PAYING THE PIPER

Funding and Financing Infrastructure Issues for Housing in Scotland
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CIH Scotland has more than 2800 members working in local authorities, housing associations, housing co-operatives, Scottish Government and Government agencies, voluntary organisations, the private sector, and educational institutions.

The CIH is about transforming peoples’ lives and communities for the better. We do this by ensuring members, others working in housing and organisations are equipped to be the best they can be. Equipping them to deliver top quality services, decent housing and decent communities.

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## CONTENTS

**EXECUTIVE SUMMARY** 3

1 **INTRODUCTION** 5
   - The perennial problem 5
   - Report purpose and approach 5
   - Report structure 5

2 **SCOPING THE PROBLEM** 7
   - What is ‘infrastructure’? 7
   - Infrastructure investment: performance and plans 8
   - Mechanisms for funding and financing infrastructure investment 12
   - Conclusions 13

3 **INTERNATIONAL PERSPECTIVES** 14
   - Plus ça change, plus c’est la même chose 14
   - Conclusions 16

4 **THE SEARCH FOR SCOTTISH SOLUTIONS** 17
   - Central Government perspectives 17
   - The Scottish Futures Trust 18
   - Local Government perspectives 19
   - Conclusions 20

5 **INNOVATIVE MECHANISMS: A CLOSER LOOK** 21
   - Public debt 21
   - Taxation 22
   - User charges 24
   - Producer levies 25
   - Special Purpose Vehicles 32

6 **ASSESSMENT, CONCLUSIONS AND RECOMMENDATIONS** 36
   - Sizing the gap 36
   - Financing infrastructure investment 37
   - Paying the piper 37
   - Broader considerations 39
   - Recommendations 40

**APPENDIX 1: TAX INCREMENT FINANCING CASE STUDY** 42

**APPENDIX 2: LAND BANK FUND CASE STUDY** 43

**GLOSSARY** 44

**BIBLIOGRAPHY** 46
EXECUTIVE SUMMARY

This report explains the alternative approaches available to both finance and fund housing infrastructure investment, looks at the strengths and weaknesses of these approaches and draws conclusions for improving future housing infrastructure investment in Scotland.

The term ‘infrastructure’ has no universally recognised definition. In a housing context, it can be understood as either the connections made on site between new housing and power/communication/transport/water etc distribution networks (interpretation 1) or affordable housing per se (interpretation 2). Depending on which interpretation is used, a very rough estimate of the Scottish housing infrastructure investment gap is somewhere in the range £100 million - £500 million per annum.

The UK comprehensive spending review in October 2010 delivered a reduction in the overall Scottish budget of over 11% in real terms between 2010/11 and 2014/15. This includes a 36% reduction in the capital budget. The Scottish Government has subsequently proposed a budget for 2011/12 that includes a real terms cut of almost 35% in the housing budget.

‘Funding’ infrastructure involves actually paying for capital assets, while ‘financing’ infrastructure is about facilitating the acquisition of those assets. A finance deal always has to be funded. Public sector borrowing and use of private finance are the most important ways of financing infrastructure investment. Taxation, user charges, producer levies and public sector asset sweating using a bespoke ‘special purpose vehicle’ are the main funding options.

International evidence on infrastructure investment confirms widespread use of all the main financing and funding options available and demonstrates that there is no silver bullet solution to securing greater infrastructure investment.

Securing additional infrastructure funding and financing has clearly been exercising both national and local Government bodies in Scotland for some time. A significant range of options for securing additional infrastructure investment in Scotland has been identified, but limited progress has so far been made in deciding which to actually adopt and develop.

On balance, prudential borrowing used in creative ways and backed by new sources of funding looks the most productive financing route to pursue at the present time.

The most productive routes to securing more funding are tax increment finance, land bank funds, the development of a national rolling infrastructure fund and of a Scottish community infrastructure levy. Increasing social rents to support greater housing infrastructure investment should not be entirely discounted, but would be controversial and from a system-wide perspective the yield may be modest. In the longer term, guarantee schemes may also play a contributory role.
We recommend that:

➣ The Scottish Government works with COSLA and the development industry to scope out a Scottish community infrastructure levy scheme.

➣ The Scottish Government commissions research to assess the overall annual yield potential of tax increment financing in Scotland and, within this, the extent to which this approach can be used to directly support future new housing supply.

➣ The scope for evolving the ‘JESSICA’ fund into a more broadly-based rolling Scottish infrastructure fund is assessed once the scheme has been properly bedded in.

➣ Scottish local authorities are given greater encouragement to formally assess the potential for developing in-house land bank funds and land trading ventures to facilitate housing infrastructure investment in the immediate future.

➣ The Scottish Government and COSLA open discussions on the potential for establishing a land development/assembly advice and support giving agency to complement the financial advice giving role of the Scottish Futures Trust. These discussions should also encompass acceptable arrangements for the future governance of these specialist advice agencies.

➣ In future, Scottish local authorities use prudential borrowing powers allied to Scottish community infrastructure levy and tax increment financing to support greater housing infrastructure investment.

➣ The Chartered Institute of Housing in Scotland takes an ‘honest broker’ lead in assessing the true potential for social housing rents to support greater investment in affordable housing in Scotland.

➣ The Scottish Government explores further the longer-term potential of guarantee models for supporting new housing supply.
1 INTRODUCTION

The perennial problem

Funding and financing infrastructure development is a perennial issue for central and local governments around the world. Different emphases have been placed on the range of possible solutions in different countries at different times. Increasingly within the UK, borrowing/tax solutions have been supplemented by approaches involving special purpose vehicles (SPVs) such as the private finance initiative (PFI) and producer levies such as planning obligations.

Scottish experience of the more recently developed mechanisms has been patchy, and the Scottish Futures Trust (SFT) was established in 2008 to help ensure better value for taxpayers in the delivery of future infrastructure projects. To date, SFT has experienced a barrage of quite sharp criticism as to its purpose and effectiveness, while the wider infrastructure financing debate has been played out in the context of continued effort by the Scottish National Party to secure further devolution of power from the Westminster Parliament.

The issue of infrastructure finance has of necessity also had to be taken forward in recent years in the context of the near meltdown of international finance markets in 2007, government intervention to avoid consequent economic catastrophe, and a subsequent need for unprecedented fiscal austerity measures to pre-empt a sovereign debt crisis. Yet even as this process has been playing out, an Independent Budget Review Panel set up by the Scottish Government has re-affirmed the importance of maintaining expenditure on infrastructure as a potential driver of job creation and economic growth (Beveridge et al, 2010).

Report purpose and approach

This report explains the alternative approaches that can be used to finance and fund housing infrastructure investment. It looks at the strengths and weaknesses of the various approaches and draws some conclusions for improving future housing infrastructure investment in Scotland.

In the course of preparing the report, we have examined the available literature and held discussions with a number of interested parties. We are very grateful to all those who spoke with us, as well as to Professor Duncan MacLennan of St Andrews University and Professor Kenneth Gibb of Glasgow University, who both offered comments on an early draft. However, responsibility for the content of this report remains ours alone.

Report structure

Section 2 looks at the nature of the problem in more detail by addressing the thorny issue of how to define infrastructure, looking at UK and Scottish infrastructure investment performance and plans, and developing a framework for organising subsequent discussion of available solutions.

Section 3 considers infrastructure issues in an international perspective and, using the classification framework developed in section 2, shows that there is little of genuine novelty to draw upon from experience elsewhere.
Section 4 documents the search for Scottish solutions, explains where Scottish central and local Government currently stand on the infrastructure issue and outlines the role of the Scottish Futures Trust.

Section 5 takes a much closer and more critical look at the wide range of possible approaches suggested by various commentators for increasing infrastructure investment, again using the classification framework developed in section 2 to assist inquiry.

Section 6 provides an overall assessment of options, draws some conclusions, and makes a number of recommendations. A glossary has also been included to help the reader make headway in this acronym littered field of endeavour.
2 SCOPING THE PROBLEM

What is ‘infrastructure’?

The term ‘infrastructure’ has no universally recognised definition and covers an extremely wide range of possibilities in practice (Pomeroy, 2007).

The OECD defines infrastructure as the “system of public works” in a country, state or region. More specifically, OECD recognises two main categories of infrastructure (Inderst, 2009):

**Economic infrastructure:**
- Transport (toll roads, airports, seaport, tunnels, bridges, metro, rail systems, etc).
- Utilities (water supply, sewage system, energy distribution networks, power plants, pipelines, gas storage).
- Communication (TV/telephone transmitters, towers, satellites, cable networks, etc).
- Renewable energy.

**Social infrastructure:**
- Education (schools, universities and colleges).
- Health (hospitals and health care centres).
- Security (prisons, police stations, military installations, etc).
- Other (housing, community facilities, etc).

However, there remains considerable disagreement on what specifically counts as an infrastructure asset. For our purposes, much of this disagreement is irrelevant, as our concern is primarily to do with site-specific new housing investment. Even here, however, there is scope for very different interpretations. In particular, infrastructure in this context could be taken to refer to the connections made on site between new housing and power/communication/transport etc distribution networks, which currently costs anywhere between £5,000 and £40,000 per unit\(^1\) (call this interpretation 1). Alternatively, affordable housing per se can be classed as social infrastructure, in which case the unit cost in 2009/10 would have been around £121,000\(^2\) (call this interpretation 2).

In pre-crunch times, the Scottish Government ‘aspirational target’ for annual housing completions was 35,000 (Scottish Government, 2007a), while the Chartered Institute of Housing in Scotland (CIHS) – along with Scottish Federation of Housing Associations (SFHA), the Convention of Scottish Local Authorities (COSLA), Shelter Scotland, the Scottish Council for Single Homeless (SCSH) and Scottish Church Houses Action (SCHA) – argued that 10,000 of these completions per annum should be affordable (Chartered Institute of Housing in Scotland, 2009).

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\(^1\) The basis of this estimate is advice kindly provided by Matthew Benson, Director of Research and Consultancy at Rettie and Co.

To fix ideas, taking the midpoint of the above noted unit infrastructure costs under interpretation 1 (£22,500), the annual cost of housing-related infrastructure in Scotland would be in the region of £787.5 million (for a total supply of 35,000 units), or £225 million (for 10,000 affordable units). Under interpretation 2, the annual cost of housing-related infrastructure in Scotland would be 10,000 multiplied by £121,000, or just over £1.2 billion.

**Infrastructure investment: performance and plans**

**UK infrastructure**

Infrastructure investment in the late 1960s and early 1970s, as measured by UK public sector net investment (PSNI), was normally in excess of 5% per annum. By the early 1980s, this had fallen to less than 2% (figure 2.1). PSNI began to grow again from the millennium onwards, reaching 3.5% in 2009/10.

**Figure 2.1: UK Public Sector Net Investment as a % of GDP**

Notes: Red = projection; Net investment is gross spending on investment less depreciation. It measures the extent to which public spending is adding to the country’s stock of physical capital.

Source: Public Sector Finances Databank 30 September 2010 http://www.hm-treasury.gov.uk/psf_statistics.htm

In October 2010, the Coalition Government published a UK-wide infrastructure plan\(^3\), which focuses on economic infrastructure only, but notes the UK to be one of the most expensive countries in the world from an infrastructure procurement perspective.

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\(^3\) The plan includes a commitment to work alongside the devolved administrations in developing appropriate arrangements in the areas for which they have responsibility.
According to ‘Infrastructure UK’ (IUK), which authored the plan:

“For several decades the UK’s approach to infrastructure investment has in general been timid, uncoordinated, incremental, wasteful in its procurement and insufficiently targeted to supporting balanced and sustainable growth in the economy, both economically and environmentally. The result is that our infrastructure is ageing, plans are unclear and costs are too high”.

(HM Treasury, 2010)

The plan itself promises £200 billion of investment over the next five years, with the lion’s share of this investment going to the transport and energy sectors. Even so, the IUK plan translates into once more falling rates of PSNI (figure 2.1). By 2015-16, anticipated PSNI will constitute 1.1% of projected GDP.

Scottish infrastructure

Scotland has had its own official infrastructure investment plans since 2005. The Building a Better Scotland Infrastructure Plan (Scottish Executive, 2005) committed the Scottish Government to a 5% real terms annual increase in net investment over the spending review period 2005/6 - 2007/08. Under the Communities Portfolio, this translated into the profile of net capital investment recorded in table 2.1.

### Table 2.1: Communities Portfolio Net Capital Investment 2005/6-2007/8

<table>
<thead>
<tr>
<th>£ millions</th>
<th>2005-6</th>
<th>2006-7</th>
<th>2007-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable housing investment programme</td>
<td>266</td>
<td>297</td>
<td>342</td>
</tr>
<tr>
<td>Modernising private sector housing</td>
<td>75</td>
<td>82</td>
<td>83</td>
</tr>
<tr>
<td>Vacant and derelict land fund</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Tackling fuel poverty</td>
<td>50</td>
<td>49</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>415</strong></td>
<td><strong>448</strong></td>
<td><strong>483</strong></td>
</tr>
</tbody>
</table>

In addition, the Building a Better Scotland Infrastructure Plan also observed that housing transfers and the ill-fated ‘community ownership programme’ were expected to generate nearly £2 billion more for investment in both existing housing and residential new build, while noting:

“the move to the new prudential regime in capital investment for housing and changes to ‘set aside’ rules for capital housing receipts has enabled local authorities greater flexibility in deciding what is an affordable and prudent level for borrowing, some of which they may utilise to invest further in housing stock”.

The 2008 successor to Building a Better Scotland Infrastructure Plan raised the bar further (Scottish Government, 2008a). Proclaiming itself to be the largest and most ambitious programme of capital investment ever proposed for the public sector in Scotland, the 2008 plan boasted that:

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4 Infrastructure UK is a division of HM Treasury. It defines its general role as one of enabling greater private sector investment in infrastructure and improving long-term infrastructure planning, and in this regard is probably best understood as the Scottish equivalent of SFT.
“By investing in well-designed, sustainable housing and the social infrastructure needed to support the population we will make communities safer and stronger. We will increase the attractiveness of Scotland as a place to live and work, attract high quality businesses and talented migrants, reduce out-migration and secure the productive engagement of an even higher proportion of the population”.

In support of these claims, the plan included the public capital investment commitments on housing and regeneration recorded in table 2.2.

**Table 2.2: Housing & Regeneration: Forecast Infrastructure Investment (Public Funding)**

<table>
<thead>
<tr>
<th>£ millions</th>
<th>2008-9</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable housing investment programme</td>
<td>178</td>
<td>251</td>
<td>276</td>
</tr>
<tr>
<td>Modernising private sector housing</td>
<td>10</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Central Heating Initiative/Warm Deal</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Regeneration Programmes</td>
<td>26</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>Local authority specific grants, comprising:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Affordable Housing Investment Programme</td>
<td>119</td>
<td>119</td>
<td>119</td>
</tr>
<tr>
<td>b) assistance to Glasgow owners</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>c) Private Sector Housing Grant</td>
<td>68</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>d) Vacant and Derelict Land Fund</td>
<td>12</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>473</td>
<td>566</td>
<td>502</td>
</tr>
</tbody>
</table>

Additionally, the plan included estimates of the private sector investment that would be generated by public expenditure on housing and regeneration over the same period (table 2.3).

**Table 2.3: Housing & Regeneration: Forecast Infrastructure Investment (Private Funding)**

<table>
<thead>
<tr>
<th>£ millions</th>
<th>2008-9</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable housing investment programme</td>
<td>71</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Modernising private sector housing</td>
<td>1</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Local authority specific grants, comprising:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Affordable Housing Investment Programme</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>b) assistance to Glasgow owners</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>c) Private Sector Housing Grant</td>
<td>18</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>d) Vacant and Derelict Land Fund</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>153</td>
<td>210</td>
<td>193</td>
</tr>
</tbody>
</table>

Current total annual infrastructure investment in Scotland is estimated to be around £5 billion (Beveridge et al, 2010). However, future years are likely to see Scottish infrastructure investment falling significantly (Armstrong et al, 2009, 2010). The UK 2010 Comprehensive Spending Review (CSR) has imposed a reduction in the overall Scottish budget of over 11% in real terms between 2010/11 and 2014/15. This includes a 36% reduction in the capital budget (figure 2.2).
In light of impending elections to the Scottish Parliament in 2011, the Scottish Government deferred a three year Scottish CSR to September 2011, limiting itself instead to preparation of a draft budget for 2011/12. Even in this regard, the Government has had to manage a £1.3 billion cut to the overall Scottish budget, involving £500 million revenue expenditure and £800 million (or 24% in cash terms) capital expenditure.

### Figure 2.2 Scottish Government Capital DEL budgets

![Diagram showing Scottish Government Capital DEL budgets from 2005-06 to 2014-15]

Note: Capital DEL budgets for 2005-06 to 2009-10 are outturn figures. The 2010-11 total is from the 2010-11 draft Budget. For 2011-12 to 2014-15, Capital DEL allocations are from the UK CSR.

Source: Scottish Government (2010b), figure 3.

The 2011/12 draft Scottish budget document prepared (Scottish Government, 2010b) is difficult to interpret. Relevant measures include:

- A transfer of £100 million from 2010/11 to supplement 2011/12 capital spending.

- Hypothecation of 1% of ‘resource DEL’ to revenue fund new capital spending via ‘public private partnerships’ (PPP). This will involve using a ‘non-profit distributing’ (NPD) model (discussed in section 5) to develop a £2.5 billion programme of infrastructure work centred on transport, health and education projects.

- A rejection of both the ‘Scottish variable rate’ income tax power and the power to raise non-domestic rates as sources of additional revenue to augment spending plans.

- Strong support for the adoption of tax increment finance (TIF) and ‘JESSICA’ (which are also discussed in section 5).

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5 ‘DEL’ is the abbreviation for Department Expenditure Limit and measures the discretionary spending available to the Scottish Government. It can be subdivided into ‘resource DEL’ (current expenditure on salaries etc) and ‘capital DEL’.

6 In the UK, a Public Private Partnership refers to any formal arrangement between public bodies and private companies to deliver a public service or project. More precisely, whereas NPD (and PFI) is a procurement tool, PPP is an ownership structure (HM Treasury, 2003).

7 Subsequent to publication of the draft budget, it emerged that the Scottish Parliament does not actually have this power currently as it was allowed to lapse in 2007.
What the proposed budget means for housing investment is a moot point. The 2011/12 budget document records a 21% fall in real terms for the overall housing and regeneration budget. Table 2.4 provides the breakdown of this budget in cash terms.

Table 2.4: Scottish Government Spending Plans 2011/12 (cash)

<table>
<thead>
<tr>
<th>£ millions</th>
<th>2010/11 Budget</th>
<th>2011/12 Draft Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting Economic Growth/Housing Supply</td>
<td>280.3</td>
<td>268.5</td>
</tr>
<tr>
<td>Supporting Sustainability</td>
<td>104.6</td>
<td>83.9</td>
</tr>
<tr>
<td>Supporting Transitions</td>
<td>77.4</td>
<td>57.2</td>
</tr>
<tr>
<td>Scottish Housing Regulator</td>
<td>4.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Less Income</td>
<td>(20.0)</td>
<td>(20.0)</td>
</tr>
<tr>
<td>Non Recurring Budget Consequentials</td>
<td>41.0</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>488.0</strong></td>
<td><strong>393.8</strong></td>
</tr>
</tbody>
</table>

Of which:

<table>
<thead>
<tr>
<th></th>
<th>2010/11 Budget</th>
<th>2011/12 Draft Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEL Resource</td>
<td>167.0</td>
<td>153.9</td>
</tr>
<tr>
<td>DEL Capital</td>
<td>321.0</td>
<td>239.9</td>
</tr>
</tbody>
</table>

Source: Scottish Government (2010b), table 8.05.

The affordable housing investment programme (AHIP) budget is incorporated into spending on ‘supporting economic growth/housing supply’ in table 2.4. This budget line registers a cash fall of less than 5% between 2010/11 and 2011/12 and is accompanied in the budget document by the comment that:

“In 2011-12 we will meet the commitments for housing and regeneration capital investment which commenced during the recession and continue to support the economy and protect the supply of new homes. This can be achieved jointly with partners, using less taxpayer investment for each new home by leveraging more funding from other sources”. (Scottish Government, 2010b)

The budget document also makes reference to “a new £50 million competitive funding arrangement to allow all suppliers to provide new affordable homes”. However, very little new build will occur in 2011/12 that has not already been committed by forward funding, and the Chartered Institute of Housing in Scotland has calculated that, taking accelerated investment from last year into account, the settlement translates into a real terms cut of almost 35% in the housing budget (Chartered Institute of Housing Scotland, 2010).

Mechanisms for funding and financing infrastructure investment

The terms ‘funding’ and ‘financing’ are often used interchangeably, but there is an important difference (Reekie, 2010). The distinction is perhaps easiest to grasp in terms of a household engaged in buying a house. If the house is bought on a 100% mortgage, the deal is financed by the mortgage lender, but funded by the household through future income. Funding is therefore about identifying the real resource stream to be used to acquire a capital asset while financing is about facilitating the acquisition. Both are important, but so is the distinction.

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8 Scottish Government, 2010b, table 8.02.
A positively bewildering array of possible mechanisms exists for funding and financing infrastructure investment. However, they fall into five main types that may be used singly or in combination. Table 2.5 provides an initial overview of the various options.

**Table 2.5: Infrastructure Funding and Financing Mechanisms**

<table>
<thead>
<tr>
<th>Mechanism Type</th>
<th>Main Instruments</th>
<th>Funding or Financing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government borrowing</td>
<td>Central and local government bond issuance</td>
<td>Financing</td>
</tr>
<tr>
<td></td>
<td>Prudential borrowing</td>
<td>Financing</td>
</tr>
<tr>
<td>Taxation</td>
<td>Land value taxation</td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td>Council tax/non-domestic rates</td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td>Guarantee schemes</td>
<td>Funding</td>
</tr>
<tr>
<td>User charges</td>
<td>Property rents</td>
<td>Funding</td>
</tr>
<tr>
<td>Producer levies</td>
<td>Planning obligations and agreements</td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td>Tax increment finance/accelerated development zones/business improvement districts</td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td>Infrastructure loan funds and revolving land bank funds</td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td>Community infrastructure levy/tariff schemes</td>
<td>Both</td>
</tr>
<tr>
<td>Special purpose vehicles</td>
<td>Local asset backed vehicles</td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td>Private Finance Initiative</td>
<td>Financing</td>
</tr>
<tr>
<td></td>
<td>Non-Profit Distributing Public Private Partnerships</td>
<td>Financing</td>
</tr>
</tbody>
</table>

**Conclusions**

Defining infrastructure is not straightforward. However, it is clear that, notwithstanding the rise witnessed in the immediate post-millennium period, the long-term direction for infrastructure investment as a proportion of GDP continues to be downwards at UK level.

Scottish infrastructure investment spending fared reasonably well following devolution but, as a wider UK-level fiscal realignment takes shape, prospects are now much less favourable. Within this, the outlook for investment in affordable housing has also deteriorated. In light of Scottish Government budget choices, housing infrastructure investment continues to present major challenges.

How concerned we should be about this state of affairs depends on three things:

▸ What the appropriate overall level of infrastructure investment is for Scotland.

▸ What the appropriate distribution of this overall total is across transport, communications, education, housing etc.

▸ Whether the funding and financing options chosen for specific infrastructure investment projects are appropriate.
The first and second issues are ultimately political questions and, having no ‘technical’ solution, await a proper, informed political debate (Scottish Futures Trust, 2010).

The third and final issue also involves value judgements, such as whether and in what proportions current or future generations should foot the infrastructure bill. However, there is also a considerable range of technical issues to sift in addressing this issue.
3 INTERNATIONAL PERSPECTIVES

Plus ça change, plus c’est la même chose

Governments around the world invest in infrastructure to address market failures and to support economic growth. Chan et al (2009) examine long-run trends in infrastructure investment in Australia, Canada, France, Germany, New Zealand, Sweden, the United Kingdom and the United States. These authors find that, in most of these countries, investment in economic and social infrastructure as a share of GDP declined steadily in the 1980s and 1990s (table 3.1), which they attribute to structural change and government policy developments.

Table 3.1: Total general government spending on investment (decade average, % of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>4.1</td>
<td>3.3</td>
<td>2.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Canada</td>
<td>4.1</td>
<td>3.0</td>
<td>2.7</td>
<td>2.4</td>
</tr>
<tr>
<td>France</td>
<td>3.7</td>
<td>3.2</td>
<td>3.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Germany*</td>
<td>4.2</td>
<td>3.2</td>
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<td>United States**</td>
<td>2.8</td>
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* Data are for the former Federal Republic of Germany prior to 1991
** First observation is for the period 1970-5
Source: Chan et al (2009), table 3.2.

Chan et al also demonstrate widespread application of the full range of mechanisms outlined in table 2.5, confirming the conclusion of the Allen Consulting Group (2003) that:

“Governments at the state and local level have been innovating industriously over the years and have tried different means to raise funds to meet the needs of their constituent communities...Governments continue to innovate. The current thrust is upon applying additional levies and taxes upon developers to fund incremental elements of urban public infrastructure...Despite this innovative process there is very little that is really new, or that is really different in infrastructure funding”.

Although not a primary concern of this paper, there is an interesting debate – and considerable disagreement – on the extent to which investment in infrastructure affects economic development (Maclennan, 2008; Estache and Fay, 2009).
A number of international studies have sought to summarise, compare and rank the different mechanism types (Canadian Mortgage and Housing Corporation, 1999; Allen Consulting Group, 2003).11

Worth highlighting from the Allen Consulting Group analysis are the assessments that:

➣ Public debt involves a sufficiently lower cost of capital than private financing to often outweigh the potential advantages to be gained from transferring risk to the private sector.

➣ Using current taxation to pay for infrastructure development upfront and in full is inefficient because meeting the full cost immediately in this way imposes a drain on the economy and suppresses job growth.

➣ Debt financing of infrastructure investment generates future taxpayer obligations, but because it normally yields a stream of future benefits it is also fair to expect those who will benefit from the investment to pay for it.

➣ If user charges could raise all the necessary funding for infrastructure investment, the private sector would probably be providing it anyway.

➣ Producer levies distort incentives; developers facing a levy have an incentive to provide ‘less than optimally durable’ facilities, while public authorities have an incentive to gild the lily. Such levies are inefficient, involve significant transaction costs, and are subject to the vagaries of the economic cycle. While potentially useful for raising modest sums of money, producer levies are unsuitable for funding large infrastructure projects.12

➣ Producer levies are often passed on to consumers. In a housing context, this means new house prices are inflated, as is the price of existing housing in its role as a close substitute for new housing.13 As existing homeowners generally have higher incomes than renters and first time buyers, this is unfair.

➣ The cost of establishing SPVs, of subsequently monitoring performance and on occasion of enforcing contractual conditions, together with their often complex nature, limits the range of infrastructure projects for which this approach is suitable.

10 Many others explore individual mechanisms more intensively in particular locations; see for example: Pomeroy et al, 1998 (which looks at public private partnerships (PPP) for the production of affordable housing in the US), or Gurran et al, 2009 (which examines residential developer contributions towards local infrastructure investment in Australia).

11 The Allen Consulting Group study involved both qualitative and quantitative analysis. Quantitative modelling used a multi-regional, dynamic computable general equilibrium model of the Australian economy and involved two scenarios – an investment of $200 million every five years and an investment of $5 billion every five years – reflecting the infrastructure tasks facing Australian local and state governments respectively. The analysis examined the impacts of funding these investments using the alternatives of government debt, a special purpose vehicle, residential rates, taxation, user charges and a producer levy, in terms of the net present value of the additional output and average jobs created over a 15 year horizon.

12 Newhaven Research (2008) explored the role of producer levies for supporting the delivery of affordable housing through the planning system in Scotland. The Newhaven research study echoes many of the reservations raised by the Allen Consulting Group in an international context. Gurran et al (2009) offer a more positive perspective, arguing that developers often agree with the principle of making contributions, but dislike it when there is lack of certainty about what specific obligations are actually going to be imposed for particular projects, or about the timing, location and quality of the infrastructure to be provided. This suggests that tariff style levies, like the community infrastructure levy discussed in section 5, may be inherently superior to individually negotiated planning agreements.

The Allen Consulting Group concludes that there are four ‘first tier’ approaches to funding infrastructure: national taxation, local taxation, debt funding and user charging. SPV approaches, including PFI and PPP, are considered as almost on a par with the first tier approaches, sharing many of the characteristics of user charging but being subject to high transaction costs. Producer levies are concluded to be inefficient, unfair and the least attractive of all possible approaches:

“Of the raft of financing techniques available, governments currently seem to be overlooking and/or under-using the most efficient that are to hand. While producer levies and the like may be politically more attractive than state or local government taxes that fall more widely on the community, the downside that results from their use needs to be more fully considered. Use of funding approaches that smooth out the payment over time or are less distorting would significantly enhance the tangible gains that are obtained from public infrastructure investments. This implies a greater preparedness or capacity to use government debt...The evidence presented in this study suggests that the state would be better off with the use of almost any other funding approach [than producer levies]. As an indication of the severity of their adverse impact it is notable that the state may be better off in economic terms without the infrastructure funded using these means”.

More generally, a strong conclusion from international evidence is that there is no single silver bullet solution amongst the various mechanisms available (Maclennan, 2010). None of the approaches on their own is likely to meet overall infrastructure requirements, while each has specific advantages and disadvantages that determine the desirability of adoption in specific circumstances.

Conclusions

International evidence confirms that there is only a limited number of general ways to approach the funding and financing requirements of infrastructure projects (including social infrastructure like affordable housing), although under some of these approaches there is certainly scope for considerable operational variation.

Government debt and taxation approaches to infrastructure investment are arguably inherently superior to other approaches, but producer levies and SPVs have proved politically attractive and, even before the international financial crisis of 2007, there was an increasing tendency for governments to look to these mechanisms to support infrastructure investment. In the continuing aftermath of the credit crunch, the likelihood is that this tendency will intensify further, regardless of the intrinsic economic attractions of using other approaches to support infrastructure investment.
4 THE SEARCH FOR SCOTTISH SOLUTIONS

Central Government perspectives

In June 2007, the Scottish Government announced the establishment of a Housing Supply Task Force (HSTF) with a remit to:

“…identify and tackle impediments to increasing the supply of housing across all tenures – all with a view to ensuring that people across Scotland have the opportunity to access suitable housing that meets their needs and demands”.

The HSTF reported in February 2009 (Housing Supply Task Force, 2009). From case study analysis it concluded that the key issue was that:

“The process of delivering housing has been significantly affected by the reliance on up-front developer contributions, sought through planning agreements, to help fund infrastructure and other amenities for housing development. As these contributions have to be in place before wider development can be completed, uncertainty around the nature of the contribution and the time taken to negotiate and conclude the planning agreement can lead to significant delay, particularly where developments involve multiple parties. This issue has been exacerbated by the significant decrease in lending, which has constrained all parties’ access to finance and, in some circumstances, their capacity to fund infrastructure”.

As to the future, HSTF identified advance funding of infrastructure as a priority area where innovation was required to support the delivery of new housing and noted:

“A number of possible funding mechanisms have been highlighted to us, including direct support from national Government, an expanded role for the Scottish Futures Trust, ideas such as Tax Increment Funding and the Community Infrastructure Levy, the proposal that Local Authorities use their prudential borrowing powers and the Revolving Landbanking Fund used by Highland Council and other proposals in use outside of Scotland. In all of these, a role could be retained for some element of continued contributions from developers, sought on a per unit or square metre basis once developments have commenced”.

HSTF recommended that the Scottish Government assess the proposed options for financing infrastructure provision to accelerate new housing construction.

In its final report 15 months later (Housing Supply Task Force, 2010), HSTF noted that no specific new initiatives had emerged, but held out some hope for a European initiative known as JESSICA\textsuperscript{14} and a partnership approach in Aberdeenshire known as FIRS\textsuperscript{15}. It also noted that the Scottish Government had asked SFT to develop appropriate criteria for the potential application of tax increment financing in Scotland.

\textsuperscript{14} Joint European Support for Sustainable Investment in City Areas.  
\textsuperscript{15} Future Infrastructure Requirements for Services.
The Scottish Government subsequently published a housing policy discussion paper (Scottish Government, 2010c), mooting a housing and infrastructure loan fund and a housing investment bank, and posing the question:

“Should Government spend less on building and improving social houses and more on providing the underlying and supporting infrastructure?”

The Scottish Futures Trust

From the outset, the Scottish Government saw the Scottish Futures Trust as operating across the whole spectrum of public sector investment activity, including housing (Scottish Government, 2007b) – a prospect that was not initially welcomed by the Chartered Institute of Housing (Chartered Institute of Housing in Scotland, 2008). The SFT business case (Scottish Government, 2008b) articulated an intention to commence development of a ‘funding and aggregation model’ for the housing sector:

“Social housing has been considered as a separate sector given the specific nature of the revenue stream from tenants which supports the servicing of funding (rather than being reliant on 100% government funding). A concept has been considered whereby the SFT could enhance the level of housing investment by changing the financing assumption that the units built would remain in the social housing sector in perpetuity. This could reduce the level of public sector grant funding required and therefore, increase the number of units that could be constructed. This could be complemented by a role as a funding aggregator or conduit in this sector. It is important in this concept that tenancy arrangements are not disrupted”.

Subsequently, SFT has progressed the idea of a National Housing Trust (NHT) scheme (Scottish Futures Trust, 2009) designed to bring to market unsold or yet to be built properties for mid-market rent through joint ventures involving local authorities and developers. Under the scheme, NHT properties are to be acquired in part by means of Public Works Loan Board (PWLB) funding. A distinctive feature of the approach is that it involves the Scottish Government providing a guarantee to councils that they will have sufficient funds to repay borrowing costs16.

More generally on infrastructure funding, SFT has suggested:

“Private sector developer funding of infrastructure works required to support specific developments will require reform. The ability of private developers to finance infrastructure up-front has been hit hard by reducing land values and lending market changes. There is an opportunity to develop a public sector bridging finance structure which invests in unlocking infrastructure on a recycling fund basis. It would seek to unlock private investment at a significant multiplier to the public funds invested. This recycling nature and unlocking of private investment means it would represent a high economic-impact use of scarce funds” (SFT, 2010)

What this means in practice remains to be clarified.

16 For more detail, see Gibb and O’Sullivan (2010).
The Independent Budget Review Panel report recommended a considerable enhancement for the role of SFT (Beveridge et al, 2010). The Scottish Government accepted this (Scottish Government, 2010b), and has now agreed that SFT will:

➢ Lead improvements in capital procurement, with savings thereby derived recycled into further capital investment.

➢ Assess the potential and practicality of all available financing options for capital spending.

➢ Develop into a centre of expertise in the ownership, management and disposal of public assets and operate as a source of independent advice for all public bodies.

Not everyone welcomes these developments however:

“One thing that is clear to the Task Group is that SFT has in many ways become the Government’s think-tank on infrastructure delivery, covering everything from Schools to Housing to Waste, along with other areas of public sector infrastructure... The Task Group noted that this may overlap with its own work in looking at models but, more importantly, the Group had concerns that Local Government has so far not been able to influence the work of SFT at an early stage and is being presented with end products and solutions instead”. (COSLA, 2010)

Local Government perspectives

Central Government progress to date on the HSTF agenda has also not impressed Scottish local authorities (COSLA, 2009a), which chose to look independently at the options for securing infrastructure investment.

The list of options considered by COSLA included more local authority prudential borrowing, tax increment financing, a national infrastructure loan fund, JESSICA funding, revolving land bank funding, asset backed SPVs and loan guarantees (COSLA, 2009b). It concluded (COSLA, 2010) that:

➢ Prudential borrowing is a leading and useful option for local government but needs to be considered within the future context of much tighter revenue budgets.

➢ Issuing bonds for infrastructure investment is not an attractive option at present because councils can borrow more cheaply and straightforwardly from the PWLB.

➢ The option of introducing a Scottish version of the community infrastructure levy (CIL) should be explored further, though not at the expense of section 75 planning agreements.

➢ Tax increment financing is a realistic option for some local authorities but will not address the infrastructure needs of local government in full.

➢ Local government should continue to monitor developments in England regarding the development of local asset back vehicles.

➢ Councils should consider rolling infrastructure funding and loan guarantee funding as well as JESSICA, but be aware that these approaches have risks and limitations.
➣ Business improvement districts are not an option for supporting large-scale infrastructure investment.

➣ Business rate incentivisation could have an indirect application to infrastructure investment in the future.

Noting in addition that Scottish Government thinking on PPP/PFI seemed to be going nowhere fast, the Task Group also concluded that:

"Scottish Government and Local Government need to have serious discussions around the future of infrastructure investment".

Conclusions

Securing additional infrastructure funding and financing has been exercising both national and local Government bodies in Scotland for some time. The Scottish Government retains an open mind on the precise nature of its own role, but increasingly looks to SFT for authoritative advice on appropriate financing and funding mechanisms.

A significant range of possible options for securing additional infrastructure investment in Scotland has been identified, but limited progress has so far been made in deciding which to adopt and promote. The different tiers of Scottish Government need to engage more actively and urgently than has so far been evident, and action is needed to address continuing reservations over the role of SFT, if real progress is going to be made.
5 INNOVATIVE MECHANISMS: A CLOSER LOOK

In this section we consider some of the ‘innovative’ funding and financing possibilities for Scotland in more detail.

Public debt

“In general, funding infrastructure investment through public capital ensures the lowest cost of finance for a typical project. This is because governments generally borrow at lower rates of interest than commercial project lenders, and private lenders also factor in a risk premium and a profit margin when they set terms for financing a particular public infrastructure project”. (Scottish Government, 2010b)

The lower cost of public borrowing is one of the main reasons that it continues to be the principal method used to support infrastructure investment. Repayment of interest and principal on this borrowing is spread across future generations, but at the same time they typically enjoy the benefits that the infrastructure investment gives rise to.

Few would currently be prepared to argue the likelihood of securing agreement from the Coalition Government to increased public borrowing for additional infrastructure investment. However, the Commission on Scottish Devolution (2009) chaired by Kenneth Calman recommended that the Scottish Parliament be given the power to borrow for capital investment purposes and to raise tax revenues to pay for it. The Coalition Government has now published a Scotland Bill. If enacted, the Scottish Parliament will move from raising approximately 15% of its own budget to approximately 35%.

The Bill allows for the replacement of the currently suspended Scottish variable rate of income tax with a Scottish rate of income tax, as well as the devolution of stamp duty land taxation and landfill taxation. It also provides a clause to enable the Scottish Parliament, with the agreement of the UK Parliament, to levy new taxes in Scotland. The Scottish block grant will be reduced in due course to compensate for the increased tax-raising powers of the Scottish Parliament.

Scottish Government borrowing powers are more generous under the Bill than were envisaged by the Calman Commission. It will be possible for the Scottish Government to borrow up to £500 million to finance current expenditure when tax receipts are less than expected. Beyond this, it will be possible to borrow up to 10% of the Scottish capital budget in any given year from the National Loan Fund, up to an overall limit of £2.2 billion.

The financial measures within the Scotland Bill are to be implemented in a phased way, beginning in 2013.
Although the Scottish Government is not in favour of the Calman Commission/Scotland Bill proposals per se, it is certainly keen on securing borrowing powers:

“The Scottish Government will continue to make the case for greater financial responsibility for Scotland, including – at the earliest opportunity – the power to borrow to fund capital expenditure. With borrowing powers in place, the Scottish Government would be able to accelerate the pace of its infrastructure programme”. (Scottish Government, 2010b)

Meantime, local authorities can in principle use their own existing prudential borrowing powers to implement additional infrastructure investment fairly quickly. However, in practice there appears to be only modest scope for additional local authority prudential borrowing if this has to rely on currently available resources to cover interest and principal repayments (COSLA, 2010). As prudential borrowing is just a financing mechanism, its greater use by authorities also requires the identification of additional funding streams to subsequently pay the additional borrowing back.

**Taxation**

**Land value tax**

Proponents of a land value tax (LVT) point out that existing property and land taxes often act as a direct impediment to development and infrastructure investment (Maxwell and Vigor, 2005; McLean, 2005). By contrast, an LVT is argued to be both efficient and fair as well as being hard to avoid (McLean, 2006). Wightman (2010) claims LVT to be superior even to using public debt for infrastructure investment:

“Today, however, the empirical relationship between land values and development has been forgotten. This is evident in the ways in which public infrastructure is being financed today through debt-based capital expenditure by government...A method in place for much of the 19th century, whereby public works were financed by the principal beneficiaries, has now been replaced by a method whereby taxes paid by individuals and companies on their earnings and VAT, and other taxes paid out of after tax income on consumption, are used to finance a capital project which delivers up to three times the value to private landowners. No wonder the Scottish Government finds it difficult to find the capital to build schools and bridges...Taxes on hard work (income), investment (capital gains) and consumption (from post tax income) should be relegated to the bottom of the list of revenue sources when such a substantial revenue can instead be obtained by returning to the community the value it creates through public infrastructure, development permissions and rising land values”.

LVT is a recurring annual tax on the market rental value of land. This explicitly excludes the value of the structures built upon it. The tax is charged to the owner of land whether or not the land has been recently sold; it is therefore not a tax on transactions, and as it also cannot be avoided it is argued that it does not impede development. Indeed, because land attracts the same tax regardless of whether it is held in an undeveloped state or put to some productive use, its proponents argue that LTV positively promotes development, while discouraging speculation:

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17 Proponents of LVT frequently see it as simply claiming for society the value society itself has created, and on that basis dislike the term ‘tax’, preferring instead to refer to it as ‘recovery of economic rent’ (Wightman, 2010).
“Since landowners would have to pay LVT even if they could not use their land economically, they would have every incentive to sell it on as quickly as possible to those who can. Resources wasted on land speculation, therefore, would become a thing of the past – it would be too costly...LVT therefore encourages investment in more jobs and businesses and more affordable homes”.

(Jones, 2006)

In a report prepared for the Green MSPs in the Scottish Parliament, Wightman (2010) offers a policy proposal that in 2015 council tax (CT) and the uniform business rate (UBR) be abolished and replaced by an LVT, with all land in Scotland subject to the tax. Calculating the total land value of Scotland to be around £120 billion, and the current annual tax yield of CT and UBR to each be around £1.9 billion, Wightman reports a revenue neutral rate of LVT would be around 3.16 pence in the pound. This compares with what would be a maximum annual LVT yield (where the market rental value of land is taxed at 100%) of £12 billion, assuming a discount rate of 10%. The implication is that more than £8 billion of additional tax revenue could be made available annually from this source for funding infrastructure investment.

Wightman sees the technical hurdles of introducing LVT as surmountable, although others are less convinced of the practicality of such a tax (GVA Grimley, 2004)\(^\text{18}\). Moreover, the fairness of an LVT is a moot point (Chapman and Facer II, 2005). The most likely effect of introducing an LVT would be to cause land prices to fall, while replacing CT/UBR with an LVT would involve very large potential numbers of winners and losers.

Coleman and Grimes (2009) demonstrate that the precise distributional consequences of an LVT depend on the initial distribution of property assets, the precise structure of the tax instrument introduced, the nature and extent of offsetting adjustments in other parts of the tax system and market adjustment processes within the wider economy. Wightman, for example, notes of his policy proposal:

“Given the variation across Scotland and within localities, there will be some properties where the level of LVT would be three, four or even five times the existing Council Tax”.

It would also involve a large and unpopular shift in the tax burden from businesses to residential properties. Jones (2006) suggests that a period of a decade or more might be needed to phase an LVT in, also pointing out correctly that:

“The main body of opinion that has to be won over undoubtedly are homeowners, since some 70 per cent of dwellings in Great Britain now, and the land on which they stand, are owner-occupied, mostly freehold”.

Wightman accepts his policy proposal poses political challenges, both in terms of homeowners, and the industries that have developed to serve their requirements. These challenges appear to us as insuperable at this point in time. An LVT would be an unfamiliar and perhaps unintuitive tax for people to come to terms with, and its introduction would in all likelihood be fiercely resisted. We believe Maxwell and Vigor are therefore right to conclude that:

\(^{18}\) Both GVA Grimley (2004) and Lichfield and Connellan (2000) note that in practice an LVT could be configured in a wide variety of ways; GVA Grimley note this is a source of some confusion in discussions of the attractiveness of LVT.
Guarantees

“In this scenario the developer would borrow commercially to provide infrastructure as had been the norm prior to the recent squeeze on lending by banks, however the local authority would underwrite this by guaranteeing to step in should the developer not be able to repay its debt. The advantage with this proposal is that the council would not incur any significant capital investment in providing infrastructure directly and therefore not require any borrowing. This could encourage developers to invest in infrastructure and would provide lenders with confidence that if a borrower defaults the risk to the lender is significantly reduced, given the loan is underwritten by a local authority. Councils would however need to set aside a significant proportion of capital reserves to ensure they can step in, should the developer default, and the risks of such a scheme could be considerable. The authority would effectively be acting as an insurer and care would be required to secure appropriate legal safeguards.” (COSLA, 2010)

General interest in the potential for loan guarantee schemes to support the development of rented housing has been growing (Gibb and O’Sullivan, 2010; Benson, 2010). The National Housing Trust (NHT) scheme being pursued by the Scottish Government involves guarantees against rental payment default and shortfall in eventual sales receipts once properties are put up for sale. Government is attracted to guarantees in principle because they are comparatively cheap, as taxpayer liability is assessed in terms of actual anticipated default covered by guarantee rather than the overall coverage offered.

Guarantee schemes can involve national Government providing cover for local authorities acting as partners in an SPV (as in the NHT case); local authorities providing cover to private parties engaged in development (as COSLA envisages), or indeed some other arrangement. Such schemes can be funded, at least in part, through guarantee scheme membership or participation fees, but net losses must ultimately be funded by the taxpayer. This can still be a cheaper and hence preferable alternative to other mechanisms, but Gibb and O’Sullivan (2010) note that where proposed schemes involve cross subsidy between participants they are likely to receive a mixed reception. Pending how they are configured, such schemes can fall foul of European state aid rules, and there is little in the way of previous Scottish experience to draw on in anything other than a minor way at present. Consequently, the short-term potential of guarantees is somewhat limited.

User charges

Increasing rents

The most obvious way to implement user charging for housing-related infrastructure development would be to raise rents. Some might argue that, to the extent that developer contributions have pushed up house prices, this is in fact already happening.

19 Guarantees must be funded, and it is assumed here they are paid for through general taxation. While this seems the most likely approach in practice, a guarantee scheme could be supported in whole or part through borrowing or (as discussed in the main text) by fees, making it difficult to classify this type of mechanism in a definitive way.
Where those rents are met by higher housing benefit payments, this just becomes, in effect, a roundabout (and arguably inefficient) way of securing infrastructure investment through taxation or public borrowing.

The introduction of private finance into new social housing development in Scotland in 1989 was also to some extent a step towards the greater use of user charging for affordable housing – one that was and still continues to be strongly resisted by many Registered Social Landlords (Gibb and O’Sullivan, 2008) but remains under scrutiny within the Scottish Government (Bramley et al, 2010).

**Producer levies**

**Tax increment finance**

Tax increment finance (TIF) allows local authorities to fund the improvement of an area through the property tax revenue subsequently generated by that improvement. The model first emerged in California in the 1950s and was widely adopted by other US States in the 1980s to pay for land assembly and infrastructure investment in response to cuts in federal support (Johnson and Robinson & Cole LLP, 2002). Used in this way, TIF is intended to create the necessary conditions for attracting subsequent commercial and residential investment, but it has also been used directly by local housing authorities to secure additional market and affordable housing (Tennessee Advisory Commission on Intergovernmental Relations, 2007).

In brief, the approach involves clearly designating a specific area, calculating the existing tax revenue generated in that area at some base date, specifying and costing a programme of improvement work, estimating the increase in tax revenue that will arise as a consequence of doing this work and then hypothecating that increase in tax revenue for a specific period to pay for the work to be done.

In the US, the most common approach to generating up-front money to pay for the work to be done is to issue municipal bonds, but other forms of borrowing are also used. A further approach, known as pay as you go (or ‘pay-go’) financing is sometimes used, where developers are required to pay costs directly and are subsequently reimbursed through the hypothecated tax receipts (Michael, 2009). The detail of legal structure, risk and reward sharing varies tremendously across TIF projects. In the US, many TIF projects involve local government financed subsidies to encourage developer participation (Weber and Goddeeris, 2007).

The use of TIF has often proved controversial in the US. Controversy can arise where more than one local public body receives a share in the tax take from a specific area, with resentment caused when future increases are ringfenced for the use of one alone. A second form of friction, and a potential cause of economic inefficiency, occurs where local authorities use TIF to compete to attract footloose developer commitment to one area rather than another. More generally, displacement of activity from one place to another as a result of initiating a TIF project is often seen as a major problem.

Dye and Merriman (2000) found that municipalities that adopt TIF grow more slowly than those that do not, suggesting that authorities are trading off higher growth in the TIF area for lower growth elsewhere. However, it has to be recognised that shifting of the location of development may in some instances be an explicit policy objective, and the efficiency ‘price’ of lower overall growth may in some instances be considered to be an acceptable one.
The initial policy intention in the US was for TIF to be used to support area regeneration. To meet the criteria for establishing a TIF, an area would in theory have to be assessed as blighted or underdeveloped, and to be likely to remain that way “but for” the TIF intervention. In practice, jurisdictions have often ridden roughshod over these requirements:

“It is only a bit of an overstatement to characterize the “blight” and “but for” findings as merely pro forma exercises, since specialized consultants can produce the needed evidence in almost all cases. In most states, the requirement for these findings does little to restrict the location of TIF districts”. Dye and Merriman (2006)

“The definition of blight for TIF purposes has been dramatically expanded. In 1999, for example, Baraboo, Wisconsin, created a TIF for an industrial park and a Wal-Mart supercenter that were built on farmland; the blight label was based on a single house in the district that was uninhabited”. (McGraw, 2006)

“In Addison, a suburb of Chicago, a Hispanic neighborhood was thought to be blighted because homes had ‘dust on the windowsills’ and ‘unwashed dishes in the kitchen sink’”. (Tennessee Advisory Commission on Intergovernmental Relations, 2007)

Controversy can also surround establishment of the boundary of the area to be subject to TIF. Whereas in principle the boundary should only cover the area that receives an economic benefit from the TIF (recognising area spillover benefits), in practice:

“A review of the shape and size of TIF districts in any state would reveal that boundaries are often highly irregular and areas covered are quite varied. Parcels that have already reached what may be considered the pinnacle of their property value growth, residential areas, and institutional buildings (that pay no property taxes) are often excluded from TIF districts. Political gerrymandering may also have an impact on the ultimate form of the district as council members demand that boundaries be drawn to reflect their respective interests”. (Weber and Goddeeris, 2007)

Other concerns with the TIF approach include their potential complexity (Purvis, 2008) and inherent risk – in particular the risk that the projected tax revenue will not materialise.

Nonetheless, the TIF approach retains considerable popularity and is seen in some parts of the US as ‘the only deal in town’, much to the chagrin of some commentators:

“In a period of scarce federal and state funds for development, TIF has come to be regarded as a kind of municipal horn of plenty. In municipalities across the country, TIF has raised the expectations of every revenue-hungry developer, social service program, and government agency seeking to shift the financial burden of capital and operating expenses”. (Weber and Goddeeris, 2007)
Support for TIF has been developing a head of steam in the UK for some time now (All Party Urban Development Group 2006, 2007, 2009, 2010; British Property Federation, 2008; Core Cities Group and Pricewaterhouse Coopers, 2008). However, while significant progress in England must await primary enabling legislation (HM Government, 2010), this is not the case in Scotland, and a number of Scottish local authorities have been actively exploring the regeneration potential of TIF.

In particular, TIF schemes have been mooted by North Lanarkshire Council (a £70 million project to regenerate Ravenscraig) and by Glasgow (an £80 million deal to part fund expansion of the Buchanan Street Galleries shopping complex). Most advanced is an £84 million Edinburgh Council TIF scheme to drive redevelopment of the waterfront area (see Appendix 1). The Edinburgh scheme has now received provisional approval from Scottish Government.

The Edinburgh TIF is focused on four specific economic infrastructure initiatives, but is based on an impact assessment that projects 1,240 new residential units arising as a direct consequence of the proposed investment. Financing is to be via prudential borrowing, with hypothecated non-domestic rate income providing the underlying future funding source. Additional council tax revenues have not been factored in to funding calculations on the basis that any new revenue from this source will be fully exhausted in the provision of council services to the households involved.

Time will tell whether any of these Scottish initiatives are successful. In the interim, however, it should be noted that COSLA remains somewhat sceptical of the overall potential of TIF:

“The Task Group agreed there are some questions that remain to be answered around TIF including the key issue of displacement and ensuring the project does not breach state aid rules. In considering the benefits of TIF the Task Group concluded that it can only be viewed as another tool in the tool box. If it can assist some Councils in regenerating areas and attracting investment, whilst addressing the issues of displacement and state aid etc, then of course that should come down to local decision making...However the TIF model does not address all the infrastructure needs of Local Government and whilst there is considerable interest in this area at present there is concern that TIF is diverting time and energy away from identifying a solution that will help more than a handful of Councils”. (COSLA, 2010)

Planning obligations, tariffs and community infrastructure levies (CIL)


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20 TIF is sometimes referred to as Accelerated Development Zones (or ADZ) in England.
The total value of planning agreements in Scotland for the period 2004-7 has been estimated at some £159 million (McMaster et al, 2008). However, the history of section 75 agreements for affordable housing in Scotland has to date been a difficult one (Newhaven Research, 2008a) and there is little sign of prospects improving in this regard in the near future. Bramley et al (2010) argue that it is legitimate to use section 75 agreements for affordable housing as a form of betterment taxation, but note that this is not generally accepted at present in Scotland.

Barker (2004) recommended the introduction of an explicit tax on development gains in England and Wales as a way of scaling back the role of section 106 agreements. The tax (known as planning-gain supplement) was to be levied on the increase in land value resulting from the granting of planning permission. Ultimately, however, this approach fell into disfavour (Barclay, 2010b).

Subsequently, the Town and Country Planning Association (TCPA) in England argued that a ‘roof tax’ scheme would provide a suitable way of funding infrastructure investment (Town and Country Planning Association, 2007). Under the TCPA proposal:

➤ A local authority would set out a costed ‘shopping list’ of infrastructure derived from planned future development for an area.

➤ The cost of the infrastructure would then be allocated across the planned development on a pro rata basis, giving a set amount of charge per dwelling or per square metre of commercial/industrial/retail space.

➤ Infrastructure required before development occurred would be forward funded, with repayment guaranteed from future roof tax payments.

➤ As development took place, developers would then pay the set tariff, rather than negotiating a section 106 agreement21.

Advantages for this approach were argued to be that it would be straightforward to apply, it would maintain links between developers and local authorities, and it would encourage development by creating certainty over both infrastructure funding requirements and infrastructure provision22.

Much of the TCPA proposal was reflected in the community infrastructure levy scheme that came into force in England and Wales on 6 April 2010 by dint of regulations made under the Planning Act 2008. Under these regulations, local authorities were empowered but not obliged to impose a CIL – but either way the future use of planning obligations in England would be restricted to affordable housing and site-specific matters. Existing local authority initiated tariff schemes were expected to migrate to CIL by 2012.

21 TCPA thinking in this regard built upon the Milton Keynes planning tariff scheme introduced in 2006. Under this scheme, section 106 agreements were converted into flat rate developer contributions of £18,500 per house completed or £260,000 per hectare of employment space created. The Milton Keynes example was subsequently emulated in other places, such as Plymouth, which introduced the Plymouth Development Tariff in January 2009.

22 In terms of underlying approach, this actually doesn’t sound very far away from current Scottish guidance on the use of planning agreements – witness Planning Circular 1/2010: “When drafting development plans and associated guidance planning authorities should work with infrastructure providers, other local authority departments and consultees to undertake a robust assessment of infrastructure requirements, the funding implications and the timescales involved. From this the level of provision that needs to be provided through planning agreements can be identified. Broad principles, including the items for which contributions will be sought and the occasions when they will be sought should be set out in the strategic development plan or local development plan, and be subject to scrutiny or examination. Methods and exact levels of contributions should be included in supplementary guidance. Standard charges and formulae should be set out in a way that helps landowners and developers predict the size and types of commitments likely to be sought”. (Scottish Government, 2010d)
In introducing the CIL scheme, the then Labour Government envisaged that public sector bodies such as Regional Development Agencies would provide up-front infrastructure funding and be reimbursed from future CIL revenue (Department for Communities and Local Government, 2008a). However, the Conservative Party in opposition had committed itself to abolishing regional bodies, along with CIL and non-specific planning obligations (Conservative Party, 2009).

The current Coalition Government subsequently chose to retain but reform CIL (Department for Communities and Local Government, 2010a)\(^\text{23}\). In its new guise\(^\text{24}\), the CIL has been assessed as having the potential to raise an additional £700 million annually for funding local infrastructure by 2016 (Department for Communities and Local Government, 2010b).

Current CIL regulations enable the Secretary of State to allow local authorities in England to borrow against future income from the levy to support infrastructure investment.

The idea of CIL in Scotland was initially dismissed by Scottish local authorities as unworkable, but COSLA has been minded recently to look afresh at the merits of a CIL approach (COSLA, 2010):

“\textit{The question then arises, might the Scottish Government who, like COSLA, have been looking for infrastructure investment solutions, seek to develop something similar here...COSLA would see any version of CIL as being a ‘tool in the toolbox’ - i.e. not compulsory for every Council and certainly not at the expense of section 75...There are a number of issues that require further consideration prior to taking any proposal for a Scottish CIL forward. Most obvious is whether there is anything needed legally to allow its introduction, or development from what might already exist in the way of tariff schemes, etc. More practically, there has to be the capacity within local authorities to gauge economic viability, which is meant to be one of the factors to be taken into account in setting CIL charges. Also, local authorities will have to balance not wanting to jeopardise the recovery of their property markets with the need to make up for probable cuts to public spending. Affordable housing is not covered by CIL in England. The option would either be to include it in any Scottish version, or look at alternatives“. (COSLA, 2010)\(^\text{25}\)

\(^\text{23}\) It has also published proposals for a ‘new homes bonus’ (NHB) to incentivise local authorities to deliver additional housing development. The NHB will be equal to the national average for the council tax band on each additional property delivered and paid for six years as an unringfenced grant, with an enhancement for affordable homes. Some £200 million has been set aside to fund the scheme in 2011/12, and £250 million for each of the subsequent three years. As unallocated grant, this money could in principle be used to fund additional infrastructure investment.

\(^\text{24}\) The Coalition reforms involve giving community groups a direct share in the funds raised through the levy and councils the ability to set flexible payment deadlines, including payment by installments. Councils are also now able to accept payment in kind for any level of contribution.

\(^\text{25}\) In our view, CIL is fully within devolved powers as it is a form of planning gain rather than taxation per se.
At this stage, COSLA considers that further work would be needed before it could formally support a CIL, but does in principle find the approach to hold some merit\textsuperscript{26}. To give some idea of potential, a CIL of £5,000 per new unsubsidised residential property applied to a Scottish-wide level of 15,000 new unsubsidised residential properties completed per annum would generate an annual £75 million revenue stream, which at a very conservative estimate could easily support £750 million of new infrastructure investment.

\textit{Infrastructure banks, infrastructure loan funds and revolving land bank funds}

Infrastructure banks and loan funds have been explored in a range of UK contexts. In particular, ideas for a UK investment bank and for regional investment funds have been floated and in some instances even launched (Barker, 2004; All Party Urban Development Group, 2009; Association for Consultancy and Engineering, 2010; Core Cities Group and Pricewaterhouse Coopers LLP, 2008; Colin Buchanan and Partners Limited, 2009)\textsuperscript{27}. Such schemes involve establishing or nominating an organisation to act as a bank, or to operate the fund.

In 2005 the European Union launched ‘JESSICA’, a mechanism allowing EU grant money to be combined with state resources to support regeneration projects. In summer 2010 a Scottish JESSICA fund was established, capitalised by £26 million of Scottish Government money and £24 million from the European Structural Fund. The total £50 million pot is being managed by the European Investment Bank (EIB).

JESSICA is intended to reduce the risk on developments in areas otherwise considered too marginal for commercial lenders or investors to invest in. The underlying principle is to use the initial budget to create a revolving fund by earning a commercial return on investments made, thereby creating further cash for further investment projects.

The EIB will take JESSICA investment decisions in conjunction with a new Scottish Government established investment board. The first investments of JESSICA money are expected during 2011, and areas currently eligible for European Regional Development Fund support can submit projects.

COSLA, as previously noted, has raised the possibility of extending the principle of JESSICA further:

\textit{“Whilst the JESSICA scheme is about creating a revolving fund for infrastructure at the European level, an alternative option to consider would be a local rolling infrastructure fund. The fund could be established by a Council to allow infrastructure projects to be forward funded by the Council and developers would undertake to repay the fund, at below normal commercial rates, within an agreed timescale or on the basis of completed developments. This option would carry significant risks for Councils and would require a significant upfront capital resource;”}

\textsuperscript{26} COSLA (2010) cites the Aberdeenshire Future Infrastructure for Services (FIRS) approach as “a focused version of the CIL model”. FIRS (which is in the early stages of application) “looks to provide up-front funding for certain infrastructure and apportion costs among all developers through the course of development on a pro rata basis, with the ultimate aim of providing more certainty for both developers and Aberdeenshire Council”. In the longer term, the Aberdeenshire Council is also looking at establishing a rolling infrastructure fund to support delivery (FIRS Case Study) http://www.scotland.gov.uk/Topics/Built-Environment/regeneration/pir/learningnetworks/mixedcommunities/recentevents/FIRSCaseStudy

\textsuperscript{27} In this context, it is worth noting that in England HM Government has now introduced a £1.4 billion Regional Growth Fund (RGF). The RGF will operate over the period 2011-2014 and will support infrastructure projects where it can be demonstrated this will lead to sustainable employment (HM Government, 2010).
however this could encourage certain developers to commit to projects, who otherwise would not be able to secure finance. Any such funding mechanism would however have to be regarded as a measure of last resort, rather than the local authority acting in competition to normal commercial lending institutions and thus breaching State Aid rules”. (COSLA, 2010)

In some ways, this is really just an extension and generalisation of the TIF approach. If a local authority managed such a fund directly, it would obviate the need for an external organisation to do so, but would require the authority to have people on staff with the necessary skills.

A more circumscribed, less technically demanding, and housing specific option, would be for a local authority to establish and manage a revolving land bank fund (LBF). A good example of this approach is the Highland Council LBF. Established in 2005 with the assistance of a £3.5 million Scottish Government grant, the Highland LBF has been subsequently grown through hypothecation of council tax on second homes and from land trading surpluses. By August 2008, the LBF stood at £15.5 million, with outstanding commitments of just under £4 million. A total of £12.8 million had been loaned since March 2005, of which around £7 million had been repaid (Newhaven, 2008b; O’Sullivan, 2010)28.

Transactions involving a land site at Woodside of Culloden (see Appendix 2) give a good feel for how a LBF can be exploited in practice.

The Highland Council LBF initiative has been very positively reviewed:

“[The Highland Council] LBF has been used to date to unlock the development of a number of sites that had previously proved impossible to progress by other means, and in doing so it has delivered considerable numbers of market and affordable housing. Once used to unlock difficult sites, LBF money has then been returned and used to unlock some more. It has also been used to directly support a range of agencies engaged in affordable housing provision. In short, the LBF has shown itself to be an effective way for a Council, with determination and the right staff, to drive affordable development forward”. (O’Sullivan, 2010)

The timing of Highland LBF establishment was propitious, as land and property markets were inflating rapidly. The scope for generating surpluses on land and property deals is more limited currently than in the heady days of 2005-2007. Moreover, the Highland Council has been so successful in securing council owned land for residential development that it is finding it ever harder to source new internal opportunities to exploit. However, markets are cyclical, other Scottish councils currently own a considerable amount of land with potential for longer-term exploitation to augment the future supply of affordable housing, and external land trading is also an option.

28 The overall value of the fund was expected to reduce somewhat subsequently, as the provision of non-refundable grants from the LBF increased in significance.
Special Purpose Vehicles

Local asset backed vehicles

A typical local asset backed vehicle (LABV) scheme involves the public sector contributing land and property to a company jointly owned with private sector partners. The private sector contributes financial resources and management skills to the venture and development is funded by asset exploitation. This model has not been widely employed in the UK to date, but Croydon Council offers a good example (All Party Urban Development Group, 2009):

“Croydon Council and property developer, John Laing, signed a £450 million partnership deal in December 2008. The deal will regenerate four town centre sites, including the construction of two 40 storey towers with 650 new flats and a new headquarters for the council. The council is using its land assets to act as a partner in the deal and will receive a 50-50 share of the profits, providing it with enough money to pay for its new headquarters”.

Local housing companies are LABV, where:

“In return for taking the land cost out of the equation, private sector partners such as housing builders, including the Registered Social Landlord sector, will provide equivalent investment and the construction expertise needed to build the homes. Local authorities could also benefit from the increasing value of land on the site with some returns being reinvested into providing more affordable homes”. (Harrison and Marshall, 2007)

Grace and Ludiman (2007) are enthusiastic about LABV potential for supporting comprehensive area regeneration in England:

“An LABV will align stakeholders behind a common vision and set in place a firm foundation for long-term investment – the key to more holistic regeneration (i.e. satisfying physical, social, economic and environmental needs). In most UK development, holistic regeneration is still the exception to the rule, with stakeholders lacking the motivation, authority or organisation to catalyse change. Public bodies are usually frustrated by a mixture of skills shortages and bureaucracy...LABVs could provide many of the answers to these problems. While the financial benefits are attractive, it is the organisational benefits that could potentially provide a step change in the efficiency and effectiveness of physical regeneration. The opportunity is enormous, with local authority holdings in England alone amounting to over £230bn”.

Others are more cautious, arguing LABVs are not right for all authorities, and that they should only be used as part of an overarching economic development strategy. Moreover:

29 In 2007, the Department for Communities and Local Government launched 14 local housing company pilots in England.
“Important issues around political support, governance arrangements, local authority capacity, investor interest and stakeholder engagement need to be tackled if local authorities are to successfully implement their own LABV arrangements”. (Harrison and Marshall, 2007)

Using LABVs potentially offers the public sector greater influence and leverage than other types of PPP deal. However, the LABV approach also offers the public sector a greater share of the risks involved in infrastructure investment, as well as a greater share of the potential rewards.

There is no pre-set template design for LABV, which must be specifically developed in each instance. In a Scottish context, LABV could allow authorities to exploit otherwise unproductive assets, but it is doubtful the approach would work in the current economic climate. It would not work for authorities without suitable land assets and there would be considerable time and resource costs to bear in finding suitable partners and negotiating the terms of the deal. For many authorities, wholly owned LBIs therefore offer a safer, less expensive and more politically acceptable alternative.

**PFI in a housing context**

PFI was launched in 1992 to encourage private investment in the public sector. At overall UK-level, PFI/PPP has accounted for about 10-15% of public sector capital investment since 1996 and by 2007 over 900 PFI/PPP projects had been signed with a capital value of £60 billion (Inderst, 2009). About 10% by value of these deals are Scottish.30

In PFI, the public and private sectors enter a contract which shares between them the risk of undertaking an investment project.31 HM Treasury (2003) argue that:

> “Evidence to date suggests PFI is appropriate where there are major and complex capital projects with significant ongoing maintenance requirements. Here the private sector can offer project management skills, more innovative design and risk management expertise that can bring substantial benefits. Where it is effective, PFI helps ensure that desired service standards are maintained, that new services start on time and facilities are completed on budget, and that the assets built are of sufficient quality to remain of high standard throughout their life”.

This would appear to make housing suitable for PFI. Indeed, since 1998 £4.3 billion has been allocated in England to local authority PFI housing projects (National Audit Office, 2010a-c). This funding had led to 50 approved projects, 25 signed deals, over 12,000 refurbished properties and almost 1,000 new properties by April 2009.

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30 A current breakdown of Scottish PPP, PFI and NDP projects by status, sector and type is provided on the Scottish Government website: http://www.scotland.gov.uk/Topics/Government/Finance/18232/13368

31 “The public sector retains some of the risks it would bear in a conventionally procured project, like demand risk or the risk that it has not adequately assessed its requirements, but transfers the remainder to the private sector. Furthermore, the public sector underwrites the public service, but not the private sector service provider, ensuring that safeguards are in place in event of failures in the private sector. The private sector takes on those risks it is best able to manage, like design, construction and maintenance risks, so that it is better incentivised to perform. The financial cap to the risk assumed by the private sector is the full value of the debt and equity it provides to a project”. (HM Treasury, 2003)
While the early PFI housing deals emphasised refurbishment over new build, the Treasury was keen to expand PFI scope to deliver a greater newbuild payload (HM Treasury, 2006). In line with Treasury thinking, the Department for Communities and Local Government (DCLG) conducted a review of the cost of delivering new build social rented housing through the Private Finance Initiative (non-HRA PFI) relative to delivery through Social Housing Grant (SHG). The Department concluded that non-HRA PFI housing could be delivered at an acceptable cost (Department for Communities and Local Government, 2008b), but not everyone was convinced32. A major housing PFI newbuild ‘push’ failed to take root, and the impetus has now withered. The current Chancellor of the Exchequer is understood not to be a fan of PFI (Care, 2010) and in June 2010 the Department for Communities and Local Government withdrew £160 million of unspent PFI credits from local authorities to assist with public sector deficit reduction (Brown, 2010). More generally, the credit crunch has substantially raised the cost of PFI project financing and so appears to have significantly undermined the value for money potential of this investment tool (National Audit Office, 2010d)33.

Even before the credit crunch, it was quite evident that the PFI approach polarises opinion into one of two camps. Those in favour of PFI believe that private capital at risk brings rigour and efficiency to the building and maintenance of public infrastructure, allowing more to be delivered for a given quantum of public funding. Those against believe it to be an opaque, expensive and inflexible way for governments to fudge national accounts and build up huge liabilities for future taxpayers, while generating excessive returns for the financial sector with no real risk transfer involved (Select Committee on Economic Affairs, 2010a)34.

In terms of hard evidence, the jury is still out on whether PFI has provided value for money (Select Committee on Economic Affairs, 2010a; National Audit Office, 2010a). Notwithstanding this, it is likely that the Treasury will continue to support the future use of PFI for some UK infrastructure projects (Select Committee on Economic Affairs, 2010c).

However, PFI is a devolved policy area, and the current Scottish Government claims to not like the mechanism:

“The Scottish Government has made it clear from the outset that it does not support the standard Private Finance Initiative (PFI) method of financing infrastructure investment under Public Private Partnerships (PPP). This does not mean that the Government is against Public/Private Sector partnerships to deliver infrastructure; simply that it does not support PFI as a financing model. The Government’s view is that PFI has traditionally been a highly costly option, leaving a burden of repayments over a lengthy period of time, and it encourages excessive profits for private sector investors due to the uncapped nature of returns. As such the Government will not support any further PFI projects”. (COSLA, 2010)

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32 Here for example is the view of Sir Peter Dixon, who was Chairman of the Housing Corporation 2003-8: “In housing I find it quite difficult to see any serious advantage for PFI, particularly because as far as housing associations were concerned there was a very cheap and very effective alternative in borrowing money from the banks, on very, very fine margins, not as cheap as government finance, but too cheap in my view, and therefore there was no requirement for using PFI as far as housing associations were concerned. Where local government did use PFI for housing improvement, it was typically because they had no other source of capital funding and therefore they used it. However, I believe it was unnecessarily expensive and also unnecessarily restrictive”. (Select Committee on Economic Affairs, 2010b)

33 On 22 November, the Department for Communities and Local Government made the further announcement that while 13 housing schemes currently in procurement would continue to be supported through PFI and a further 25 housing schemes under contract would also continue to be supported, funding support would be withdrawn for a further 13 pipeline schemes that would have cost an additional £1.9 billion.

34 For a trenchant critique of PFI from the ‘anti’ camp, see Hollowell and Pollock, 2009).
Scottish Government preference has been for its non-profit distributing alternative, which is defined by the broad principles of enhanced stakeholder involvement in project management, capped returns to private sector participants and absence of dividend bearing equity (Scottish Futures Trust, 2008):

“It is important to note that the NPD model is not a “not for profit” model – contractors and lenders are expected to earn a normal market rate of return as in any other form of PFI/PPP. Rather, the model aims to eliminate uncapped equity returns associated with traditional PFI models and limit these returns to a reasonable rate set in competition. SPV operational surpluses are reinvested in the public sector”. (emphasis as in original)

Scottish value for money guidance outlining the type of programme/project for which the NPD model is suited again appears to provide a case for developing housing deals (Scottish Futures Trust, 2008). However, the model has achieved very modest success at best to date, and is itself subject to criticism for undue complexity and for introducing incentive structures that are incompatible with value for money objectives (Moir, 2010).

It is also important to remember once more that PFI, however configured, is predominantly a financing mechanism. Neither the standard nor the NPD approach resolves the issue of how infrastructure investment is actually going to be paid for.
6 ASSESSMENT, CONCLUSIONS AND RECOMMENDATIONS

“the Panel would urge the Scottish Government to take every possible step to prioritise and fund capital expenditure even in the context of shrinking public sector budgets.” (Beveridge et al, 2010)

“The Scottish Government appears to have the freedom to allocate what has been provided as Resource DEL to Capital DEL, though not to move funds in the opposite direction. To favour capital will mean recipients of Resource DEL losing out in terms of what they would have received but future Scottish Administrations may be faced with this as the only option for the longer-term good of the Scottish economy.” (Armstrong et al, 2009)

“Greater local spending, borrowing and revenue raising powers, coupled with initiatives to increase city councils’ financial engineering skills, would help to bridge the infrastructure gap in Britain’s cities, as they have done in other places. The situation in the UK can be contrasted with Germany, the United States, and a range of other countries, where the financial returns from development accrue to local government - giving them an incentive to proactively facilitate additional development.” (All Party Urban Development Group, 2007)

“The current infrastructure financing system suffers from over centralisation, financial fragmentation, weak strategic coordination and a lack of capacity and skills.” (All Party Urban Development Group, 2010)

Infrastructure investment is a minefield that presents interested parties with a daunting array of acronyms and technical terms. At heart, however, the problem resolves to a small number of questions:

➢ How much infrastructure investment does Scotland require?
➢ How should it be financed?
➢ Who should actually pay for it?

It is impossible to take the politics out of answering these questions and there is plenty of scope for continuing disagreement, but in this concluding section we offer some thoughts to further the debate.

Sizing the gap

On the first question – how much infrastructure investment is required – the answer depends on how one defines infrastructure. In section 2 we suggested that under the first of the two interpretations offered (where the definition is restricted to making local site connections between new dwellings and power/communication/transport/water etc distribution networks), this might be estimated (very roughly indeed) for a total annual supply of 35,000 homes at around £787.5 million, or at £225 million for 10,000 affordable homes.
The Scottish Budget for 2011/12 says that 6,000 new affordable homes will be funded next year. A target of 10,000 homes would then translate to an infrastructure gap of £90 million\(^{35}\). From a total supply perspective, however, just fewer than 17,500 homes were built in 2009/10 according to official statistics\(^{36}\), or 50% of the aspirational target set by the Scottish Government. Using this shortfall to measure the gap yields a (rounded) figure of close to £395 million\(^{37}\).

If on the other hand we use the second interpretation and treat affordable housing per se as infrastructure investment, then, using the housing lobby figure of 10,000 affordable homes required annually, a shortfall of 4,000 homes translates into an investment gap of up to £485 million\(^{38}\).

Rounding these numbers gives a range of between £100 million – £500 million per annum as an estimate of the current housing infrastructure investment gap. There are considerable grounds on which these numbers can be quite legitimately challenged, but they provide a useful point of reference when considering alternative mechanisms for boosting housing infrastructure investment.

### Financing infrastructure investment

Public borrowing for infrastructure investment can be efficient, effective and fair, depending on how the borrowing is eventually repaid. In a UK context, however, the Coalition Government is unlikely to support additional unsecured public debt to deliver infrastructure investment. The Scotland Bill offers the possibility of prudential borrowing by the Scottish Government for this purpose, but there will be strong national competition for the use of any available funds – including for replacement of the existing Forth Road Bridge. More generally, pending the outcome of Scottish Parliament elections in May 2011, it is impossible to determine how realistic this option is for supporting greater housing investment.

At local authority level, additional prudential borrowing based on the use of new local funding streams holds greater promise.

From a financing perspective, the alternative to prudential borrowing is PFI, which in theory trades higher borrowing costs off against project efficiencies derived from more effective risk management. However, the PFI model remains unproven in housing applications, and carries considerable political baggage in Scotland. The current SNP administration prefers its non-profit distributing alternative to ‘traditional’ PFI, but significant doubts remain over the acceptability of this model to the private sector, its efficiency or effectiveness.

On balance, prudential borrowing used in creative ways and backed by new sources of funding looks the most productive financing route to pursue at the present time.

\(^{35}\) That is, £22,500 x 4,000.

\(^{36}\) [http://www.scotland.gov.uk/Topics/Statistics/Browse/Housing-Regeneration/HSfs/NewBuildAllSector](http://www.scotland.gov.uk/Topics/Statistics/Browse/Housing-Regeneration/HSfs/NewBuildAllSector)

\(^{37}\) More precisely, 17,500 x £22,500 = £393.75 million.

\(^{38}\) £121,000 x 4,000 = £484 million.
Paying the Piper

In the search for funding sources, land value taxation stands out as having the potential to generate more than enough to address the housing infrastructure investment gap. Proponents of an LVT also argue that it has strong efficiency and fairness credentials. In practice, however, the fairness argument is far less apparent than LVT supporters claim and any attempt to introduce an LVT would be highly controversial and unpopular. In addition, shifting the tax base in this way would involve significant set up costs and even supporters recognise that a very long lead in time would be required. In our opinion, the LVT route does not offer a practical solution.

Guarantee schemes have the potential to leverage new investment, as the NHT demonstrates. It is not obvious at present how much investment this approach could unlock in time, but current lack of familiarity limits its short-term potential. Moreover, where the approach involves cross subsidisation, stakeholder support is difficult to achieve, as attempts to establish an RSL loan guarantee system in England have shown. As there also remain state aid question marks over this general approach, it appears to be one worth continuing to explore, but as likely to offer only niche answers for the foreseeable future.

Increasing social rents in Scotland to fund more affordable housing investment remains a possibility, but it will always be a hotly contested one. Concerns amongst housing providers regarding affordability and payment for delivering wider roles and services rub badly against wider suspicions of landlord inefficiency, possible featherbedding and unnecessary paternalism. Rent increases could be restricted to new developments or imposed across existing tenants, with different yield potential and different fairness implications. There is also the issue of how much additional revenue could really be secured when so much of current rent is paid by housing benefit. This funding route should not be discounted entirely, and cross subsidisation of affordable housing through market rental ventures on the part of social landlords could deliver some less controversial payoffs. However, making this approach deliver more generally involves sailing into some serious political headwinds.

Tax increment finance, land bank funds and rolling infrastructure funds hold more immediate promise. With the Edinburgh waterfront project, Highland land bank fund and JESSICA, we have real world home-grown examples on which to draw. In all instances, stakeholder opinion appears to be benign. However, some caution is needed. So far, TIF has only been developed to facilitate housing investment indirectly rather than to fund it directly, JESSICA is still bedding down, and the Highland LBF contribution, while welcome, has been modest. It is difficult at this point to hazard a meaningful guess at the funding generation potential of these mechanisms, but it seems safe to accredit them a greater role in the short term.

A Scottish CIL also looks to offer additional medium-term potential. Experience in England shows that stakeholder support can be built for this approach and it could be used to reform the currently inefficient and ineffective system of section 75 affordable housing planning agreements. A CIL approach would reduce project uncertainty while injecting simplicity and transparency into development gain extraction. It should be noted, however, that potentially against this approach are that CIL:

- Loads the cost of new infrastructure onto new development rather than spreading it more broadly (as a land value tax would).
Makes meeting the cost on new infrastructure the responsibility of the current generation rather than spreading it over future generations (as user charging and borrowing would).

The final funding mechanism to consider is the local asset backed vehicle. In our view, this has limited (if any) potential in a Scottish housing context. While it offers local authorities the potential for greater influence and leverage than other types of PPP, the approach presupposes a local authority has suitable assets to exploit, is potentially very costly, demands skills an authority may typically not have access to (see below), requires a suitable economic climate to work, and calls for an appetite for risk that many Scottish authorities simply do not possess.

Broader considerations

The All Party Urban Development Group (2007) concluded that there are currently four key weaknesses in the UK infrastructure financing system:

➢ Over-centralisation (central government micro-manages infrastructure spending and prevents authorities from raising money to fund local priorities).

➢ Financial fragmentation (too many funding streams for the delivery of infrastructure, leading to confusion, inefficiency, and delay).

➢ Weak strategic co-ordination (of public sector strategies, targets and investment activities).

➢ Lack of capacity, expertise and skills within local authorities.

This combination of factors creates unnecessary risk:

“If you go to any of the big banks or investment houses what they say is they can handle the market risk…but the planning risk and the infrastructure delivery uncertainty…are the things that really scare them”. (All Party Urban Development Group, 2007)

Because of this, the Group recommended that local authorities, working together with regional agencies and central government, invest more heavily in the specialist skills required to develop and deliver planning and economic development projects.

The Group returned to this theme in its 2009 report:

“If these plans go ahead [for TIF in England], the HCA could play an important role in providing expert advice to local authorities in terms of practical implementation, particularly as regards risk analysis and mitigation...The HCA should establish a specialist regeneration team to help local authorities with the practical challenges of implementing different funding models, such as assessing and allocating risk”. (All Party Urban Development Group, 2009)

In a complementary vein, Barker (2004) sounded an earlier call for the effective marshalling of expertise to assist local authorities to deliver greater volumes of new housing:

39 Homes and Communities Agency.
“One way in which Government can intervene to tackle the problems posed by externalities, co-ordination failures and information failures is to task and empower public bodies to take a lead role in enabling development... English Partnerships (EP) should have a lead role in delivering development through partnering with public and private sector bodies in assembling complex sites, masterplanning, remediating land and developing supporting infrastructure. At the same time, Government should provide greater certainty as to the principles by which EP would, or would not, intervene, so as to avoid crowding out private sector activity, or stunting the development of new markets. Devolved administrations may wish to assess the roles of their own housing and regeneration agencies in the context of this Review’s recommendations”. (Barker, 2004)

In Scotland, SFT provides advice on value for money matters relating to infrastructure investment, but land assembly and area regeneration per se is beyond its remit, and the relationship of SFT with local Government is prickly at best.

Scottish local authorities need a wider array of options at their disposal in order to secure more housing infrastructure investment. They also need the humility to recognise that they require some support to deliver this investment. Specialist agencies set up to help redress skills gaps should be welcomed by local authorities rather than treated with suspicion. At the same time, such agencies need to display sensitivity to the responsibilities placed on local authorities and respect for the ways they are required to work (in terms of selling ideas to elected members, securing committee approvals etc).

Authorities that wish to exploit their own land assets should be encouraged to do so, but they should be supported in this by an agency that understands the land development market and the land assembly process. This could in principle be achieved through an extension of the SFT remit, but more practically it would involve establishment of a separate land agency. Part of the ‘serious discussions’ Scottish central and local Government need to have around the future of infrastructure investment involves how best to constitute and manage specialist organisations for delivering advice and assistance on infrastructure financing and funding, land asset management and land assembly.

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40 See section 4.
Recommendations

When it comes to infrastructure investment, the sad fact is that there really is no simple solution:

“There is no single source of finance which governments can use to pay for the infrastructure that is vital to the continued economic, environmental and social health of our community. Instead, there will continue to be the need for a mix of instruments to raise those monies. Sound governance and getting the best value for the community requires that any financing options for significant expenditure on urban public infrastructure pass a broader test than just ‘is it possible’. Only with an understanding of broader consequences can the appropriate mix be determined by government decision makers”. Allen Consulting Group (2003)

That said there is considerable scope for increasing housing infrastructure investment in Scotland, however this is interpreted.

To this end, we recommend that:

➢ The Scottish Government works with COSLA and the development industry to scope and implement a Scottish community infrastructure levy scheme that encompasses and replaces the current affordable housing dimension of section 75 planning agreements.

➢ The Scottish Government commissions research to assess the overall annual yield potential of TIF in Scotland and, within this, the extent to which TIF can be used to directly support future new housing supply.

➢ The scope for evolving the JESSICA fund into a more broadly-based rolling Scottish infrastructure fund is assessed once the scheme has been properly bedded in.

➢ Scottish local authorities are given greater encouragement to formally assess the potential for developing in-house land bank funds and land trading ventures to facilitate housing infrastructure investment in the immediate future.

➢ The Scottish Government and COSLA open discussions on the potential for establishing a land development/assembly advice and support giving agency to complement the financial advice giving role of the Scottish Futures Trust. These discussions should also encompass acceptable arrangements for the future governance of these specialist advice agencies.

➢ In future, Scottish local authorities use prudential borrowing powers allied to Scottish CIL and TIF to support greater housing infrastructure investment.

➢ The Chartered Institute of Housing in Scotland takes an ‘honest broker’ lead in assessing the true potential for social housing rents to support greater investment in affordable housing in Scotland.

➢ The Scottish Government explores further the longer-term potential of guarantee models for supporting additional new housing supply.
APPENDIX 1: TAX INCREMENT FINANCING CASE STUDY

A pilot TIF has been proposed for the Edinburgh waterfront area between Leith and Granton, an area with a history of heavy industrial activity. The area includes three of the most deprived council wards in the city and requires intensive regeneration. Edinburgh Council intends to recreate the waterfront as an area centred on mixed residential, commercial and light industrial activity, and tourism.

Total new infrastructure funding required for the wider waterfront project is estimated to be around £500 million by 2020, involving investment in transport (£230 million), schools (£90 million), land, water and utilities (£25 million) and public realm/social infrastructure (£140 million). Current (optimistic) expectations of section 75 developer contributions are in the region of £25 million, leaving a £475 million funding gap. This is considered too large a sum and to carry too much risk to TIF in total. However, a smaller TIF scheme has been proposed involving £84 million of prudential borrowing from the Public Works Loan Board for four initial infrastructure projects (a new road link, a public esplanade, a new finger pier and new lock gates) to be repaid by hypothecated incremental non-domestic rates (NDR) over 25 years. This hypothecation is awaiting final Scottish Government approval.

The economic appraisal undertaken for the project suggests the proposed infrastructure investment will create around 800,000 square feet of commercial space, up to 1,100 hotel beds and 1,240 new residential units, that it will help unlock up to £660 million of private investment, including around £60 million in new infrastructure, will create an additional 4,900 full-time equivalent jobs and will generate Gross Value Added in the area of around £140 million per annum.

The four initial projects are to be delivered under the control of a TIF executive drawn from the key stakeholders.

Source: City of Edinburgh Council and Partners (2010).
APPENDIX 2: LAND BANK FUND CASE STUDY

Highland Council owned 7.1 hectares of land at Woodside of Culloden. Outline planning permission was granted on the site in March 2003 for approximately 100 new homes, 25 of which were to be affordable. The Council had the site independently valued at £3,370,000 subject to no abnormal site conditions.

In March 2005, Highland Council transferred the land to Highland Housing Association (HHA) for the open market value. Purchase of the land by HHA was funded by means of an interest free loan provided from the LBF. HHA issued a development brief in July 2005, and commissioned a feasibility study and indicative masterplan for the site, which confirmed potential for 32 affordable and 88 private units, or 120 in all; revised outline planning consent was applied for and granted.

In March 2006, HHA sold two lots on the site for 10 Homestake and 22 rented properties (which included a clustered housing development) to Albyn Housing Association. The sale price was just over £616,000, and resulted in repayment of £544,000 to the LBF.

HHA advertised for contractors to undertake infrastructure works on the entire site in May 2006. In August 2006, Highland Council approved a further loan to HHA from the LBF to fund the cost of servicing the remaining plots at Woodside up to a maximum of £900,000, with the LBF to be repaid as parts of the site were sold.

The infrastructure contract was subsequently let in December 2006, at a value (excluding VAT) of £1,254,000, £801,000 of which was met by HHA, with the remainder met by Albyn. Infrastructure works were completed in November 2007. However, it did not eventually prove necessary for HHA to borrow the full amount from the LBF for funding its share of the Woodside infrastructure costs.

While infrastructure work was ongoing, the land retained by HHA was parcelled and offered in the form of both serviced lots and individual plots. Four lots involving 75 private dwellings were offered to the market in January 2007. A deal with O’Brien Properties was concluded in December 2007 for a price of £5,968,000. £3,845,000 was transferred back to the Highland Council LBF the day after payment was received from O’Brien Properties.

In November 2007, O’Brien Properties submitted a planning application for land at Woodside involving 26 additional affordable and 7 extra private market units. With intentions to build a further 11 private market dwellings at Woodside, this meant the total number of dwellings yielded by the site rose to 153 (58 affordable and 95 market, or 38% affordable over the whole site). This application was approved in February 2008.

The initial 32 affordable units being provided by Albyn were completed in February 2008. In summary therefore and in very broad terms, the LBF had received back £4,389,000 from HHA by December 2007 for the two loans made, which included an overage payment of £510,000. At the same time, 32 affordable units were supplied at the outset of the overall site development process in locations determined as most suitable by Highland Council and its partners.

**GLOSSARY**

**BID (Business Improvement District):** A PPP where businesses in a defined area pay an agreed fee to fund improvements in that area.

**CIL (Community Infrastructure Levy):** A tax on the increased value of land arising from planning permission, applied according to a published schedule (or tariff) where the size of the levy is determined by a) the amount of infrastructure required in a defined area b) the type of development to be undertaken (residential, commercial or industrial) and c) the size of the development involved (number of residential units; square footage of commercial development).

**DEL (Department Expenditure Limit):** This term describes planned and controlled expenditure by a devolved administration or Government department. It is an annual spending limit. It can be split into ‘Capital DEL’, which reflects investment spending and ‘Resource DEL’, which covers personnel and running costs.

**EIB (European Investment Bank):** An EU constituted financial institution charged with (amongst other things) addressing economic and social imbalance across the EU area.

**FIRS (Future Infrastructure Requirements for Services):** An infrastructure funding scheme operated by Aberdeenshire Council involving a tariff-based approach similar to CIL.

**JESSICA (Joint European Support for Sustainable Investment in City Areas):** A mechanism allowing EU grant money to be combined with state resources to support regeneration projects on a commercial basis. Loans are offered in eligible areas by the EIB, and once repaid the money can be re-lent, creating a rolling fund.

**LABV (Local Asset Backed Vehicle):** A scheme where a local authority contributes land to a company jointly owned by private sector partners in order to exploit the asset's fund raising potential.

**LBF (Land Bank Fund):** A local authority owned and run rolling fund that is established and grown using council tax and profits on land transactions. The fund is used to pay for infrastructure investment and land assembly activity with expenditure subsequently recouped through rising land values and interest on loans made.

**LVT (Land Value Taxation):** A recurring tax on market rental value of land. This explicitly excludes the value of the structures built upon it.

**NDR/UBR (Non-Domestic Rate/Unified Business Rate):** Non-domestic rates are collected by all 32 authorities on the basis of a national poundage set by the Scottish Government, paid into a central pool and redistributed to councils in proportion to their populations.

**NHT (National Housing Trust):** This is a scheme where residential units are bought jointly by a local authority and a developer through a special purpose vehicle. The units are offered for rent for a period of time and then for sale. The Scottish Government offers a guarantee to the authority to ensure it is able to repay any money borrowed to fund the scheme.
**NPD (Non-Profit Distributing):** This describes a special purpose vehicle-based scheme that is 100% debt funded. Where an SPV is equity funded, any commercial surpluses earned are secured by the owners of the equity. Under a NPD scheme, surpluses remain available for public sector use.

**PB (Prudential Borrowing):** Describes a system where local authorities determine how much long-term borrowing they can afford to undertake to fund capital expenditure, in accordance with a ‘prudential code’.

**PFI (Private Finance Initiative):** This is the most extensively used form of joint public/private procurement deal. Under PFI, the public sector contracts with the private sector for the delivery of an investment or service. The private sector takes on the risk of designing, financing, constructing, maintaining and/or operating infrastructure assets as appropriate to deliver the public sector requirement. The higher public sector cost of securing an investment or service in this way is supposedly offset by the greater financial discipline brought to the project by private sector involvement.

**PO (Planning Obligations):** Planning obligations (known as section 106 agreements in England and section 75 agreements in Scotland) are contractual agreements between planning authorities and those with a legal interest in land that require some specified contribution to be made as a condition of granting development planning permission.

**PPP (Public Private Partnership):** This refers to any formal arrangement between public bodies and private companies to deliver a public service or project. More specifically, PPP is an ownership structure as distinct from NPD and PFI which are procurement tools.

**PSNI (Public Sector Net Investment):** This is gross spending on investment less depreciation. It measures the extent to which public spending is adding to the country’s stock of physical capital.

**PWLB (Public Works Loan Board):** The PWLB is a government agency that provides long-term loans to local authorities at favourable interest rates.

**RIF (Regional Infrastructure Fund):** A rolling fund (however resourced) that operates at regional level and for which a regional body is held accountable.

**SPV (Special Purpose Vehicle):** A legal entity (normally a limited company) created for the specific purpose of fulfilling the requirements of a public/private agreement to deliver a public service or project.

**TIF (Tax Increment Finance):** A method of funding infrastructure investment up-front by borrowing against the increase in tax yield in an area expected to follow from the investment.

**User Charging:** A method of funding investment involving borrowing against payments that beneficiaries will make to use the asset created by the investment.
BIBLIOGRAPHY


Armstrong, J., McLaren, J., and Harris, R (2010) Outlook for Scotland’s Infrastructure, Centre for Public Policy for Regions Scottish Government Budget Options Briefing Series No 4

Association for Consultancy and Engineering (2010) A UK Infrastructure Bank, London: Association for Consultancy and Engineering

Barclay, C (2010a) Planning Obligations (planning gain or planning contribution), House of Commons Library Standard Note SN/SN/1298 http://www.parliament.uk/briefingpapers/commons/lib/research/briefings/snsnsc-01298.pdf


http://www.conservatives.com/~/media/Files/Green%20Papers/planning-green-paper.ashx


COSLA (2009a) Funding for Infrastructure Investment, Resources & Capacity Executive Group 9 September 2009

COSLA (2009b) Development and infrastructure options in the new economic context, Resources & Capacity Executive Group 9 September 2009,
rs090911item21appendix-1


Department for Communities and Local Government (2008a) Community Infrastructure Levy, London: Department for Communities and Local Government


Department for Communities and Local Government (2010a) New homes bonus: Consultation, London: Department for Communities and Local Government

Department for Communities and Local Government (2010b) The Community Infrastructure Levy: An overview, London: Department for Communities and Local Government


Jones, J (2006) A strategy for introducing a land value tax in Britain, paper submitted to the Left Economists Advisory Panel


http://www.reclaimdemocracy.org/articles/2006/tax_increment_financing.php


McLean, I (2006) The case for land value taxation, Compass Thinkpiece Number 2
http://www.compassonline.org.uk/publications/thinkpieces/


Michael, J (2009) Tax Increment Financing, Research Department of the Minnesota House of Representatives
http://www.house.leg.state.mn.us/hrd/pubs/ss/sstif.pdf


National Audit Office (2010a) PFI in Housing, London: TSO

National Audit Office (2010b) PFI in Housing: Case studies summary report, London: TSO

National Audit Office (2010c) PFI in Housing: Project details, London: TSO

http://www.cih.org/scotland/policy/All-Pain-no-gain.pdf


Scottish Futures Trust (2008) NPD Explanatory Note
http://www.scotland.gov.uk/Topics/Government/Finance/18232/NPDExpNote

Scottish Futures Trust (2009) Increasing Affordable Housing Supply from Limited Public Resources – the proposed National Housing Trust initiative
http://www.scotland.gov.uk/Topics/Built-Environment/Housing/supply-demand/Proposal/Q/EditMode/on/ForceUpdate/on

Edinburgh: Scottish Government

Scottish Government (2007b) Scottish Futures Trust: Consultation Paper, Edinburgh:
Scottish Government


Scottish Government (2008b) Taking forward the Scottish Futures Trust, Edinburgh:
Scottish Government

Scottish Government (2010a) Affordable Housing Investment Programme 2009-10
Outturn Report
http://scotland.gov.uk/Topics/Built-Environment/Housing/investment/ahip/
ahip20092010report

Scottish Government (2010b) Scotland’s Spending Plans and Draft Budget 2011-12,
Edinburgh: Scottish Government

Scottish Government (2010c) Housing: Fresh Thinking, New Ideas, Edinburgh: Scottish


Scottish Government (2010f) Affordable Housing and Housing Land Audits, Planning

Tennessee Advisory Commission on Intergovernmental Relations (2007) Tax Increment
Financing: Opportunities and Concerns, Nashville: TACIR
http://www.cdfa.net/cdfa/cdfaweb.nsf/fbaad5956b2928b086256efa005c5f78/3c83
2f194c822be4862572dc004c31e1/$FILE/Tax%20Increment%20Financing.pdf

Town and Country Planning Association (2007), Tariffs for Infrastructure Delivery,
Tomorrow Series Paper 7

Issues, Lincoln Institute of Land Policy Working Paper WP07RW1
http://www.lincolninst.edu/subcenters/teaching-fiscal-dimensions-of-planning/
materials/goddeeris-weber-financing.pdf

Wightman, A (2010) A Land Value Tax for Scotland
http://twodoctors.org/lvtwightman.pdf