Financing local infrastructure using land value capture
Potential levels of investment for the Edinburgh City Region

This summary report has been prepared for Built Environment Forum Scotland to estimate the returns from land value capture for the Edinburgh City Region over a 20 year period. These figures are to be used to support city region infrastructure planning and provide indicative estimates of the scale of infrastructure that could be financed from land value capture.

April 2017
Summary

The Scottish Government is right to argue in its consultation on the future of the planning system that actively enabling infrastructure has a critical role to play in supporting housing delivery. Indeed, the idea of embedding an infrastructure first approach is key to solving the challenges of housing development. However, there is a risk that the current proposals of utilising an infrastructure levy ignore both its failure in England and best practice across Europe and Asia in financing infrastructure.

If the Scottish Government is to be successful in actively enabling infrastructure it must start learning from European and Asian countries and implement a land value capture system instead. This will require the Scottish Parliament to amend the Land Compensation Act (Scotland) 1963, permitting public authorities to capture the uplift in land values to finance the infrastructure.

Analysis by the Centre for Progressive Capitalism suggests this would unlock around £8.6bn of additional funds for the Edinburgh City Region alone to finance infrastructure over the next 20 years. Furthermore, these additional funds would have no negative impact on the public finances. The Centre for Progressive Capitalism recommends the Scottish Government prioritise the implementation of land value capture as a core component of a reformed Scottish planning system.

Land Value Capture

Land value capture is a widely-used mechanism across Europe & Asia to finance infrastructure investment to open new areas of land for housing. The mechanism works by the public authority monetising the difference between the value of either greenfield or brownfield land and residential land value. Public authorities borrow directly from the bond market and payback the investors with the revenue streams from the uplift in land values resulting from the infrastructure investment and the associated planning permission that is subsequently awarded.

Examples of land value capture in the Netherlands & Germany

Hamburg’s Hafen City, Germany

In 1996, Hamburg set out a plan to expand the city using adjacent brownfield sites in order to dramatically increase the housing supply in conjunction with a new container terminal. While around 70 per cent of the land to be developed was already under the ownership of the city-state, the agency responsible for the project, Hafen City Hamburg GmbH, was tasked with bringing the remainder of the privately-owned land into public hands. The infrastructure for the project was financed by borrowing against the land assets and included building roads, bridges, public spaces and flood defences. The total public expenditure of €2.4bn was subsequently complemented by private investment totalling €8.4bn. Sales of land that have captured the uplift in land value due to the infrastructure investment has permitted the agency to finance its operations and also to pay back the loans needed for investment.

Amersfoort, Netherlands
The Vathorst Development Company (OBV) was set up in 1998 in Amersfoort to expand the housing supply. OBV was a 50:50 joint venture between the local authority and a consortium of private landowners and developers who had pooled their land holdings. The development company was responsible among other things for land acquisition and commissioning infrastructure. Financing the development of 11,000 homes, a shopping centre and business park amounted to €750m, of which half was used to fund infrastructure. Borrowings with a maturity of 15 years are to be repaid out of the proceeds from land sales.

**How it works in the UK**

Where the public authority is the owner of the land that covers the entire area of the scheme, then land value capture is also possible in the UK. A good example of this is the North West Cambridge development undertaken by Cambridge University. It used the mechanism of land value capture to finance the £70m infrastructure, thereby unlocking land for 3,000 homes to be built. If the University had to acquire the land at market values, the project would not have been viable. The value of residential land in Cambridge for 3,000 units is estimated at around £384m, which is more than the £350m the university borrowed from the bond market to finance the entire project.

This example where the public authority is both the landowner and infrastructure provider for a given project is unfortunately the exception. Typically, large scale projects would need to acquire privately owned land. However, the current legal framework in both England and Scotland requires landowners to be compensated as though the land had residential planning permission on it. This in turn often makes projects unviable and reduces the ability to use land value capture as a self-financing mechanism for infrastructure.

**Scottish Government planning consultation and infrastructure financing**

The Scottish Government is right to argue in its consultation on the future of the planning system that actively enabling infrastructure has a critical role to play in supporting housing delivery. The idea of embedding an infrastructure first approach is key to solving the challenges of housing development. Indeed, by asserting that infrastructure should be recognised as a key part of place making goes a long way to resolving the future challenges that the Scottish Government will have to deal with.

However, the Centre for Progressive Capitalism urges the Scottish Government to reconsider its approach on how to finance local infrastructure. While it is eminently sensible to accept that section 75 payments are not going to fund large scale infrastructure, the current proposal of utilising a form of community infrastructure levy will not be able provide sufficient funding to finance Scotland’s 21st century infrastructure needs.

The evidence from England from the recent Community Infrastructure Levy (CIL) review has demonstrated that it has been a poor way of financing infrastructure. Even where it has been used to support large scale projects such as Crossrail, it provided only 4% of the total amount required. The CIL review suggests using a fixed percentage on projects, however, there is a limit to what can be financed by developers given they have already paid for land at residential values.
The best practice across Europe and Asia suggests that land value capture is a much more effective approach to financing infrastructure, given that this approach is generally self-financing. The Westminster Government in its housing white paper has proposed exploring land value capture for England.

It is widely accepted that land value capture would work for city regions like London which have high residential land values and high infrastructure costs. However, Centre analysis also shows that land value capture can provide significant financial benefits for other city regions.

Such estimates provide useful indications of the scale of projects that city regions should be planning to unlock available land for new housing. In our discussions with public authorities over the last few years, one common factor has been that the size of infrastructure projects proposed remain small-scale. This is understandable given that finance has been in short supply.

To understand the potential scale of land value capture in Scotland, the Centre for Progressive has undertaken some empirical analysis for the Built Environment Forum Scotland to estimate potential land value uplift for the Edinburgh City Region. This empirical approach is based along the lines the Centre has used for England.¹

Estimates of annual land value capture

The estimates for the amount of investment that could be financed using land value capture largely depend on the scale of housebuilding, which is linked to demand for housing and the absolute size of the city region.

For the Edinburgh City region it is estimated that over a 20 year period an additional £8.6bn of infrastructure could potentially be funded. This figure is a nominal 20 year estimate based on current housebuilding rates, but assumes that large scale infrastructure projects are able raise the rate of housebuilding by 35%.

As the Edinburgh City Region thinks about its infrastructure planning and how it can unlock new land for housing, these are the kinds of funding levels that can be assumed - as a result of reforming the Land Compensation (Scotland) Act 1963 - to support new infrastructure without recourse to public subsidy.

¹ See Bridging the Infrastructure Gap, June 2016 http://progressive-capitalism.net/2016/06/bridging-the-infrastructure-gap/
Table 1: Land Value Capture Analysis

<table>
<thead>
<tr>
<th>Land Value Capture Analysis</th>
<th>Edinburgh City Region</th>
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</thead>
<tbody>
<tr>
<td>Number of units 2015/16</td>
<td>4,330</td>
</tr>
<tr>
<td>Residential Land value £m</td>
<td>381</td>
</tr>
<tr>
<td>Original Use value £m</td>
<td>31</td>
</tr>
<tr>
<td>Annualised uplift £m</td>
<td>350</td>
</tr>
<tr>
<td>Estimated section 75 revenue £m</td>
<td>32</td>
</tr>
<tr>
<td>Public land sales £m</td>
<td>TBC</td>
</tr>
<tr>
<td>Incremental available uplift £m</td>
<td>319</td>
</tr>
<tr>
<td>Annualised uplift with 35% higher building rate £m</td>
<td>430</td>
</tr>
<tr>
<td>20y uplift £m</td>
<td>8,600</td>
</tr>
</tbody>
</table>

The data for Scotland is not in as robust format as the data in England, hence these estimates should be used as proxies prior to more accurate data being published. The sources of data used and assumptions are set out in the appendix.

Reform of the Land Compensation (Scotland) Act 1963

The Centre for Progressive Capitalism proposes amending the 1963 Land Compensation Act for Scotland so that the municipality benefits from the uplift in land values instead of the landowner. This would bring Scotland in line with other advanced economies that utilise land value capture to self-finance infrastructure without any further deterioration of the public finances. Furthermore, it would also ensure that the firms and workers whose productivity increases the demand for land would be rewarded by improved local infrastructure.

Sections 22-24 of the 1963 Act ensure that compensation levels ought to be set for land as though planning permission were granted. In effect, this prevents land value capture being utilised where the landowner is private, as any hope value will flow to the landowner and not the public authority.

In order to address this issue in legislation, it is recommended that the relevant sections of 22-24 of the Act be amended so that: No account is taken of any prospective planning permission of land designated by a city region\(^2\) for infrastructure including housing with respect to compensation.

In addition, it is recommended that section 25 be amended so: Certificates of appropriate alternative development would cease to apply in those areas designated by city regions\(^3\) for development.

The amendment of the 1963 Act in this way will ensure that the land market mechanism will no longer be distorted by speculation and oligopoly / monopoly effects. The market mechanism would still

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\(^2\) The definition of city region can be applied to both formal and informal groups of local authorities that come together to agree on planned large scale infrastructure.

\(^3\) See note 2
determine land values as set out in section 12 (2), however given that hope value would no longer be taken into account for compensation purposes, market values would fall to levels just above use value.

Although this legislation is related to compulsory purchase orders (CPOs), evidence from Continental European countries suggests that once the incentive to profit from speculation through hope value is removed, the land market will function more efficiently leading to a reduction in CPOs. In general, land would be expected to trade at slightly higher values to use value, with the premium roughly equivalent to the cost of undertaking a CPO which local authorities would be willing to forgo.

In essence, these reforms will enable the price mechanism to function fully indicating to all parties, indicative land values. Critically, these reforms would facilitate land value capture enabling Scottish city regions to finance large scale infrastructure investment, thereby unlocking land for new housing.
Appendix: Notes on the data

The housebuilding completion data by individual local authority are published by Housing Statistics Scotland.

Greenfield/brownfield split for Edinburgh is sourced from Edinburgh City Council. Estimation for other city region local authorities has been derived from English core city averages.

Density data for greenfield sites has been derived from Edinburgh data for all local authorities.

Density data for Edinburgh brownfield sites is from Edinburgh City Council. Estimated brownfield density data for other local authorities is at lower rates and derived from the average of English core cities.

Residential and industrial land values for each local authority have been derived from Valuation Office Agency data by Archie Rintoul.

Agricultural land values have been taken from the 2011 VOA property market report.

Accelerated rate in housebuilding from infrastructure derived from National Infrastructure Commission estimates which suggests that large scale infrastructure supports an additional 35% in housebuilding rates.

Section 75 estimates are derived using the Edinburgh city council data which amounts to 9% of the full uplift which has been used for all other local authorities.

City-region definitions

The Edinburgh city region has been defined by the Edinburgh and south east Scotland city region deal, which dovetails with the travel to work area of the successful Edinburgh agglomeration. This includes the following local authorities:

- East Lothian
- Edinburgh
- Fife
- Midlothian
- Scottish Borders
- West Lothian