valuation of one and a half million parcels in a hundred and eighty cities. He is currently Greenwich, Connecticut Tax Assessor and President of the American Journal of Economics and Sociology. He is a former Professor in the Department of Law, Baruch College, New York, specialising in real estate appraisal and law. Ted Gwartney is a member of the Appraisal Institute.

Introduction

Just as improved property, land is valued using appraisal techniques proven over time. I have found seven methods that I use based upon reliable data, often using multiple methods to check results. Valuation of the land involves first determining the highest and best use of the site, estimating the value by current appraisal theory, and reconciling to a final estimate of value.

The first step in the valuation of land is determining the highest and best use of the site. The four criteria that highest and best use must meet are: physically possible, legally permissible, financially feasible, and maximally productive. Two types of analyses are made in determining the highest and best use. The first is the highest and best use of the site if vacant; the second is the highest and best use of the site as improved, or, if undeveloped, as proposed to be improved.

There are three standard approaches to estimating market value that form the foundation for current appraisal theory: the cost approach, the sales comparison approach and the income approach. Variations of these three approaches are discussed here.

The cost approach is based upon the principle that the informed purchaser would pay no more than the cost to produce a substitute property with the same utility as the subject property. It is particularly applicable when the property being appraised involves relatively new improvements, which represent the highest and best use of the land, or when relatively unique or specialised improvements are located on the site and for which there exists no comparable properties on the market. With good data, land value can be measured as a residual.

The sales comparison approach utilises prices paid in actual market transactions of similar properties to estimate the value of the site. This appraisal technique is dependent upon utilising truly comparable market or sales data, which have occurred near enough in time to reflect market conditions relative to the time period of the appraisal. This method could also be used to estimate the rental value of land.

The income capitalisation approach is widely applied in appraising income-producing properties. Anticipated present and future net operating income, as well as any future reversions, are discounted to a present worth figure through the capitalisation process. This approach also relies upon market data to establish current market values and expense levels to arrive at an expected net operating income. Land value can be measured as a residual in a development model.

The resulting indications of value from various models are correlated into a final estimate of value for the site. The nature of the property being appraised, and the amount, quality, and type of data available dictate the use of each of the various models. Variations of the three approaches to value have been devised and seven will be presented here.

Specific Methods Used in Appraising Land Value

In the valuation process the land value estimate is a separate step accomplished by applying either sales comparison, land residual or income capitalisation techniques. The most reliable way to estimate land value is by sales comparison. When few sales are available, or when the value indications produced through sales comparison require substantiation, other procedures may

be used to value land. In all, seven procedures can be used to obtain land value indications.

1. Sales comparison

Sales of similar, vacant parcels are analysed, compared, and adjusted to provide a value indication for the land being appraised.

2. Proportional relationship

Relating a site to a known standard site. The difference can be expressed as a percentage. This procedure can be used when there is little value evidence in existence.

3. Land residual technique

A model is created where the land is improved to its highest and best use. The gross income is estimated and all operating expenses and the return attributable to other agents of production are deducted. The net income imputed to the land is capitalised to derive an estimate of land value.

4. Allocation

Sales of improved properties are analysed, and the prices paid are allocated between the land and the improvements.

5. Extraction

Land value is estimated by subtracting the estimated value of the depreciated improvements from the known sale price of the property.

6. Ground rent capitalisation

This procedure is used when land rental and capitalisation rates are readily available, as in well developed areas. Net ground rent – the net amount paid for the right to use and occupy the land – is estimated and divided by a land capitalisation rate.

7. Subdivision development

The total value of undeveloped land is estimated as if the land were subdivided, developed, and sold. Development costs, incentive costs, and carrying charges are subtracted from the estimated proceeds of sale, and the net income projection is discounted over the estimated period required for market absorption of the developed sites.

With the appraisal process and the approaches to value understood, it is appropriate to consider the methods and procedures used to analyse and interpret the land data. The choice is based upon what data is available, and it's reliability and usefulness in making a value estimate.

METHOD ONE Sales Comparison

This is the best method to use when appropriate data is available. The method is based upon estimating land market data for a large district based upon a limited occurrence of market sales but with data available on various site characteristics for all properties. This is based upon the actual site data and sales evidence within the assessed district.

For 12 years, I was the Assessment Commissioner for the Province of British Columbia, Canada. During this time, significant data was collected for each parcel of land. This enabled a more detailed analysis of land value and the development and use of land valuation systems. Computer

programs were written that allowed the annual update of land values.

The assessment profession has benefited from the existence of land valuation rules based upon previous analysis. The basic intent is to provide a means of measuring and applying a rule of valuation by sales comparability for assessment purposes.

The land market is not a perfect market, but is made up of the expressions of all different types of persons in terms of money in relation to potential land use. The assessor uses market sales and site data to estimate what value would be paid for a site, assuming a competitive market, involving knowledgeable people who are typically motivated and acting in their own best interest.

Standard Units of Measure

Land markets can be estimated on the basis of a certain value per unit and the unit is often one of the following:

i) per dwelling-unit site
ii) per square-metre
iii) per hectare
iv) per front-metre

The selection of the most appropriate unit, or combination of units, is of importance. It is a decision which can only be made after a careful analysis of the market and the available data.

Land is not always sold on the same basis, but rather on the value in the eyes of the user. No amount of mathematics can override the main objective of achieving fair economic value, as reflected by market behaviour. This relegates the unit of measure to the role of a means to an end. The measure can be used to assist in the

interpretation of market evidence for a few sites (the sample), so that all of the sites can be properly estimated (the population).

The choice of a particular unit of measure will be dictated by expediency. For example, the user of a condominium[7] dwelling unit will share the use of a large site, but a certain air space will belong to them and command a different market value due to height, access, view and preference. In urban land valuation, many of the sites to be valued will be of similar sizes and arranged in more-or-less orderly rows on streets, avenues, boulevards and cul-de-sacs. Many will be of identical size with minor departures arising from topography and shape. The assessor will probably wish to adopt a standard site value, which includes the majority of sites, for the particular area under review – standard both as to probable market value and to characteristics.

The standard residential site may respond well to a value per dwelling unit site. A commercial use may be better estimated by using a value per square-metre or per front metre. A farm or rural site may be better estimated by using a value per hectare. Once the market value per unit of measure has been established for the standard site representative of the area, the value will become a base to which all other sites can be compared.

Adjustments will have to be made for differences between the standard site and every other site. The assessor will want to study the typical differences and make individual refinements. There may be reasons for an increase in value for characteristics which are better than the standard

[7] NOTE: For our purposes here, in this Note of Advice, we can see that American-style condominium properties share features with flatted and especially tenemental property in Scotland – for instance, land tenure arrangements which show qualities of sharedness, collectivity or commonality. [PG]

site. They would make a positive adjustment for desirable characteristics, such as:

superior location – view – topography – services – access

There can also be reasons for loss of value for characteristics which are inferior to the standard site. They would make a negative adjustment for undesirable characteristics, such as:

poor location – longer distance to transportation – longer distance to the civic centre – wet ground in the winter season – overabundance of rock – poor access

Site valuation may be summed up in the manner of a Unity Rating which will be X% greater or lesser than unity (1.0) when compared with the base standard site characteristics adopted for the area.

Standardised Adjustments

A standardised method is the application of the comparative method to land markets under review. Adjustments are made for divergences from the standard site by the use of a specific set of rules. The most common examples are those used for distance and size. The methods were born out of the necessity to produce sound and impartial market estimates in a limited amount of time recognizing the accepted principles of valuation.

It is essential to use discretion and judgement and only treat standardised methods as guides. The use of formulae should be the result of local market analysis and testing. Sales are sought that are similar except for the one difference that is being analysed. A value for this

difference will result. The main virtue of the method is its administrative adaptability, permitting land markets to be estimated on the basis of strict comparability. Mistakes become more easily detectable, particularly in cases of errors of judgment and mathematics.

Below is an example of an adjustment grid (Table B1) and the procedures which are commonly used to estimate site value after considering all differences. This shows how market values increase or decrease due to distance, size, frontage and other important characteristic differences.

Per Dwelling Unit Site – Sale evidence will frequently indicate that minor variations in sites, whether frontage or size, have little effect on markets. The assessor could select the standard dwelling unit site, both as to location and market. They would proceed to make judgment decisions in relating the other sites to the site that was selected as the standard site – rating them as standard, superior or inferior. An individual site could have some characteristics that are superior and others that are inferior. The per dwelling unit site method is useful in the valuation of apartments and homes. It may also be combined with the use of another method such as the per square-metre method.

Adjustments for Unique Features

After the base value has been estimated, the individual sites must be considered. Some sites have unique advantages or disadvantages compared to other sites. Actual real estate market values vary for each site and are dependent upon numerous individual features, qualities, characteristics and restrictions such as:

location	zoning access	size

utilities	use density frontage	view
topography	river parks	transportation
traffic	regulations utilities	noise

People would tend to be willing to pay additional value for a land site with special advantages and would pay less value for a land site with disadvantages. The market value for the unique differences would be determined by how much more or less site users in general were willing to pay for those features. This market difference must be determined for each significant variable feature.

The difference can then be converted to an adjustment of value. For example, if a site were better than the standard in a district because of distance to downtown of 5% ($4,000), site size of 5% ($4,000), location of transportation 10% ($8,000) and convenience of recreation of 5% ($4,000), the site being appraised would be 25% ($20,000) superior to the standard site. In reality most sites have many small differences both positive and negative from a standard site.

Table B1: Sales Adjustment Grid

Variable	**=**	**Standard**	**>**	**Superior**	**<**	**Inferior**
Base Value ($)		$80,000		$80,000		$80,000
Downtown (miles)	5	0	3	+4,000	7	-4,000
Size (square feet)	10,000	0	12,000	+4,000	8,000	-4,000

Transport (blocks)	3	0	1	+8,000	6	-6,000
Recreation (blocks)	6	0	3	+4,000	10	-3,000
Adjusted Value ($)		$80,000		$100,000		$63,000

Per Square-Metre – The value per square metre unit of measure has application in estimating value for commercial and industrial lands where the applied rate will be more constant over the entire site. The size of the site limits or enhances the use and market value of a site. The application of a market value per square-metre to residential lands is not common.

Per Front-Metre – This method has been useful in the downtown portion of intensely developed cities where people pay a premium for exposure to customers. For those sites that are not identical to the standard site, it will be necessary to make appropriate adjustments for variations in width, depth (4-3-2-1 rule) and other attributes that differ from the standard site. The total departures from standard front-metre market can be expressed as an adjusted frontage. It is against this adjusted frontage that the adopted front-metre value will be applied.

Per Hectare – Beyond the limits of the urban area, there will be those parcels that are so much larger that they will not respond well or at all to dwelling unit site value, a square-metre or front metre unit measure. Where these larger parcels are the norm, the unit of measure can best be expressed as a value per hectare. The adjustment factors would be completely different however. They might relate to agricultural benefits, such as soil fertility, utility, distance to markets, water supply.

There is a principle of commerce that commodities are cheaper by the dozen. By the same token it could be that frontage metres are cheaper per unit when the total exceeds the average, or standard width. A width table is a series of percentage adjustments greater or less than 1.0, needed to adjust the actual market per front metre of any site and equate it to the front metre value of the adopted standard site.

METHOD TWO Proportional Relationship

One method to secure a land assessment system, when sales or rental data is unavailable, is to make an estimate of value based upon the experience in other locations where land data already exists. This is a variation on the Sales Comparison method. It could be used to measure land market value or the rental value of land.

Adjustments for Use and Location

If a jurisdiction has very limited land data, such as permitted use (zoning) and density of population, but no assessment system, it might be possible to build a simple model. An assessor might draw a grid, showing the potential use on the Y-axis and the resulting land market value on the X-axis.

In this instance, a typical home unit site in a major city could be assigned a base market value of 1.00 to which all other sites would be compared. Moving toward a superior location and potential use would influence the land market value in a positive manner. Moving away from the base location and use to one which was inferior would influence the land market value in a negative manner.

Adjustments for additional attributes and deficiencies could be made for each individual site, after the base market

value had been estimated by the comparative method. The experience from a comparative city could be borrowed and tested in the local area to verify the results.

A chart can be created that illustrates the relationship of one type of land use and location, to another site of differing potential land use. The relationships in the chart that follows have been found to be common in many areas of the world. However, every area is different, and local experts can design a new suitable model for their area.

This model could be a basis for considering the distinctions that are part of the local society of a city. It should be modified to conform to the local experience. This can be accomplished by performing a local investigation, which draws upon the expertise of individuals who understand the advantage that one location has compared to another. Using the other methods, which are explained later, tests can be made of its validity.

A base factor, which was equal to the comparative difference, could be determined for each use and location. Individual sites could then be adjusted for superior or inferior conditions as compared to the base. A determined value could then apply to all sites resulting on equitable treatment for varying qualities.

Table B2: Proportional Land Market Values

Use / Location	Major City	Suburban	Developing	Rural
COMMERCIAL				
Central Business	20.00 +			
Downtown Area	10.00	5.00	2.50	
Standard	**3.00**	**2.00**	**1.00**	**0.75**

Secondary	1.50-	1.00	0.60	0.50
INDUSTRIAL				
Prime	2.50+	1.75	1.50	0.95
Standard	**1.50**	**1.00**	**0.75**	**0.65**
Inferior	0.75-	0.50	0.40	0.25
HOME				
Prime	1.50+	1.00	0.75	0.50
Standard [8]	**1.00**	**0.75**	**0.60**	**0.40**
Inferior	0.65-	0.45	0.40	0.25
RURAL & FARMING				
Hectares Close-in	**0.20+**	**0.15**	**0.10**	**0.05**
Hectares Distant		0.10	0.05	0.02
Intense Farming			0.03	0.02
General Farming			**0.02**	**0.01-**

METHOD THREE Land Residual Technique (Developmental Analysis)

A theoretical method to achieve a land assessment system, when market or sales data is unavailable, is to make an estimate of the market value of land, based upon the net land residual income (total income, less all costs except land value). This would result from the development of a hypothetical building of the highest and best use for a given site.

The developmental analysis technique would be used when the following data can all be reasonably estimated: the best use of the land site, the hypothetical building

[8] Basis for Comparison: a home of standard quality in a major city = 1.00

value, the hypothetical net income to the development, and the appropriate capitalisation rates.

First, an assessor would determine what hypothetical improvements would represent the highest and best use (greatest net land value) for the site.

Second, to determine the net land income, the assessor would have to estimate the gross possible income, which could be earned from the use of the improvements and site combined. An allowance for the average vacancy (non-use) over the life of the investment would be subtracted. Then the probable operating expenses (but excluding income attributable to the land) would be evaluated and deducted.

Third, the assessor would have to estimate the cost of the proposed building. A portion of the net income would be required to recapture the investment over time in the hypothetical building. The remaining income would be income residual to the land.

The selling price would be determined by capitalising the remaining net income after deducting a portion for land taxes. The net markets were capitalised at a rate of, say, 6% to estimate the market value of the land. This rate would vary for different types and locations of property. The land price is what a potential future user would have to pay a landowner in order to use the site.

An Example on a per m^2 Basis	**Land Income**	**Land**
Gross Possible Income	$24	
Vacancy Allowance	-1	
Operating Expenses	-5	
Net Income before Land Taxes	$18	

Recapture of Building Cost[9]	-1
Land Residual	$ 17
Land Tax	-6
Net Land Income	$11

METHOD FOUR Allocation

When it is difficult to find vacant land sites that have sold or are offered for sale, the assessor can use an allocation approach. There tends to be a typical ratio of land value to property (land plus buildings) value for specific categories of real estate, with similar characteristics, in specific locations.

The individual values for the total property (both the land and building) may be known and available on public records, but there is no allocation made between the land and buildings. Time might best be spent in analysing a sample of homes to estimate the typical proportion of value, which represents land as compared to buildings. This percentage factor could then be applied to all of the total market values for the similar type of homes in a given district, to estimate the individual site land values.

If the existing practice for assigning total values has been arbitrary or not based upon valid market conditions, this method will not be useable. Fairness and justice would require that all markets be based upon a competitive system where all individuals were given an equal opportunity to use a given site. As an interim step, an estimate of competitive total value could be made for different types of property and locations, then an allocation could follow.

[9] Using a financial calculator, an amount of $12.05 would have to be paid for a period of 50 years if interest were at, say, 6% per year.

The analysis of many units which represent a random sample would be conducted, perhaps by using some of the other techniques that are discussed. From this analysis a typical land factor (relationship) for each type of property and location would be determined. The land portion would be allocated from the total value. In the sample below, an assessor might conclude that the typical land factor was 0.40 (40% land and 60% buildings).

Table B3: Sample Analysis

Unit Number	Total Value	(-) Building Portion	(=) Land Portion	Land Factor (Land/Total %)
212	$190,000	$114,000	$76,000	40%
321	$181,000	$105,000	$76,000	42%
222	$192,000	$117,000	$75,000	39%
311	$192,000	$119,000	$73,000	38%
Conclusion: indicated land portion				**40%**

Once the portion was determined and tested for accuracy, it could be applied to the entire population of market data for a particular category of real estate in a specific location. The calculation might be made as follows:

Table B4: Population Application

Unit Number	Total Value X	Land Factor =	Land Value
215	$193,000	0.40	$77,200
305	$185,000	0.40	$74,000
301	$189,000	0.40	$75,600

METHOD FIVE Extraction

The extraction method is a variant of the allocation and developmental methods, where the market rent

contribution of a building is estimated, then subtracted from the total rent, with the balance being assigned as land rent. This was reviewed earlier, and accomplishes a land value analysis in a simplified manner. This could best be used where the improvements or buildings made a small contribution to the rent, and the majority of the value was land value.

	Land Rental Income	**Land Market Value**
Gross Possible Income	$24	
Vacancy Allowance	-1	
Operating Expenses	-5	
Net Income before Land Taxes	$18	$300
Recapture of Building Cost	-1	-$17
Land Value Residual	$17	$283
Land Tax	-12	-$200
Net Land Income	**$5**	**$83**

In this example, $5 per square metre is the net land market allotted to the land. The land tax is $12 per square metre and the land value is $83 per square metre.

METHOD SIX Ground Rent Capitalisation

In many parts of the world land is owned by an individual or government agency and leased to tenants who construct buildings and pay an annual rental fee. These rental fees can be analysed, and adjusted for differences, just like sales and market rental fees are estimated. This lease fee can be capitalised by an appropriate land capitalisation rate to estimate market value.

This procedure is used when land rental and capitalisation rates are readily available, as in well-developed urban areas. Net ground rent, the net amount paid for the right to

use and occupy the land, is estimated and divided by a land capitalisation rate.

Table B5: Ground Rent Capitalisation

Comparable Ground Rents	per Sq. Foot	Location	Traffic	Parking
Comparable Ground Rent 1	$10.00	-$0.50	-$0.50	-$0.75
Comparable Ground Rent 2	$9.50	-$0.25	-$0.50	-$0.25
Comparable Ground Rent 3	$10.00	-$0.00	-$0.50	-$0.00
Subject Market Ground Rent Sq. Foot	$9.50 rent per square foot / 6% = $158.3			

Rent 3 was the best comparable located in the same area and required only one adjustment for traffic, rent 2 required three small adjustments and rent 1 required larger adjustments. I conclude that the subject land has a value of $9.50 rent per square foot / 6% = $158.33 value per square foot.

METHOD SEVEN Subdivision Development

The total value of undeveloped land is estimated as if the land were subdivided, developed, and sold. Development costs, incentive costs, and carrying charges are subtracted from the estimated proceeds of sale, and the net income projection is discounted over the estimated period required for market absorption of the developed sites. This is the method used by developers to estimate the price they can pay for raw land.

Total sales proceeds, 50 sites at $50,000	$2,500,000
Discounted at 15% over 50 months	$1,850,000
Subdivision cost, $1,000 per site	$ 50,000
Development cost, $15,000 per site	$ 750,000

Sale cost, 10% of gross sale price	$ 250,000
Taxes, interest, carrying costs, 10% of net value	$ 50,000
Incentive cost and profit, 10% of gross sale price	$ 250 000
Net value of undeveloped land	$ 500,000
Net value per hectare, 12.5 hectares	$40,000
Net value per site, 50 sites	$10,000

Concluding Remarks

Land Value Maps

The market values which have been calculated should be displayed on a land value map. This will allow the assessor to review his market data and land value conclusions. They can then judge whether equity has been achieved. A field review will allow them to make further necessary adjustments, for other variables observed in the review, and finish the project. The assessor will find that by displaying the results of their analysis and the major adjustment criteria utilised, the public can understand the logic of the assessments. Experience reveals the inherent transparency of the process is a guard against unwarranted and onerous appeals.

Computer Estimated Land Values

There are many jurisdictions that have both prior market value estimates and some site data available on a computer. They may be capable of using this data as a basis for updating market estimates.

Many government agencies have already collected limited data about land on a computer system. By analysing the market trends, new land market estimates could be made with a single updating factor for each permitted land use within a neighbourhood.

An entire country would be capable of annual reassessments, updated by computer data entries. A simple model used for computer calculation of land value or market values for 1,000,000 land sites could be based upon a careful analysis of the market value of a sample of 12,000 sites.[10] A local valuation committee of land experts could define the land use classes, neighbourhood areas and market values for each standard site in the area. A Geographic Information System can be used to display land values, characteristics and statistical data.

The advantages to using a computer assisted market update include the abilities to:

1) Facilitate frequent update of markets ensuring equitable treatment of all taxpayers.
2) Eliminate arithmetic errors in land value calculations.
3) Improve the assessor's productivity in land value assessment.
4) Employ standardised assessment techniques that have proven to be effective.

Ted Gwartney MAI, Greenwich, Connecticut Tax Assessor
e tgwartney@aol.com

13th April 2006

[10] When I managed the British Columbia Assessment Authority, we were able to value 1,500,000 land parcels annually, using a land valuation computer system, which considered all land attributes, zoning, physical features and market demand factors. A multiple regression analysis system was used for the analysis of sales and testing of results.

Rewards from Eliminating Deadweight Taxes: The hidden potential of Scotland's land and natural resource rents[11]

Roger J Sandilands[12]

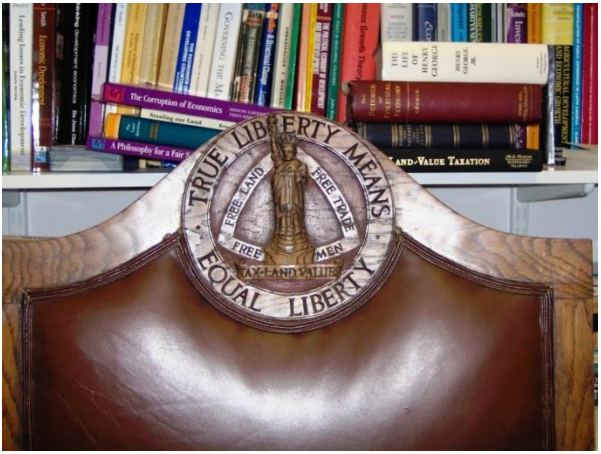
1.1: Introduction

In 1884, the American economist Henry George addressed a packed audience in Glasgow's City Halls to decry the shameful poverty and squalor that existed side by side with so much evidence of growing overall wealth in the Second City of the Empire. Why was this? George had an answer that resonated with the public and they later gave the Liberals a landslide victory in the general election of 1906. The Liberal MP for Stirling, Henry Campbell Bannerman, was confirmed as Prime Minister, followed in 1908 by Herbert Asquith, the MP for East Fife. Glasgow Corporation was also dominated by Liberals who campaigned strongly for land-value taxation. Prominent among these was Baillie Peter Burt who helped promote a petition in 1906 signed by 518 local authorities calling for reform that led to a land valuation bill in 1908 and another

[11] Background paper for conference on "The Constitutional and Fiscal Dimensions of Land", Glasgow, February 25, 2015, organised by the Scottish Land Revenues Group (SLRG).

[12] Emeritus Professor of Economics, University of Strathclyde

in Lloyd George's "People's Budget" of 1909. Both bills were blocked by the landlord-dominated House of Lords. This led in 1911 to the removal of the Lords' power to block finance bills and a process was begun to value the land of the United Kingdom, a process halted by outbreak of war in 1914. On his retirement in 1920, a chair was presented to Baillie Burt with an iconic carving that summarised Henry George's vision:



The purpose of this background paper is to investigate how far the United Kingdom and Scotland could together have been more prosperous and equal had Lloyd George's struggle for fiscal revolution succeeded.

To answer this question, giving a broad brush range of plausible figures, two issues must be addressed.

First, we need to know whether the annual rental value of land and natural resources ("Land" in its broad classical definition) would likely be sufficient to finance modern governments' fiscal needs if these rents were its main revenue source, with a corresponding reduction in taxes on other incomes. Over the 50 years between FY1964-65 and FY2013-14, tax revenues as a share of UK GDP fluctuated within the relatively narrow range of 31.6% and 37.6%, with an average of 34.3%. There was a declining trend: the yearly average for the first half of this period was 36.7% and 32.0% for the second half.

For Scotland, the *Government and Expenditure and Revenues Scotland* (GERS) gives data for 2008/9 – 2012/13 that enable us to calculate the share of her revenues (inclusive of those from North Sea oil computed on the basis of Scotland's geographical share) in Scotland's Gross Value Added (GVA). This share averaged 36.5%, and fluctuated between 34.2% and 38.6%. (Expenditures averaged 42.7% of GVA over the same period.)

Secondly, we need to be convinced that this fiscal revolution would yield a significant improvement in economic growth and its distribution.

But before we address these two questions, we need to clarify the nature and source of economic rent.

1.2: The nature and Source of Economic Rent

Following Adam Smith and David Ricardo, market forces – to the extent not obstructed by natural or man-made restrictions – determine, through the interaction of supply and demand, the "going" wage rate for labour and the expected "normal" return on capital. Labour and capital combine to produce goods and services at various geographic locations. On the least desirable land actually in use, labour and capital produce just enough to earn the going wage and interest rates, with nothing left over to pay for land. This is at the 'margin of cultivation' on agricultural land.

At and beyond this margin, land is currently free. Inside the margin there are natural and locational advantages that enable labour and capital to produce more than at the margin. Competition for these better locations pushes their prices and rents above zero. But as Ricardo put it, "Land is the free gift of Nature". It has had no labour costs of production but it commands a price. Thus its price is a pure economic surplus. Since land is fixed in supply and location, no more can be produced or moved to reduce its price when the pressure of demand pushes this above its zero labour cost.

Contrast produced goods and services: if their price exceeds their labour costs (including the indirect or "stored-up" labour costs of man-made capital inputs), labour and

capital can and will move into those activities until their prices are reduced and excess profits eliminated.

In the land market, the rent that each location commands is the difference between the unit labour costs on marginal (no-rent) land and the lower unit costs on intra-marginal locations where the productivity of labour and capital is higher. Competition exerts an equalising tendency on product prices; mobility exerts an equalising tendency on the prices of labour and capital. Land, however, being fixed in supply and place, has no similar tendency toward an equal price. Pure land prices and their annual rents (abstracting from what is paid for any buildings thereon) are therefore entirely demand-driven.

Goods and services are entirely the product of (direct and indirect) labour, but labour gets only its marginal, not its average product. The difference is what the owners of land – the passive factor of production – capture from labour in the form of rent. This is an income entirely analogous to the income of a monopolist who is able to prevent competition. He unfairly obtains excess profits because he is left free to charge prices that exceed his costs of production.

2. The Adequacy of Rents

Table 8.2 of the UK National Income Accounts gives GDP in 2011 at market prices (£1,537bn) by category of income and by its percentage composition, thus:

Total gross operating surplus:
£436bn 28.4%

"Mixed" incomes (of the self-employed): £85bn 5.5%
Employee compensation £820bn 53.4%
Taxes less subsidies on products and imports: £190bn 12.5%

Gross operating surplus is gross value added (GVA) minus labour costs paid by producers. It is the sum of (i) gross trading profits and (ii) "income earned through the ownership of buildings (rental income)." But separate figures are not easy to find for (i) and (ii); and nor is "rental income" calculated separately for land and buildings.

However, Summary Table 1.6.3 gives a figure of **£483 billion** for total **property income** accruing to individuals. These incomes comprise:

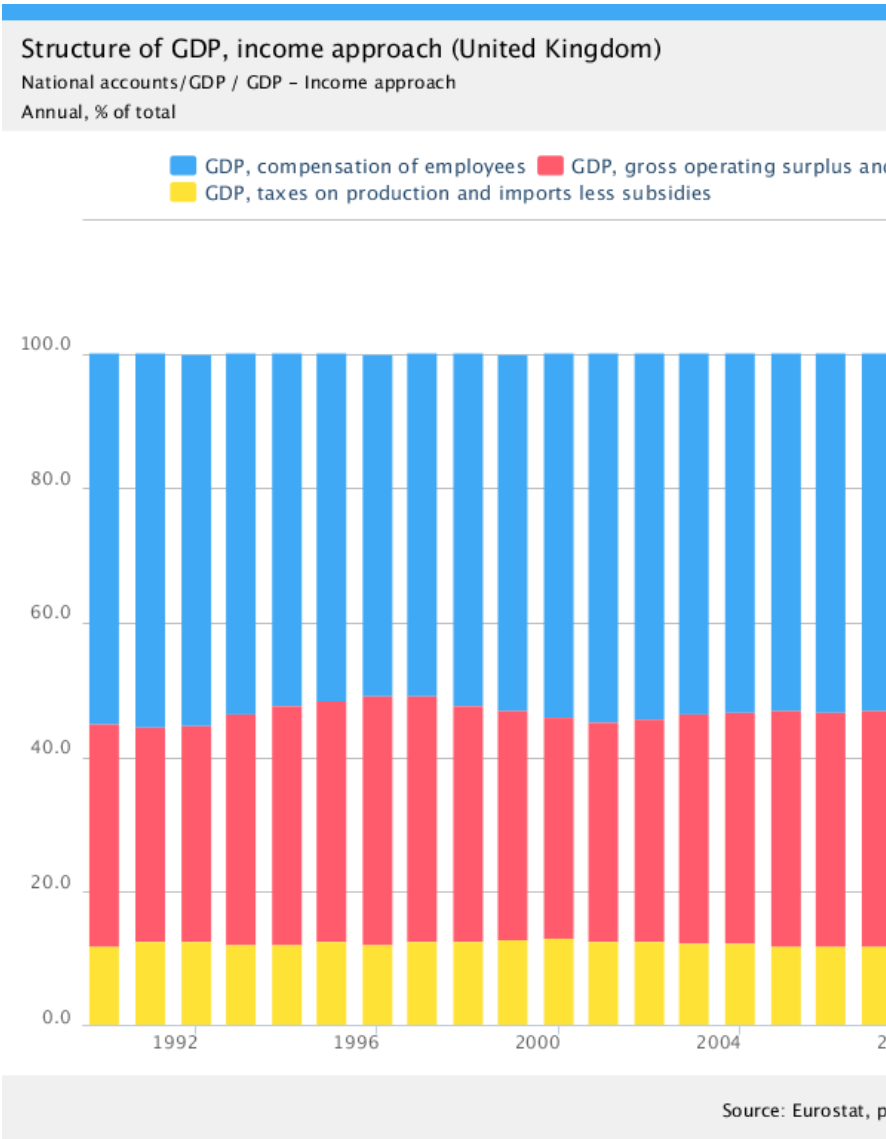
(i) interest: **£210bn**
(ii) distributed incomes of corporations: **£198bn**
(iii) reinvested earnings on direct foreign investment: **£130bn**
(iv) "property income attributed to insurance policy holders" – presumably owners of buildings: **£71bn**
(v) rent on land: **£0.417bn (i.e., £417m)**

"Rent on land" is defined as "the amount payable to the owners of land and sub-soil assets in return for allowing others to exploit the assets in question. In practice, the main constituents of rent for the UK are for agricultural land royalties in respect of permits to explore for oil and gas." It is a relatively trivial sum (**£417m**) because relatively few agents make explicit payments for land qua

land, and land here is onshore land only. Offshore oil incomes are not officially defined as rent.

Figure 1 (below) summarises the functional distribution of the United Kingdom's GDP, 1990-2013, as revealed by the national accounts:

Figure 1: Structure of The United Kingdom's GDP



What must alarm us is that "rent" has virtually disappeared from the picture. This, however, is because the accounts show only the surface flows of income. The great bulk of the rents from land and natural resources lie hidden beneath, or have been given wrong labels. In tune with modern mathematical economics land is no longer a distinct factor of production as it was with the classical economists, notably Adam Smith, David Ricardo, John Stuart Mill and Henry George. Instead we have only labour aided by "Capital", earning wages and profits. Land is conflated with "Capital" and its income has no special significance.

This involves an egregious fallacy of composition: that what is true of the individual is also true of the whole. The individual may invest indifferently in "God-given" land and/or man-made capital and hope to maximise her returns accordingly. If she invests in machinery, equipment, and raw materials that have been extracted from the ground she has added to the stock of capital goods that aid labour to produce wealth (including new capital goods and buildings). If she purchases land – whether as an empty plot or as the ground beneath a house, a factory, a shop or an office – she is persuading an existing owner to transfer its ownership. Nothing has been created thereby. It is a mere transfer payment. From the social standpoint, rent is not a cost. But, rent payments are the way that land is apportioned between its competing uses.

In purchasing or renting a house, a factory, a shop, an office or farm, the land rent element may be almost zero or

it may be close to the whole cost to the individual, depending on its location – Rannoch Moor or Buchanan Street? But in both cases the national income accountant will treat the payments as capital investments and record the incomes as a return on capital or "gross operating surplus" (as above) – except in the relatively rare cases where bare land is changing hands and being held.

It is not as difficult to separate the land element from the value of the buildings as is often claimed. Professional assessors do this all the time. Glasgow City Council conducted a pilot study in the East End of Glasgow in 2008-09 and found few problems in moving to at least a hybrid LVT-Council tax system, with a purer LVT system recommended for the longer-term. Much more difficult than assessing the rental value of land was assessing the value of the heterogeneous buildings thereon, since that requires determining the state of each individual building's fabric, fittings, extensions, etc. Less was easier to do than more. As they say in Spain: "Quien puede mas puede menos."

Clearly, businesses and households that own their own buildings own also the land on which the buildings stand. But these businesses report their overall income and profits (the national accounts' "gross operating surplus") as undifferentiated "income" rather than rents on their use of land plus profit on capital.[13] Similarly, owner-occupant households are not assessed on the "imputed rents" they enjoy from the locational benefit they gain from their

[13] This, however, can invite asset stripping.

neighbourhoods' various social amenities that give their land its value.

However, the story does not end there. "Land" in the classical economics of Smith and Ricardo is the entire universe apart from man and his products. It includes (as Mason Gaffney [2009] has so comprehensively listed), such extremely valuable natural resources as the radio spectrum, oil beneath the sea[14] other minerals beneath the ground, our harbours, waterways and seas, aircraft landing slots, and road and car parking spaces.[15] Good climate and beautiful views, while free in one sense, are free only to

[14] Most though not all oil revenues are rents: it depends on the world price which will price marginal fields in or out according to their differential costs. Currently, with world oil prices falling below US$50 a barrel, new investment has been cut sharply. However, many of the old fields do still yield considerable rents. Scotland's geographical share of North Sea oil and gas production is about 90%. But Scotland will never be as fortunate as Saudi Arabia where marginal costs are a fraction of those in the North Sea but whose oil fetches the same world price for their sheikhs. UK fiscal revenues from oil peaked at £12.4bn in 2008/09 but fell to £4.7bn in 2013/14 and will be much lower than that in 2014/15. This extreme volatility would have an accentuated macroeconomic importance for Scotland if she were not closely linked to the United Kingdom and this needs to be borne in mind when considering the extent of fiscal autonomy appropriate for Scotland within the UK.

[15] See the Appendix for brief details of the extent to which Singapore (one of the most dynamic economies in the world) charges for the use of road space for cars and harbours for ships, with a consequential alleviation of the burden of taxes on earned incomes.

those who can afford the land whose value is enhanced thereby, or who can afford to holiday in such places.

Next we must consider an even more important omission from conventional estimates of the size of rents.

2.1: Rents and the Incidence of taxation

The failure to capture the social value of land and its rents as the primary and most natural of state revenues has meant that governments have turned instead to taxation.[16]

As indicated above, wages and the return on capital (properly defined) tend to where they currently equilibrate supply and demand at a similar price for each type of work or enterprise, dependent on the skills or risks involved. The going wage and profit rates are determined at the margin. While neither labour nor capital are perfectly elastic to wage or profit differentials, especially in the short run,

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[16] In principle, when the state collects land rents this is not taxation in the strict sense of the word – as a mandatory levy that has no necessary or fully compensating benefit. In this sense taxes differ from fees or the prices paid for goods or services that yield perceived direct and corresponding benefits. We equate our expected benefit from clothes or food to the price we must pay for them.

The higher price of a ticket for a better seat at the theatre or an hour of downtown parking is the fee or user charge for its expected benefits. Likewise, the higher rent for living or conducting business in superior locations is in return for correspondingly high expected benefits.

Not so when I am compelled to pay a tax on every dollar I earn as wages from my labour, or profits on my enterprise, or VAT on my purchases of goods.

nevertheless strong equalising pressures exist in the absence of artificial barriers to mobility.

If taxes are imposed on labour and capital, their costs rise above what can be earned at the margin where rents are zero or very low. Rents cannot be negative for long, so labour and/or capital must bear the taxes. If their incomes thus fall below minimum acceptable levels their supply and their product will fall.

This is the source of one element in the so-called "deadweight losses" or "excess burdens" of taxes.

However, for the labour and capital that operate at superior "intra-marginal" locations, the owners of the land will have been capturing Ricardian rents or surpluses. These are market determined and cannot be increased to absorb the tax on earned incomes.[17] To preserve activity there, rents must absorb the cost of the taxes.

The eighteenth century French "Physiocrats" (or *économistes*), and Adam Smith in *The Wealth of Nations* (1776), understood this well. Smith wrote:

> **In all cases a direct tax upon the wages of labour must, in the long-run, occasion both a greater reduction in the rent of land**, and a greater rise in the price of manufactured goods, than would have followed from the proper assessment of a sum equal to

[17] VAT and sales taxes increase product prices. So these taxes also reduce real wages and profits below their market-clearing levels, again causing a fall in the supply of labour, capital, and output.

> the produce of the tax, partly upon the rent of land, and partly upon consumable commodities".

He describes such taxes as "Absurd and destructive" [p.394] and urged that even landlords ("who love to reap where they have nor sown") should realise that their own best interests lay in the abolition of "fines" (taxes) on production in favour of rents as the main source of state finance. That was the way to maximise the incentive to work and invest and so increase the size of the national product, hence the size of the national market.

Below, we shall explore further the implications of the "absurd and destructive" burdens of taxes on earned incomes. Meanwhile, we should stress an important implication: Whatever the size of rents that we may identify today after they have been fully and properly revealed in the hidden recesses of national, corporate and household accounting, these rents would be much greater in the absence of the distortions that our current tax system imposes on the economy.

An economy freed of these shackles would be one in which incomes and economic activity would be greater, and this means a greater demand for land for living and working. With increased demand pressing against fixed supply, rents and the price of land would be greater than otherwise. This increases the scope for greater public revenues, and even leaves landowners with some increased income from higher rents if all are not collected. And landowners, in their other existences as consumers, workers or capitalists would gain with the rest of us. Smith lamented that landowners are often too intellectually indolent to recognise where their own best interests lie.

In fact, the wealth of nations was both defined and stimulated by the size of the market and the whole point of Smith's magnum opus was to condemn 'mercantilism', or protection for producers at the expense of consumers. Not laissez faire, but the promotion of competition and mobility was Smith's fundamental message. Competitive prices and factor mobility promoted efficient allocation of resources and increased purchasing power.

But the classical economists were not only concerned with the allocation of scarce resources – the economics of scarcity. They equally intuited the economics of opportunity – the opportunity to reorganise productive resources through increased opportunities to specialise and increase the division of labour and stimulate technical innovations. At the very beginning of *The Wealth of Nations* (1776), Smith showed the very great productive power of specialisation (through his example of work in a pin factory), but also coined the famous aphorism that "the division of labour ***is limited by the extent of the market***."

The deadweight losses from taxes on work, enterprise and consumer goods (including imports) were consequentially immense because they restricted the size of the market at home and abroad.

Ricardo reinforced Smith's message in two ways. First, he deepened our understanding of the law of rent and why rent is a pure surplus over the cost of production, so that rent could be the prime source of state revenue without adverse effects on supply. Second, he explained that the mutual gains from reciprocal international trade arose not only for countries where there was an ***absolute*** difference in the productivity and costs of the goods they could trade. Rather, trade could also, and more extensively, be

conducted between countries that had only a ***comparative*** advantage in the goods they traded. In the process, nations' markets could be more greatly extended than even Smith recognised. Thus so too could specialisation be increased, with powerful consequences for increased productivity, lower costs, lower prices, enhanced purchasing power, greater real market size. This in turn would mean greater opportunity and wherewithal to increase specialisation yet again, **in a self-reinforcing and self-sustaining *cumulative* process.**

This endogenous process differs fundamentally from the self-exhausting nature of modern neo-classical growth theory which postulates diminishing marginal productivity for labour and capital as their supply increases, and *constant* rather than increasing returns *to scale* (that is, *to the size of the overall market*). Thus productivity growth requires technical progress to enhance the productivity of labour and capital that otherwise would be subject to diminishing returns in the face of a fixed supply of land.

Though empirically important, this technical progress is unexplained and "exogenous" in the neo-classical model. To stimulate technical progress at home, the supporters of this theory are often inclined to preach, *per contra* Adam Smith and Henry George, the virtues of import tariffs, strong patent laws, and taxpayer-financed subsidies to favoured producers: all at the expense of the consumer and the overall size of the market. So perversely different!

For a rough but evidently telling indication of the relative buoyancy of land values, Table 2 below shows the significantly greater average annual inflation of house prices in the UK between 1970-2012 than the overall inflation rate: 9.8% as against 6.7%. This disparity is

especially evident in London and the South-East where population and regional incomes have risen most rapidly, creating greatest pressure on the fixed amount of space. House prices there exhibited roughly a four-fold increase in nominal terms.

The figures suggest (i) that real land values (hidden inside the "house" price inflation data, but surely the dominant element relative to the cost of bricks and mortar etc.[18]) are secularly very buoyant; but that (ii) land values are also cyclically very volatile.

[18] Between 1996 and 2012, for example, the "house" price index rose by 166% (see Table 2). Meanwhile, the price index for manufactured goods rose by 32% while prices overall rose by 40%. (www.ons.gov.uk/ons/datasets-and-tables/data-selector.html?cdid=JVZ7&dataset=ppi&table-id=4.) This indicates a fall in the relative price of manufactures (including building materials) but a very large rise in the relative price of "houses". This implies that the price of land must have risen by even more than the 166% increase in the "house" price index.

Table 2: Nominal and Real UK GDP, 1969-2012

Year	Nominal GDP (millions of pounds)	Real GDP (millions of 2008 pounds)	GDP Deflator (index 2008 = 100)	Annual GDP Inflation rate (implied by GDP deflator)	Annual rate of house price inflation
1969	47,023	563,097	8.35		
1970	51,696	575,736	8.98	7.5%	6.3
1971	57,670	587,805	9.81	9.2	11.9
1972	64,621	609,275	10.61	8.2	33.8
1973	74,545	653,124	11.41	7.5	36.2
1974	84,513	644,539	13.11	15.0	8.3
1975	106,717	640,534	16.66	27.1	5.9
1976	126,274	657,418	19.21	15.3	8.9
1977	146,973	673,025	21.84	13.7	7.6
1978	169,344	694,765	24.37	11.6	15.8
1979	199,220	713,380	27.93	14.6	29.3
1980	233,184	698,528	33.38	19.5	21.2
1981	256,279	689,289	37.18	11.4	5.5
1982	281,024	703,711	39.93	7.4	2.5
1983	307,207	729,215	42.13	5.5	11.9
1984	329,913	748,691	44.07	4.6	9.1
1985	361,758	775,643	46.64	5.8	9.1
1986	389,149	806,765	48.24	3.4	13.9
1987	428,665	843,572	50.82	5.3	16.5
1988	478,510	886,020	54.01	6.3	25.6
1989	525,274	906,236	57.96	7.3	21.0
1990	570,283	913,299	62.44	7.7	-1.3
1991	598,664	900,580	66.48	6.5	-1.4
1992	622,080	901,901	68.97	3.8	-3.8
1993	654,196	921,945	70.96	2.9	-2.5
1994	692,987	961,407	72.08	1.6	2.5

1995	733,266	990,751	74.01	2.7	0.7
1996	781,726	1,019,337	76.69	3.6	3.6
1997	830,013	1,054,232	78.73	2.7	9.4
1998	879,152	1,094,704	80.31	2.0	10.9
1999	928,871	1,134,723	81.86	1.9	11.5
2000	976,282	1,185,305	82.37	0.6	14.3
2001	1,021,625	1,222,650	83.56	1.4	8.4
2002	1,075,368	1,255,142	85.68	2.5	17.0
2003	1,139,441	1,299,381	87.69	2.4	15.7
2004	1,202,370	1,337,782	89.88	2.5	11.8
2005	1,254,292	1,365,685	91.84	2.2	5.6
2006	1,328,597	1,401,290	94.81	3.2	6.3
2007	1,405,796	1,449,861	96.96	2.2	10.9
2008	1,433,870	1,433,871	100.00	3.1	-0.8
2009	1,393,854	1,371,163	101.65	1.7	-7.6
2010	1,458,452	1,395,312	104.53	2.8	7.3
2011	1,508,836	1,410,903	106.94	2.3	-0.9
2012	1,529,921	1,414,821	108.14	1.1	1.6

Figure 1 (below) on the growth of house (i.e., land) prices in real terms (2012 prices)[19] also dramatically illustrates both (i) and (ii). It confirms the way that house (i.e., land) prices have risen faster than the rate of inflation and in real terms faster than the growth of real GDP. This is especially evident in London where there has been the greatest increase in infrastructural and business investment. This together with rapid population growth has pushed up the pressure of demand against a fixed supply of land.

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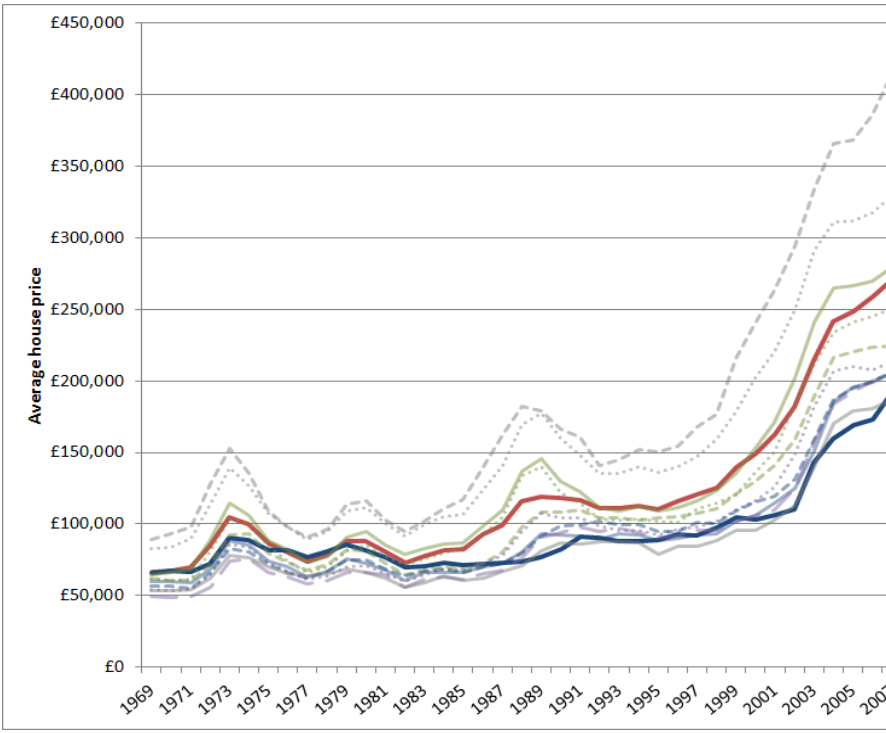
[19] ONS data show that the current UK average house price was £4975 in 1970 and £251,634 in 2011, a 50-fold increase: see www.gov.**uk**/government/uploads/.../Table_502_-_ONS.xls.
From Table 2 above, the annual average house price inflation rate, 1970-2012, was 9.8% while the annual average GDP deflator was 6.7%. The difference of 3.1 percentage points has produced a very strong secular skew in the distribution of wealth between home owners and the rest.

We shall then examine the implications raised by these figures for the extent of deadweight losses imposed on us all by the distortive fiscal system we have been living with for so long, and the corresponding opportunities that a more natural system would provide.

Figure 1: (REAL) HOUSE PRICE BOOM, 1966-2013



Source: David Bell and David Eiser, 2014[20]

[20] "Inequalities in Scotland: New perspectives". Paper for the David Hume Institute, Edinburgh, 2014, at

3. The "deadweight losses" or "excess burdens" of taxation.

We have seen that taxes on wages and on the profits of genuinely productive enterprise ultimately depress the land values and rents that remain in private hands. Land values and rents are also lower the lower is the growth of the economy because that means a lower growth of demand for land and natural resources. Nevertheless, much land value evidently does still remain in private hands. Thus governments have relied more heavily on earned income and expenditure taxes, including tariffs and quota restrictions on foreign trade, than on the unearned incomes from rent.

The deadweight losses from those taxes and protectionism are far greater than is commonly realised, and I shall simply list them here.

1. By raising costs, taxes depress wages and profits and this cuts the supply of work and workers at the margin. It also discourages investment by reducing the profitability of productive enterprise. Unemployment and – equally significant – underemployment increase. Many potential workers are openly unemployed; many others choose leisure over work when the marginal rate of tax on extra earnings is high. GDP falls below its potential. A figure of 10% can easily be attached to that loss.

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http://www.davidhumeinstitute.com/images/stories/publications/other/DHI_Paper.pdf

2. By increasing the cost of labour and capital while treating rents and capital gains from land relatively lightly, their relative prices are distorted. This has two effects: (i) the after-tax price of land falls relative to the price of labour and capital and this encourages its relatively wasteful use. Factor proportions diverge from what is most economically efficient from the social viewpoint. Most egregious is the holding of land idle purely for an anticipated speculative gain.

3. The price of "housing" is greater when taxes are imposed on the cost of building materials and the labour of construction workers. The market price of land, on the other hand, is higher the lower are the taxes that are imposed on its rent or selling price. This price has to be paid up-front when houses (new or old) are purchased. This makes housing less affordable and depresses the size and quality of housing and indeed the extent of homelessness.

4. The high and secularly rising price of land encourages its purchase as a speculative investment. This does not increase its supply. On the contrary, because the supply of land is fixed, the speculative demand both drives up its price and reduces its availability for productive use and/or (equally important) encourages its inefficient use.

5. This speculative demand explains the volatility of land prices and the credit-driven cycle of boom and bust that produces depressions that cost the economy much more than is gained from increased activity during the upswing of the cycle. (Compare the gains from the "roaring

twenties" with the costs of the Great Depression of the 'thirties.)

6. The poverty and inequality that these distortions produce give rise to social dislocations, class conflict, crime and drug-taking that further vitiates overall productivity and necessitates the diversion of a large fraction of public expenditure on the welfare budget that tackles the symptoms rather than the causes of the disease, and promotes a dependency culture rather than a vibrant one that enhances self-respect and fulfilment.

7. The reduction in productive activity depresses real reciprocal demand in the overall economy. The size of the market is smaller. The division of labour in its many powerful, productivity-enhancing manifestations is limited by this limitation in the size of the economy, as Smith, Ricardo and George understood.

8. It is not just that the size of the economy is thereby limited. So too is its rate of growth.

9. On a conservative estimate – surely difficult to challenge unless critics can produce more convincing alternatives – the above evidences of major distortions and losses suggest that over the century since the failure to implement the goals of the People's Budget of 1909, the growth rate of the British and Scottish economies has been at least 2

percentage points a year lower than it would otherwise have been.[21]

4. The estimated quantitative implications

On what I regard as a reasonable and conservative estimate of a 2 percent boost to the annual average growth rate of the UK economy and of Scotland if the radical fiscal reforms outlined above had been fully in place by, say, 1970, let me broadly quantify the implications.

I shall start with the actual 1970 real UK GDP (in 2008 prices) of **£575.7bn**. With the UK population in 1970 at 55.6 million, this represented an average income per head of **£10,555** in 2008 pounds.

Over the period 1970-2012, the UK's annual average growth rate was 2.52% (2.2% in per capita terms). By 2012, UK GDP stood at **£1,414.8bn**. With a population that

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[21] Recall that annual growth has been much faster than in the UK in economies such as Hong Kong and Singapore, where a far greater proportion of government revenue comes from rent of land or the leasehold sale of public land. The annual average growth rate for Singapore, 1970-2012, was 7.6 percent (6 percent in per capita terms), instead of the more typical one or two percent in countries more reliant on disincentive taxation. In real terms, Singapore's per capita income in constant US$ (base year 2011) rose from US$6,708 in 1970 to US$48,630 in 2011, **a real increase of 625 percent.** See http://www.indexmundi.com/facts/singapore/gdp-per-capita together with World Bank 2011 data: http://data.worldbank.org/country. **The comparable figures for the UK were US$19,198 in 1970 and US$41,680 in 2011, a far more modest increase of 116%. This meant that the UK, initially nearly three times richer than Singapore in 1970, ended up 17% poorer by 2011. Scotland lagged even more.**

had grown by 14.6% to 63.7 million, average income per head had slightly more than doubled to **£22,211** (again in 2008 pounds).

However, if the overall growth rate average had been just two percentage points higher over the period, at 4.52%, the real UK GDP in 2012 would have been more than 6 times greater, at **£3,768.4bn.** Income per head, instead of doubling, would have risen nearly six-fold, to **£59,158.** The difference is a very substantial sum: **£36,947 per head.**

Such is the power, or the magic, of compound interest when the full potential dynamism of a freer economy is given full rein. Growth provides the incentives and the wherewithal to invest in more specialised, hence more productive methods and organization.[22] With the greater competition and mobility that come with the removal of distorting and destructive taxation, growth is accelerated. But if, as may be expected, a higher growth rate is largely self-perpetuating in the absence of major exogenous shocks or policy errors, the gains are compounded and compounded.

The United Kingdom and Scotland may be unable to match the Singaporean record, though it may be noted that even Singapore has had its ups and downs and an incomplete

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[22] As Adam Smith (1776) recognised. In December 1928, Allyn Abbott Young (of Harvard and the LSE) gave a famous presidential address to the British Association (held that year in Glasgow). He extended Smith's insights on the cumulative nature of the gains from "the division of labour limited by the size of the market". He explained that in the modern world specialisation is as much ***by firms*** as it is ***within firms***. (Smith's example was the pin factory, seen today on Bank of England £20 notes).

fiscal revolution since her independence from Britain in 1959. But with her 7.6% average annual rate of growth (6% per capita) since 1970, **Singapore was able, from a base income only one third that of the UK, to catch up and overtake the UK within less than 40 years.**

This again emphasises the almost magical power of compound interest, or the relatively self-sustaining nature of growth. This justifies us making every effort to grasp the nettle of reform, and even shows the potential for Scotland to achieve a comparable "miracle" relative to the UK if it were to grasp the nettle of truly radical fiscal reform on the basis of full fiscal devolution that allows it to switch from taxing earned incomes toward the collection of unearned land rents instead. Clearly, it would be better if Scotland showed the UK the way by example so they could march together to an even brighter new dawn. (In the same way, Singapore and Hong Kong could have been even more prosperous if the rest of Asia (or the world) had followed its economic example.

5. The Case of Scotland

Next we examine the specifically Scottish data and consider what a similar boost to the dynamism and fairness of the Scottish economy and society could have delivered for her living standards over the period since 1970.

From Table 3, we calculate that Scotland's average annual real growth rate, 1970 – 2013, was 2.1%. The United Kingdom average growth rate over the same period was 2.52% (a figure somewhat depressed by Scotland's poorer growth rate).

If, as we hypothesised for the UK, the removal of deadweight taxes and their replacement with land rents as state revenue can reasonably, indeed conservatively, have been expected to add two percentage points to Scotland's average growth rate over this period, there would have been a massive boost to living standards today compared to the actuality.

In 1970 the average per capita income in Scotland was £9,166 (in 2011 prices). In 2013, this had increased by 133 percent to £21,378, an increase of £12,212 per person.

Had Scotland's average annual growth rate been 4.1% over this period, the 2013 average income *would have been not 133 percent but 463 percent higher at £51,589.* This is an increase of £30,211 per person.

Once again, this demonstrates the power of compound interest and justifies great efforts to overcome the opposing power of vested interest by explaining to the people and their politicians the root causes of inequality and low living standards. Change does not come automatically from arithmetic but from the cumulative rewards that a truly radical fiscal system could have delivered by removing the burden of deadweight taxation.

Table 3: Scotland: Gross Value Added, 1963-2013 (2011=100) chained volume measure at basic prices[1]		% Annual real growth	Current GVA £m[2]	Real GVA 2011=100 £m[3]
1963	33.2			37044
1964	35.8	7.8		39933
1965	37.2	3.9		41490

1966	37.9	1.9		42278
1967	38.6	1.8		43039
1968	40.3	4.4		44933
1969	42.0	4.2		46820
1970	42.9	2.1		47803
1971	43.5	1.4		48473
1972	45.1	3.7		50266
1973	48.4	7.3		53935
1974	48.5	0.02		54043
1975	47.9	-1.2		53402
1976	48.7	1.7		54310
1977	49.5	1.6		55179
1978	50.8	2.6		56614
1979	51.3	1.0		57180
1980	50.4	-1.8		56169
1981	49.7	-1.4		55393
1982	50.4	1.4		56169
1983	51.2	1.6		57068
1984	53.3	4.1		59408
1985	54.9	3.0		61119
1986	55.3	0.7		61547
1987	56.7	2.5		63086
1988	59.3	4.6		65988
1989	61.1	3.0		67968
1990	63.0	3.1		70075
1991	63.2	0.3		70285
1992	64.8	2.5		72042
1993	67.2	3.7		74708
1994	70.0	4.2		77846
1995	71.6	2.3		79739
1996	73.5	2.7		81892
1997	77.6	5.6	63810	86478
1998	79.3	2.2	66506	88381
1999	81.7	3.0	66071	91032
2000	83.5	2.2	69726	93035
2001	85.8	2.8	74280	95640
2002	89.0	3.7	77940	99179
2003	91.6	2.9	82863	102055

2004	94.3	2.9	88038	105015
2005	95.9	1.7	92866	106800
2006	99.7	4.0	99551	111072
2007	102.7	3.0	103028	114404
2008	102.0	-0.7	108130	113609
2009	98.1	-3.8	108660	109450
2010	99.7	1.6	108344	111201
2011	100.0	0.3	111535	111535
2012	100.2	0.2	113919	111758
2013	102.1	1.9	117116	113881

1. See http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/GDP. Gross Value Added (GVA) is GDP at basic prices. These data are given as indices in real terms. Quarterly GDP statistics for Scotland are available which detail growth in GVA for the whole economy and at a detailed industry level. Estimates are presented as indices in real terms, meaning they have been adjusted to remove the effects of inflation to represent changes in the volume of output rather than the cash value.

2. The Scottish Government does not publish its own real GVA data, but does give real growth rate indices. The ONS gives current GVA data for Scotland (http://ons.gov.uk/ons/taxonomy/index.html?nscl=Regional+GVA#tab-data-tables) from which I have computed real GVA in 2011 prices.

3. From http://ons.gov.uk/ons/taxonomy/index.html?nscl=Regional+GVA#tab-data-tables.

4. From http://www.gro-scotland.gov.uk/statistics/theme/vital-events/index.html

APPENDIX

A Brief Comparison with the Case of Singapore

In Singapore in FY2013, more than a third of all current government revenue of about £28 billion (about 16% of

GDP[23]) came from levies on the use of space and fixed property. A further £5billion (18% of current revenues) came from sales of government land. (The government owns about 75% of all land on the island.) In addition, there was undoubtedly much rental income in the corporate income taxes that accounted for 22% of all revenues. (For example, the Port of Singapore Authority's revenues amounted to nearly £2.4bn in 2013, mostly from docking charges. Its "profits" amounted to about £836m or 36% of revenues, and it paid around £150m in taxes.)

Singapore residents pay for the use of land in various other explicit and implicit ways. For example, one cannot buy a new car without first bidding, in a monthly auction, for a "certificate of entitlement (COE). The certificates are issued strictly according to the estimated increase in the carrying capacity of the road system – about 1% a year. Currently, a COE for a 1600cc car costs £33,000 on top of the world price of the car plus 31% import duty. So, a car whose world price is £15,000 would cost around £53,000 in Singapore. Also, there are steep parking charges and charges for entering the Central Business District. These are all effectively charges, or rents, for the use of road space.

Since 1973 various Land Acquisition Acts have also empowered the government to purchase any land deemed necessary for public development purposes at its historic and pre-development value. It is then sold post-development at its then market price.

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[23] This is less than half of the proportion of total tax revenues in the UK's GDP.

So Singapore (as in Hong Kong) obtains a substantial fraction of all government revenue from property taxes, with correspondingly low taxes on earned incomes and expenditures. As a result of this greater dependence on land-based revenues, Singapore's taxes on personal incomes account for only 13.4% of all government revenue. (In the UK, the proportion obtained from personal income taxes in FY 2012-13 was 26.9% plus another 16% in national insurance contributions.) The resulting dynamism of the Singapore economy – it has one of the world's fastest rates of growth – has naturally engendered a self-sustaining virtuous circle of buoyant land values and associated state revenues.

Black Holes & Pots of Gold

The stunning triumph of the Scottish National Party in the general election of May 2015 reinforces the need for tax reform. Without pro-growth changes to taxation, Scotland will be dragged by Westminster's fiscal policies into a UK-wide recession by 2019. And Conservative "austerity" policies will continue to weaken Scotland's economy and society.

The Conservative Government may now seek to trap the SNP with the offer of full fiscal autonomy, believing that this would cause havoc with Scottish finances. This would be a serious political miscalculation. For even under the devolved fiscal powers proposed through the Smith Commission, Edinburgh can cut Income Tax in 2017 and boost the economy to the tune of billions of additional pounds. Investors starting up new businesses would migrate to Scotland. And by raising revenue from land rents under a reformed property tax, the incentive to speculate in land – the primary driver of the business cycle – would be moderated.

Scotland can now strike out on an independent path to social renewal to achieve the SNP's goals of enhancing people's lives and abolishing inequality.

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Roger Sandilands
Emeritus Professor of Economics,
Strathclyde University

and

Fred Harrison
Land Research Trust

London

CONTENTS

A sizable proportion of the people of Scotland vested their trust in the Scottish National Party at the referendum in September 2014. Many who voted against formal independence from the United Kingdom have nevertheless registered their desire for change. Following the financial *débâcle* of 2008, the *status quo* is no longer acceptable. That is the lesson of the May 2015 General Election.

In March 2015 the SNP Government issued a document to chart the way forward. *Scotland's Economic Strategy* was presented as a step-change away from conventional policies, thereby highlighting the route towards a progressive society.

Few would disagree with the objectives set by the Scottish government. The goal is a vibrant and diversified economy which is fair and unites all sections of society. Priority is given to investment and innovation to create inclusive growth. This is the vision held out by the first Minister, Nicola Sturgeon, in her foreword. The concepts are familiar: sustainability, fairness, national prosperity.

A Manifesto for Emancipation

By understanding the SCALE and NATURE of the damage inflicted on them by the taxes levied by government, people can begin to visualise the enormous benefits they can achieve with fiscal reform. Conventional taxes are the legacy of the lairds. They are arbitrary, invasive and discriminatory.

The alternative for Scotland is replacement of taxes on earned incomes with a unique charge on unearned economic rents. This would lay the foundations for the democratisation of the public's finances. The cornerstone principle is that people should be free to **keep what they create, and pay for what they receive**.

Unfortunately, the plan conforms to the legacy of an economic paradigm which necessarily generates long-term unemployment, sustains barriers to personal development and creates obstacles to the renewal of communities.

The word *sustainable* is borrowed from ecologists and is now applied to practically every political pronouncement. But we now have sufficient evidence from economic history to know that the capitalist economy, as at present constructed, operates on the basis of 18 year business cycles. These are structured around boom/busts in the property market. The dynamics are to be found in the way land markets distribute income and raise expectations about capital gains that lead to destructive bouts of speculation. These are followed by protracted periods of unemployment (Harrison 1986, 2005). *Scotland's Economic Strategy* offers no antidote to that disruptive cyclical process.

The taxing question

The SNP complains that it has not been accorded sufficient power in the post-referendum settlement. However, its power over income tax rates provides the Scottish government with a tool that could lead to a *doubling* of the growth rate, re-lay the foundations of the labour market on principles of *equity and natural justice*, and attract entrepreneurs who wish to establish new businesses in a labour-friendly environment.

To realise why current policies and proposals will not stabilise the Scottish economy, we need to understand how taxes both discourage and distort economic activity. For historical reasons, they misdirect the employment of land, labour and capital. Fortunately, the Scottish Government has been empowered by the terms of the Smith Commission to significantly

restructure the public's finances. The SNP claims that "for the Scottish Parliament to be able to create jobs and tackle inequality, it needs more than control over one or 2 taxes. It needs control over a range of taxes, both personal and business. It needs control of key economic levers like employment policy". We shall show that, by exploiting existing devolved powers to the maximum, the Scottish Parliament can trigger a momentum towards prosperity to create significant benefits for everyone in Scotland.

Embedded Inequality

It is true that Scotland is tied to "an economic model that has exacerbated inequalities". Of the 34 OECD countries, the UK ranked 29th in terms of income inequality. *The disparity in the distribution of income is the logical outcome of the way in which government fiscal policies favour the activity which economists call rent seeking*.

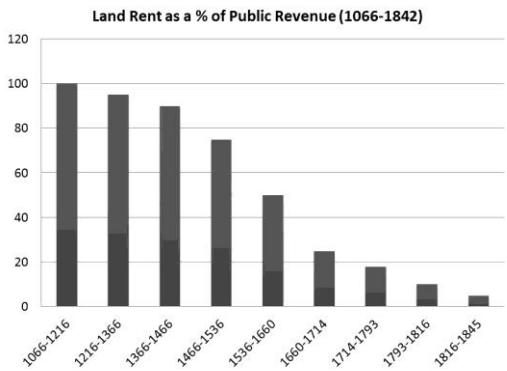
The original rent seekers were the lords and lairds who enclosed the common and clan lands so that they could capture the rents produced by people whose status was converted to that of tenants. Since then, rent seeking has been extended to include those with power in the banking sector, and those who are able to influence public policies in a way that privilege them against their fellow citizens. Ultimately, the economic gains accruing to these sections of society come out of what economists call *economic rent*.

Classical economists like Adam Smith divided national income into three categories:

- the wages of labour
- the profits from man-made capital that was created to assist in the value-creating process, and
- the remaining, net income, was economic rent.

In a society that was both fair to everyone, and efficient in the production of new value, wages and profits would remain in the hands of those who worked for their living. But the net income – the economic rent that exists after wages and profits have been paid – needs to be treated as unique. It is a composite value that reflects the services of both nature and society. Therefore, as Adam Smith pointed out, this was the proper source from which to fund public services (Smith 1776: Bk V, Ch. II, Pt. II, Art.I).

Graph 1



Source: Harrison (2012:87).

Historically, under the feudal and pre-feudal forms of social organisation, the State was funded out of that net income produced by the population. In England, for example, we have the data which demonstrates that the state created by William the Conqueror in the 11th century was wholly funded out of the rents generated by the agriculture-based economy

(Graph 1).

It all started to go wrong as the feudal aristocracy decided they had a special entitlement to that rental revenue. They embarked on a historic transformation of the English Constitution so they could take control of the public finances away from monarchs. Their intent was to reduce the revenue collected by the land tax, so that they could pocket the rents themselves. The reciprocal was the invention of new taxes which were directed at the peasants.

This was not just the theft of state revenue. It was also a strategy that suppressed the productive potential of the people. That was the effect of taxes on wages and consumption, and on the capital that was created by working people. As a result of tax-induced distortions, a raft of additional distortions were inflicted on communities as governments tried to manage the chaos that can be traced back to the de-socialisation of rental revenue. Those distortions restrained people's ability to produce the incomes that were legitimately theirs.

- Taxes such as those on salt and beer, and on the windows of people's homes, had a grinding down effect on both personal psychology and the fabric of communities.
- The privileged accumulation of rents enabled the aristocracy and gentry to evolve a culture that separated them from the rest of the people (Thompson 1991:Ch.2).

The Economics of Apartheid

The Scottish government asserts that "everyone has a right to participate fully in society". It notes the growing concentration of income at the top end of the distribution scale, with what it calls the "highest earners" receiving a greater share of the income in recent years.

The problem with the government's analysis is with the way it analyses the top incomes. In common with all governments and academic analyses of income distribution, such as the widely acclaimed investigation by Thomas Picketty (2014), insufficient attempt is made to differentiate between earned and unearned income.

- High incomes that are *earned* imply that the beneficiaries added value to the sum total of wealth.
- It is a different story with those who get rich on unearned income. They damage the welfare of others.

The inequality between the rich and the poor which the Scottish government says it opposes was, and remains, the logical outcome of conventional modes of governance.

The outcome of the privatisation of socially-created rent is the economics of apartheid. Any attempt to correct that inequality must be viewed in terms of the historical perspective.

In the late mediaeval period when the peoples of the British Isles still relied on agriculture, whole communities were demolished and people expelled from their traditional habitats. The sole purpose of this social engineering: the rent seekers wanted to maximise rental incomes. Thus was born the deferential society, in which the peasants, and the later proletariat, were schooled into doffing their caps in acknowledgement of their "betters".

This socio-economic model, which separated people into the haves and have-nots, remains with us to this day. The welfare state that was created in the 1940s could not alter this tragedy. Some of the worst excesses were moderated through the transfer of incomes to those who could not fight their way out of the grip of social exclusion. But the propensity remains: to recreate a new subclass with every generation.

The policy of taxing the incomes of those in work has added to the discriminatory nature

of the fiscal regime; in the process, it has added to loss of national wealth and welfare. This was not what Adam Smith envisaged for his native Scotland (see Box 1).

Box 1

Adam Smith's "Peculiar Tax"

"Both ground-rents and the ordinary rent of land are a species of revenue which the owner, in many cases, enjoys without any care or attention of his own. Though a part of this revenue should be taken from him in order to defray the expenses of the state, no discouragement will thereby be given to any sort of industry. *The annual produce of the land and labour of the society, the real wealth and revenue of the great body of the people, might be the same after such a tax as before*. Ground-rents, and the ordinary rent of land, are, therefore, perhaps, the species of revenue which can best bear to have a peculiar tax imposed upon them." (Smith 1776:Bk.V: 370; emphasis added).

A modern manifestation of the economics of apartheid is the enrichment of homeowners, who have capitalised on their good fortune with wealth untold, at the expense of the new generation. Young adults now find it increasingly difficult to establish families and secure a foothold in labour markets.

The Democratic Deficit

During the general election campaign of 2015, the SNP focused attention on its determination to abolish inequality by administering a "tax system that is fit for the 21st century" (SNP 2015:14). The puzzle, however, is that it proposed to retain the existing way of raising revenue, along with some amendment to the locally-administered property tax and piecemeal "land reform" in the guise of community buy-outs. On the basis of this strategy, the SNP could not realistically expect to change the course of Scotland's social and economic development. This conclusion holds, even if the SNP government achieved "full fiscal responsibility".

Table 1
Scotland's Finances Under Competing Scenarios: £ billions

2013–14	*2014-15*	*2015-16*	*2016–17*	*2017–18*	*2018-19*	*2019-20*
Net Fiscal Balance, 2013–14 (outturn), 2014-15 to 2019-20 (IFS Projections)[1]						
-3.8	-5.9	-7.6	-8.2	-8.5	-8.9	-9.7
Net Gain from Zero-rating Scotland's Income Tax						
11.5	11.5	11.5	11.7	11.9	12.2	12.4

[1] David Phillips, "Full fiscal autonomy delayed? The SNP's plans for further devolution to Scotland", London: IFS, 21 April 2015. http://www.ifs.org.uk/publications/7722

The SNP called such devolution of fiscal power "a fairer approach to taxation". The implications were examined by the Institute for Fiscal Studies (IFS). It concluded that Scotland would endure a fiscal deficit every year up to 2020. The shortfall of revenue in 2020 would be nearly £10 bn. The projection is shown in the top row of forecasts in Table 1.

The IFS projections are seriously misleading, because they do not include the offsetting gains that could be achieved from fiscal reform. To properly evaluate the claims by the SNP, the people of Scotland needed a full audit of the fiscal implications. Democratically speaking, they were entitled to some idea of the full costs associated with current funding policies. Those costs are technically called the "excess burden" of taxes. The more meaningful term used is "deadweight losses".

Box 2
Measuring Deadweight Losses

In the general election of 2015, all four major political parties declared that they would have to increase taxes if given the power by the electorate. The IFS compared those increases, and concluded: "None of

Economists can measure the wealth and welfare which people *forego* as a direct result of the way government chooses to raise revenue. The IFS failed to provide estimates of those losses (Box 2).

The scale of the damage caused by taxes remains controversial. HM Treasury claims that the deadweight loss is equal to 30p for every £1 raised (Harrison 2006:155, 156). This is such a low estimate that it raises serious questions about the integrity of the assessment process. The 0.3:1 ratio suggests that the Treasury is only taking into account their costs of administering the tax regime, and the costs of administrative compliance by taxpayers. This excludes the distortions to behaviour that arise from the disincentives created by taxes.

Some US economists claim that the total damage is as high as 1.5:1 – that is, a loss in wealth and welfare of $1.50 for every $1 collected by such taxes. The ratio that is recommended by Mason Gaffney, a leading fiscal economist, is 1:1 (Box 3).

By eliminating the losses inflicted by "bad" taxes, society enjoys a net gain from switching to charges that fund public services out of socially-created economic rent. Productivity is improved in a million and one ways.

- When people are not taxed on earned incomes they may choose to earn more because the additional income does not attract the attention of the taxman. Alternatively, they may choose to receive the benefit in the form of more leisure time.
- Investment in capital goods would increase and be employed more efficiently. Under

current taxes, capital is diverted to "tax efficient" projects which may not maximise the satisfaction of consumers, but which minimise the taxes paid by corporations.

Under the rent-revenue formula for public finance, labour and capital resources are devoted to optimising the satisfaction of people who want the goods or services that are made available in the economy. Consumer satisfaction is synchronised with the objectives of the producers. Here, we identify two of the virtues of the rent-revenue strategy.

Box 3
The Gold Standard

We base our estimates on *average* deadweight losses. What is sacrificed in precision is gained in public comprehension. Taxpayers are intuitively aware that there is an unaudited loss associated with the taxes they pay, but they have no concept of the society-wide scale of the losses inflicted by taxes. Politicians bombard them with value judgements like favouring "fair" taxes, but such words are plastic. They are manipulated to mean whatever is required by the politician's ideology.

What is not controversial, however, is the gold standard against which the damage caused by taxes must be judged. When revenue is collected from economic rent, damage is not inflicted. In fact, rent-charging tools must be characterized as "better than neutral" (Tideman 1999; similar insights are in Feldstein 1977). That is because they positively support behaviour that *increases* people's wealth and welfare. This is how one economic textbook explains the point:

"Land will not be forced out of use, because land that is very unprofitable will command little rent and so pay little tax. Thus there will be no change in the supply of goods that are produced with the aid of land, and, since there is no change in supply, there can be no change in prices. *The tax cannot be passed to the consumers"* (Lipsey 1979:370: emphasis in original). This means the charge falls (as Adam Smith insisted it should) on people who benefit from their use of the services provided by nature and/or society.

- The policy of abolishing harmful taxes is self-funding.

As taxes that damage the nation's health and wealth are reduced or terminated, *the rentable value of "land" in all its forms rises by corresponding sums*. This is explained by the ATCOR thesis – All Taxes Come Out of Rent. The theory was originally elaborated by John Locke in the 17th century, documented in the 18th century by Adam Smith in *The Wealth of Nations*, affirmed by John Stuart Mill in the 19th century, and received its most exhaustive treatment in the 20th century in the studies by Mason Gaffney, Professor of Economics at the

University of California. The political implications of this insight are of major significance: it means that, in abolishing harmful taxes, *current public services do not have to be sacrificed*. This contrasts with the austerity programme pursued by governments post-2008 in which, to cut budget deficits, taxes had to be raised or services reduced.

- The public's finances are democratised by the rent-revenue policy.

People exercise the power over when, why and how they fund the services they want to use. This is the case today, for example, in the housing market. When someone chooses the location where she wishes to live, she selects a home on the basis of two criteria.

1. The merits of the building are evaluated: whether it has the required number of bedrooms, for example. Then,

2. account is taken of the proximity to the desired public services, such as transport, schools and parks. The public services within the catchment area are advertised by estate agents. This is essential information, because the quality and accessibility of public services affect the price of the property.

The anomaly in this arrangement is that the part of the "house" value which is paid to access the public services is not paid to the public agencies that provide the amenities. Instead, that value (the rent of location) is paid to the vendor of the dwelling. *That payment exposes the pathological character of the tax regime.*

Now we consider what would happen if the central government in Westminster did agree to devolve full fiscal autonomy to the Scottish Parliament. What would count as the responsible political behaviour to which the SNP wishes to adhere? We may fairly assume that SNP politicians would not wilfully employ taxes that damaged the health and wealth of the people who elected them. As a party that asserts its "progressive" credentials, wouldn't the SNP wish to replace deadweight losses with net gains? The gains could be far greater than those we have calculated, if the deadweight losses reported by some distinguished economists prove to be closer to the mark (Box 4). So how could an SNP government achieve these benefits?

- As a first step, the government could zero-rate the Income Tax. Under the powers devolved to Edinburgh in 2015, control over the Income Tax, alongside the existing control over property taxation, makes such a reform possible.

The net gains are shown in the bottom row in Table 1. Replacing the Income Tax with rental charges would deliver an annual net gain to Scotland of *circa* £11bn. Over the five years from 2016 to the Scottish elections of 2021, the people of Scotland would be enriched by nearly £60bn!

Box 4

Top-end Losses

Martin Feldstein is a professor of economics at Harvard who chaired the President's Council of Economic Advisers in the 1980s. Using the *marginal* impact of taxes, he concluded that the damage to the US economy exceeded the ratio of 2:1 – that is, over $2 of losses in wealth and welfare were incurred for every $1 raised in taxes. His estimates began with a minimum of $0.78 per $1, assuming that a 10% increase in the tax rate increased tax revenues by 10% (Feldstein (1999:678).

But on the more realistic assumption that a 10% increase in the income tax rate will produce significantly less than 10% extra tax revenue (because the fall in income will reduce taxes), he estimates the deadweight loss at $44/$26, or $1.7 loss per $1 raised. And if the effect on social security revenues is also taken into account, the ratio is $44/$21.4 or $2.06 loss per $1 of revenue.

This contrasts strongly with the outcome under the existing funding arrangements, in which the people of Scotland would continue to accumulate a debt-servicing burden. By eliminating the deadweight losses caused by current taxes, the projected net gains from re-socialising rent revenues would be able to convert large annual deficits to large annual surpluses.

The SNP seeks "full fiscal autonomy". According to interpretations of statements by Prime Minister David Cameron, this may be the Machiavellian strategy of the Tory Government [Giles 2015]. We see such a strategy in different terms.

Assuming the SNP government achieved such power, it could decide to get rid of regressive taxes such as VAT, National Insurance Contributions, Customs Duties – all the exactions that distort people's decisions on spending and investing. According to the Institute for Fiscal Policy, full fiscal autonomy would bequeath a £7.6bn minimum black hole in Scotland's budget. But the alternative strategy, basing revenue on rents, would *transform black holes into pots of gold*.

In 2014, the revenue from those taxes levied in Scotland which caused serious damage to the economy added up to about £33bn. In this calculation, we have excluded those charges that fall directly on rent (such as oil rents). We also exclude the "sin taxes" that people may choose to retain, to deter private activities that impose social costs (such as taxes on tobacco and alcohol). If Scotland abolished the damaging taxes and instead raised the revenue from rents, the *net gain* in wealth and welfare in just one year would be *circa* £33bn.

But would there be sufficient rent to replace the bad taxes so as to retain the current level of public services? As already noted, this is not a valid way of putting the question.

The ATCOR thesis explains that *all taxes come out of rent*. In other words, *existing taxes are already derived from the nation's rents*, but they are collected <u>*indirectly*</u>, and misleadingly labelled "income" tax or "value added tax". By scrapping this indirect way of raising revenue, the "savings" would resurface as rents. So by swapping the indirect for the direct way of collecting the rent, Scotland would be rationalising the fiscal system.

But is this a merely cosmetic change? No! Nor is it simply a redistribution of one kind of revenue for another. Through the private and public sectors, the population would share the bonus of the ensuing *increase* in total income. This increase runs into billions of pounds a year.

Dynamics of the Moral Economy

The switch to funding policies that draw revenue directly from rent would frame the national budget within the principles of integrity, transparency, accountability and, indeed, natural law

(Sandilands 1977).

Revenue from North Sea oil rents may diminish to zero over the next 40 years. But Scotland is rich in its educated labour force. This means that she will produce social rents *at an increasing rate* as the productivity of the economy rises under the influence of tax reform.

The only issue at stake is the quantum of rents that the government allows the population to produce. For in addition to the rents produced by people working in cooperation in their communities, the land of Scotland is rich in rent-generating natural resources. These include the

- radio spectrum
- highland wind
- aircraft time slots
- nature's waste absorbing capacity
- salt water
- fresh water
- …and a long list of other natural and social resources

An exhaustive list of rent-generating resources has been provided by Mason Gaffney (Appendix 1 in Harrison 1998; and see Gaffney 2009).

Box 5
The Magic of Economic Freedom

The annual average growth rate for Singapore (1970-2012) was 7.6% (6% in *per capita* terms), instead of the more typical 1% or 2% in countries more reliant on disincentive taxation. In real terms, Singapore's *per capita* income in constant US$ (base year 2011) rose from US$6,708 in 1970 to US$48,630 in 2011, a real increase of 625%. See http://www.indexmundi.com/facts/singapore/gdp-per-capita together with World Bank 2011 data: http://data.worldbank.org/country

The comparable figures for the UK were US$19,198 in 1970 and US$41,680 in 2011, a far more modest increase of 116%. This meant that the UK, initially nearly three times richer than Singapore in 1970, ended up 17% poorer by 2011. Scotland lagged even more.

Vision of Scotland's Emancipation

To appreciate the scope for transforming people's personal lives and the fabric of the community, we need an exercise in counterfactual history.

What would have happened (say) if the rent-revenue policy had been adopted back in the 1970s? How much richer would the people of Scotland have been, if the growth rate had been higher by, say, 2% per annum? This is a reasonable, cautious assumption to take as the starting point for analysis. Singapore, for example, increased its economy over many years by an annual average rate of 7.6%. That is three times Scotland's rate (Box 5). How was this achieved? According to a professor of economics at Singapore Management University, the city state flourished because the economic model contained "elements of [Henry] George's land value tax capture".[24] She explained:

Soon after independence, the Land Acquisition Act was passed in 1966, which gave

[24] Henry George was the American social reformer whose *Progress and Poverty* (1879) advocated the need to base the modern state's revenue system on socially-created rents.

the state broad powers to acquire land. In 1973, the concept of a statutory date was introduced, which fixed compensation values for land acquired at the statutory date, November 30, 1973. State land as a proportion of total land grew from 44% to 76% by 1985 and is now around 90% (Phang 2015).

Rents that accrued from growth were ploughed back into funding yet more and improved infrastructure, and taxes that damaged the economy were held down. Thus, we are entitled to take Singapore's performance as a comparator, to gain some sense of what Scotland could have achieved – and might still achieve – if she had enjoyed similar fiscal and land-use policies (Sandilands 1992, 2015).

The 1970 real UK GDP (in 2008 prices) was £575.7bn. With the UK population at 55.6 million, this represented an average income per head of £10,555 in 2008 pounds. Over the period 1970-2012, the UK's annual average growth rate was 2.52% (2.2% in *per capita* terms). By 2012, UK GDP stood at £1,414.8bn. With a population that had grown by 14.6% to 63.7 million, average income per head had slightly more than doubled to £22,211 (again in 2008 pounds). If the overall growth rate average had been just two percentage points higher over the period, at 4.52%, the real UK GDP in 2012 would have been more than 6 times greater, at £3,768.4bn. *Income per head, instead of doubling, would have risen nearly six-fold, to £59,158.* The difference is a very substantial sum: £36,947 per head. Such is the effect when people are freed to realise their full economic potential.

Growth provides the incentives and the wherewithal to invest in more specialised, hence more productive methods and organization. With the removal of distorting and destructive taxation, growth is accelerated. But if, as may be expected, a higher growth rate is largely self-perpetuating (in the absence of major exogenous shocks or policy errors), the gains are compounded and compounded. With her 7.6% average annual rate of growth (6% per capita) since 1970, Singapore was able, from a base income only one third that of the UK, to catch up and overtake the UK within less than 40 years. This reveals the benefits from grasping the nettle of reform, enabling Scotland to achieve a comparable "miracle" relative to the UK if it were willing to embark on a justice-based fiscal reform through full fiscal devolution.

A Fresh Start

In *Scotland's Economic Strategy* the SNP government claims that there is an advantage to be gained from amending the corporation tax in the way that it is believed the Northern Ireland assembly would do to compete with the low corporation tax that prevails in the Republic of Ireland. This ignores the sponge-like effect of the land market. Cut the income tax or corporation tax and the benefit ends up in raising the price of land. House prices would rise by an equivalent sum, thereby injecting a new round of destabilisation in the property market (as indeed was the Republic of Ireland's experience). The winners would be those who currently own land-based assets.

The Scottish government's strategy on land is at present confined to two policies.

1. Empowering local communities to buy their way back into land rights.

There is not, and never will be, enough money to empower every community to buy land back from existing owners. Justice requires a formula that is fair to everyone in Scotland. The buyback model does not deliver that universal justice.

2. Authorising communities to acquire land in public ownership.

The efficient use of land in the public domain is essential. Much of it is unused or underused. This imposes a significant and continuous burden on the population. Nevertheless, this approach to community empowerment does not lead to the dynamic model of citizen engagement of the kind that liberates everyone to fulfil his or her capabilities, freed from the shackles of dis-incentivising taxes.

Our vision of an emancipated Scotland offers new perspectives on existing government policies. The rural development programme, for example, proposes expenditure of £1.3 billion over the six years to 2020. This sum, and the associated fiscal policies, cannot in themselves override the process by which people are systematically driven away from the countryside in search of jobs in towns.

The Attainment Scotland Fund of £100 million for education and disadvantaged communities is welcome, but it lacks the punch that is needed to knock down the barriers that are endured by each new generation. The sum of £100 million is not trivial, but is modest when compared to the riches that would flow by zero rating the income tax.

Scotland has a resource that will never be exhausted: the ingenuity of the people themselves.

- Most of the rents now generated within the borders of Scotland do not stem from nature. They originate in the cooperative activities of people working through their communities.

- The agencies that provide the services that are shared in common automatically create the value that is pooled into that stream called economic rent. That is a stream which will never run dry for so long as the people are free to work.

But the stream of rents can be reduced to a trickle under government policies that damage the freedom to work efficiently.

Through the ballot box the people of Scotland have registered their desire for a fresh start. Whether this is within or without the UK, there is no alternative model for social renewal than the one driven by fundamental financial reform. The history of post-communist countries is revealing.

The rent-as-public-revenue model was commended in the early 1990s by a distinguished group of economists, including five Nobel laureates, as the cornerstone for the new market economy (Noyes 1991:225-230). The current tragedies in Eastern Europe, from Russia westwards to the Baltic countries and southwards through the Balkans to Ukraine, illustrate what happens when the rent-seeking motive is allowed to take control of culture. Oligarchs are the winners.

The lessons of post-Soviet Europe were not learnt by the Chinese Communist Party. Soon after China began to liberalise the command economy, the rent seekers moved in to inflict a similar tragedy on the people. Civil servants in local authorities, and investors who originally made their fortunes out of manufacturing, piled into real estate to enhance their personal fortunes. The result was a land boom that continues to destabilise China (Graph 2).

Graph 2

The people of Scotland now have a unique opportunity to scope out the strategies that will actually work for their personal and common good. *By empowering their elected representatives to initiate the appropriate fiscal reforms, they would be fulfilling the agenda which their ancestors mandated more than a century ago.* That was when the people of Scotland took the initiative to authorise their representatives to introduce new charges on the rents of land. For a summary of that history, see the video https://www.youtube.com/watch?v=qHSlMFnnsC0 .

If Scotland once again took the lead, we believe that the other nations of the UK would follow suit, as they did in the lead-up to the People's Budget of 1909. This time, in the absence of the intervention of a world war, the outcome would be a material prosperity and quality of life greater than the sum of the divided parts.

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