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The Scottish Public Sector: Does Size Matter?

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Forward

I was delighted when Fabian Zuleeg and Richard Marsh of DTZ Consulting and Research made contact with the David Hume Institute in early 2006, to see if we would be interested in publishing some of their research. Professor Brian Main, my colleague at the DHI and predecessor as Director, and I were both attracted by Zuleeg and Marsh's proposed topic – namely whether the scale of the public sector in Scotland might have adverse effects on the wider economy. We saw this topic as likely to be of great interest across a broad front; and one where additional objective analysis was desirable. Further, we were convinced that such research by these authors would be of a quality and policy relevance to fit with the remit of the David Hume Institute.

Consequently, we not only readily agreed to consider their paper for publication, but also asked if Fabian would speak at a DHI seminar in Autumn 2006, alongside Professor Brian Ashcroft of Strathclyde University, one of *the* acknowledged experts on the Scottish economy. This timing was selected so as to help to prepare the ground for an inevitable debate on public sector 'crowding out' and related issues at the Holyrood elections in 2007, without being so close in time to that election as to risk the Institute becoming embroiled in political debate - rather than the desired objective of stimulating technical and policy discussion.

This excellent paper is being published in advance of the Zuleeg/Ashcroft seminar, which will be held on 10th October 2006. Our expectation is that the paper will whet the appetite for further discussion and help set the scene for what should be productive discussion. The paper is sub-titled 'An investigation of the link between post-devolution growth in public spending and Scottish economic performance'. To fulfil this remit, Marsh and Zuleeg investigate whether there is evidence of public sector activity squeezing private sector investment – 'crowding out' in the economic jargon.

Their conclusion is that while Scotland is partially insulated from crowding out, because much of any additional spending is not raised in Scotland, the unprecedented increases in public spending post devolution are directly related to a large balance of trade deficit for Scotland (around 11% on the latest data); and that deficit is in turn linked to the excess of public spending here over revenues. They also provide evidence that funding increases have been associated with low public sector productivity in recent years, which strongly suggests an adverse impact on overall economic growth. Further they point to concerns, given the prospective macro-economic climate and the likelihood of constraints ahead on UK and Scottish public expenditure, about the sustainability of these high levels of public sector funding.

Marsh and Zuleeg conclude that the trade-off between public sector growth and private sector activity needs to be acknowledged. However, they note that in some instances this trade-off may well be acceptable, e.g. in order to assist the achievement of social objectives. But an emphasis on long-term growth is also required. The emphasis for Executive policies should be on driving forward efficiency gains and bringing in the private sector where this can deliver more efficiently. Intriguingly they suggest that setting down long-term development plans, as in Ireland's National Development Plan, would encourage a more rigorous approach to appraisal of public funding proposals and help to underpin the priority for economic growth.

It will be very interesting to see how the debate on this issue of public sector 'crowding out' unfolds in the run up to the next Holyrood election. My hope is that the analysis contained in this paper will assist an informed and constructive debate on what is a contentious but clearly important topic.

I must conclude with three notes of thanks. First, I am grateful to Professor Brian Main, now the Institute's Academic Director, for his most helpful comments on earlier drafts and his assistance in preparing this paper for publication.

Second, my sincere thanks go to Lesley Lilley and the Economic and Social Research Council for sponsoring the seminar to be held in October. The ESRC is a superb supporter of the David Hume Institute. We appreciate their assistance and I believe that they in turn appreciate our ability to bring together in one forum academics, policy makers and significant figures from business and finance. Long may their support continue! Finally, our thanks go to Fabian and Richard for both their efforts in preparing the paper and thinking of us as a route to publication.

In closing I should note that while the David Hume Institute is convinced that the topics covered in this paper, and the seminar to come, merit analysis and discussion, as a charity it holds no collective view on the subject matter or the policy implications.

Jeremy Peat
Director
September 2006

The Scottish Public Sector: Does Size Matter?

Executive Summary

This paper investigates the impact of the post devolution growth in public sector spending on Scottish economic performance. The key mechanism by which public sector spending might affect investment and growth is crowding out. Crowding out describes the effect when government spending pushes out private investment by producing disincentive effects, through for example rising interest rates, and/or consuming scarce resources, meaning that the private sector has to procure goods, services and other resources from an external source.

Crowding out is a recognised phenomenon and international evidence suggests that the size of the public sector, productivity of the public sector and type of public sector investment all influence private sector activity. Evidence suggests Scotland is insulated from fiscal/public finance crowding out by not having to raise additional revenue to fund spending within Scotland. However, there are some indications that the large scale public sector investments are leading to resource crowding out, especially at the higher wage end of the labour market and in the construction sector. While ‘productive’ public sector investment in areas such as transport and utilities can stimulate economic activity, currently there are few indications that the balance of public sector investment is aimed at enhancing economic development.

The research also suggests that the unprecedented increases in public spending are directly related to a large balance of trade deficit, exceeding 11% of Scottish GDP in 2002, corresponding to a similar figure for net national borrowing (the amount by which spending exceeds revenue). Growth in the Scottish economy is not sufficiently driven by the private sector and rising public sector employment and spending is not going to help to reduce dependency on Scottish public sector activity.

There are a number of difficult years ahead with tighter public finances being predicted in Scotland and the rest of the UK.

While there is evidence of crowding out and a negative impact on economic growth, this is not to say that a reduction in public sector spending and employment is necessarily the best way ahead. Public spending and investment is often aimed at delivering public services and to deliver social objectives and it might be acceptable to trade-off some private sector activity to achieve these. However, the trade-off between certain public sector activity and private sector growth needs to be acknowledged and it is also important to consider how to enhance long-term economic growth. It is likely that public spending as a percentage of GDP in Scotland will be lower in future and it will be critical to ensure that public spending is as productive as possible by driving forward efficiency gains and by involving the private sector where the evidence suggests that the private sector can deliver more efficiently. Such efficiency gains would also free limited resources to enable focusing on productive investment.

The public sector can support private sector development and the Framework for Economic Development in Scotland (FEDS) sets a progressive structure. However, there is no concrete action attached to FEDS. One possible way of focusing the investment activity on those areas where there are the highest returns for the economy is by setting down a single, long term economic development plans, as for example in Ireland's National Development Plan (NDP). Such a coherent and long-term plan can help finance large infrastructure projects and sets out clearly the priorities for investment in physical and human capital. It would enable a rigorous appraisal process for public funding, setting out clearly where and how the investment will feed into economic growth and ensure that a level of public investment is locked in, ensuring that economic growth remains the key priority when public funding is under pressure. Finally, such a plan can clearly identify the key priorities for economic growth.

This would be a clear way in which the Scottish Executive can demonstrate that it is putting economic growth first. Without such an emphasis it is difficult to see how the large spending increases can continue to be justified and the Executive will come under increasing pressure to reduce spending. In the long run, an emphasis on growth and productive investment is likely to minimise Scotland's dependency on transfers from Whitehall and it will make sure that Scotland plc generates economic activity which can sustain Scottish public sector employment and spending through revenues raised in Scotland.

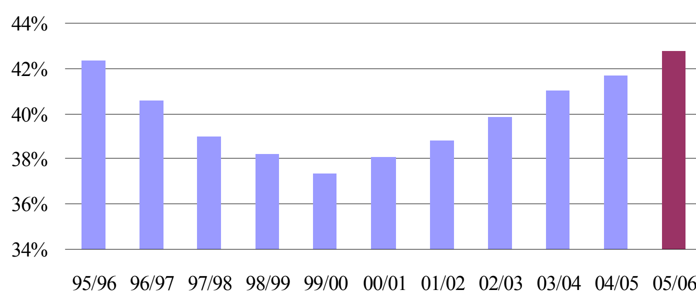
Introduction

This paper investigates the impact of the post devolution growth in public sector spending on Scottish economic performance. Since devolution, public sector spending in Scotland has increased significantly and this has led to a number of commentators raising concerns over the impact of a large public sector on private sector investment and ultimately growth. A number of commentators have dissented from this view, noting the positive impacts associated with public spending. This paper explores the underlying evidence, in particular focusing on available data on macroeconomic trends in Scotland.

The Scottish debate in the UK context

The Scottish debate mirrors questions over the UK economy. The current UK labour government initially oversaw modest growth in public spending with public sector managed expenditure as a share of the economy falling until the financial year 1999-00. Since 1999-00 government spending as a share of Gross Domestic Product (GDP) has grown each year (see Figure 1) and is forecast to rise further still in 2005-06.

Figure 1: Government spending as a share of the UK economy



SOURCE: HM Treasury, Public Finances Databank
NOTES: Total public sector managed expenditure as a proportion of Gross Domestic Product (GDP), figure for 05/06 is forecast

In the medium term, it is likely that the high growth rates in public sector spending will not be maintained and that difficult choices will need to be made in relation to public spending. The National Institute for Economic and Social Research notes that:

"Since it is clear that over the medium term, the Government sets targets for the public sector current budget balance relative to GDP, it is not unreasonable to assume that the next Spending Review, expected in 2007, will indeed involve a reduction in the share of public sector spending in the economy." (NIESR, 2006, p. 52)

Martin Wolf, the FT's respected Chief Economist has called for a rigorous debate on public spending, noting that such a debate needed to go beyond the "public sector good, public sector bad" polarisation.

"Yet, in a country where the state is raising almost half of GDP in taxes, there can be no more important topic." (Martin Wolf, FT, 3.11.2005).

Scotland is a useful case study on the relationship between of public spending and the economy. Under the post-devolution financial settlement (essentially a continuation of the Barnett formula) Scottish public spending has increased significantly in recent years. The Scottish Executive does not raise its own taxes[1] and does not borrow. Scottish spending increases have been mostly financed by transfers from HM Treasury[2].

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[1] The Scottish Executive can vary business rates and there is also the possibility to vary the basic rate of income tax by 3 percentage points, a power which has not yet been used (the 'Tartan Tax').

[2] "The Executive's Total Managed Expenditure (TME) amounts to £29.2 billion in 2006-07, a real terms increase of 3.9% over 2005-06. This funding derives from three sources. Around 90% is Scotland's share of UK government spending; 7% comes from business rates; and 2% is from Europe, through Structural Funds or schemes such as Common Agricultural Policy market support." (Scottish Executive, 2005c) The Scottish Executive funds around 80 per cent of local authority expenditure with the remainder being made up of council tax income.

While Scotland started from significantly higher per capita public spending[3], spending growth has been slower in Scotland than in the rest of the UK due to the Barnett formula. In addition, Scotland's long-term growth rate tends to be below the UK average. This means that the GDP share of Scotland's public sector remains higher than in the rest of the UK. The most recent figures available (for 2003-04) suggest that public sector expenditure accounts for 51% of Scotland's GDP (Dewar, 2006). This makes it even more important to have a debate in Scotland on how this level of spending is impacting on the rest of the economy.

The current state of the Scottish debate

Many commentators have recently commented on the size of the public sector in Scotland. Holyrood Magazine notes that even the First Minister has been drawn into the debate:

"Jack McConnell has acknowledged that the public sector has grown too large, but his response has been to encourage growth in the private sector, 'Scotland plc.', rather than examine how the public sector does its job." (Peakin, 2005)

Currently, the debate in Scotland tends to be relatively polarised. The most strident critical voices have been raised by commentators in the Scotsman, such as Bill Jamieson (Jamieson 2005a, 2005b). In view of a declining future budget for the Scottish Executive, Scotland on Sunday (2005) concludes that:

"The Scottish Executive must prepare for that rainy day. It needs to cut public sector employment and reduce public spending."

[3] In part, higher levels of per capita spending are due to higher levels of deprivation and service costs in more inaccessible areas than in the rest of the UK.

Similarly, drawing on the findings of a study carried out by economists at the European Central Bank (Afonso, Schuknecht & Tanzi, 2003), Professor Sir Donald MacKay concludes:

"What we need is not more public spending on unreformed public services, but less spending directed much more efficiently. We urgently need a radical shift from "big" government to "small" government. (MacKay, 2004)

Other commentators have also raised concerns. In written evidence to the Scottish Parliament's Enterprise and Culture Committee as part of the Business Growth Inquiry, CBI Scotland highlights that public spending is not sustainable and risks crowding out private sector growth. The incoming Director General of the CBI, Richard Lambert, commented at the beginning of July 2006 in a BBC radio interview that in his view Scotland had too large a public sector.

Professor David Bell, in his written submission of evidence to the Scottish Parliament's Finance Committee, noted that:

"The public sector in Scotland will continue to grow more rapidly than the economy as a whole until 2007-08. In the long run, there must be a danger that the public sector will 'crowd-out' private sector activity which may be inimical to sustainable growth in the long term" (Professor David Bell, paragraph 5.4, 2.11.2004) In a later paper, writing with Professor Sir Donald MacKay, he concludes that:

"… it should be an objective of the Scottish Executive to reverse the process of crowding out market sector activity which its policies have aggravated significantly." (MacKay & Bell, 2006)

On the other side of the debate, commentators such as Alf Young have cautioned against concluding that the higher levels of public spending and employment in Scotland have a negative impact.

Commenting on the rise in public sector employment in Scotland from 23% in 1999 to 23.6% in 2005 (from just over 530,000 to just over 580,000)[4], Alf Young states that:

'… the tabloid scare stories about a burgeoning state running out of control is not borne out by this data." (Alf Young, Sunday Herald, 9.4. 2006)

A paper commissioned by Unison Scotland from Andrew Cumbers and Kean Birch at the Centre for Public Policy for Regions (CPPR) concluded that:

"Recent criticisms of the public sector have tended to resort to old and largely discredited arguments about 'crowding out' which do not reflect the more complex ways that public spending interacts with business activity. The evidence that we have presented here suggests that there is no clear evidence, either historically, or through international comparison, that countries with high levels of public spending have a poorer economic performance than those with lower levels." (Cumbers and Birch, January 2006, p. 12).

Hervey Gibson concludes in the Sunday Herald that:

"In the past, we've trimmed government on financial grounds. That's one thing. But to shrink it on growth grounds, when all the best international evidence says it's good for us, would be perverse." (Gibson, 2006)

In the Scottish Economic Report, an article by two Scottish Executive economists has also investigated the issue. The paper notes that:

"It has been said that Scotland's public sector is 'crowding-out' private enterprise, but Scotland's position as a small open economy within the UK means that many of the mechanisms by

[4] Public sector employment now stands at 586,400 or 23.8% of employment (Q1 2006). Over the period Q1 1999 to Q1 2006, this is the highest in absolute terms as well as percentage terms (lowest absolute 527,600 (Q1, 1999), lowest percentage 22.5% (Q3 and Q4, 2000)). (Scottish Executive, 2006b)

which government activity might in theory retard growth do not directly apply in Scotland." (Rhatigan and Carter, December 2005).

Theoretical background

To determine the potential impact of public sector spending, it is important to establish what impacts might be expected from economic theory. As indicated above, the key mechanism concerned is crowding out.
Based on Griffiths and Wall (2001), Cumbers and Birch (2006, p. 2-3) define crowding out as follows:
"The general definition of crowding-out is when government spending in an equilibrium economy pushes out private investment by producing disincentive effects, such as rising interest rates induced by government borrowing requirements, and consuming goods and services produced by the private sector, meaning that the private sector has to procure goods and services from an external source (i.e. import)."[5]

There are three key mechanisms by which public spending can crowd out activity in the rest of the economy:

- Fiscal crowding out, where the taxes used to raise additional funds reduce private sector activity;
- Public finance crowding out, where public borrowing increases the interest rate which in turn reduces private investment; and
- Resource crowding out, where the public sector uses scarce resources, such as labour or capital which are consequently not available for private sector investors.

Crowding out is a recognised economic concept which is considered in central government spending decisions.

[5] "This quote was mistakenly attributed to Griffith and Wall in the original version of this paper and not to Cumbers and Birch. We apologise for this mistake"

HM Treasury notes that, in general, crowding out needs to be taken into account and that crowding out can completely negate any impact of increased public spending:

"If there are no grounds for expecting a proposal to have a supply side effect, any increase in government expenditure would result in a matching decrease in private expenditure (known as 'crowding out')." (HM Treasury, 2003)

It is unlikely that crowding out is ever absolute, i.e. that any increase in government spending would lead to an equal amount of reduction in private sector activity, especially in the regional context:

"there can typically be no presumption of the 100% of crowding out of government expenditure in the regional context." (McGregor & Swales, 2003)

Ultimately, private investment depends on a range of factors and crowding out is only one potential influence. This does not, however, mean that partial crowding out is not a distinct possibility.

Crowding out issues are very important in countries where the size of public sector is generally large and specifically large in economically weaker parts of the country, like Scotland in the UK context, South Italy in the Italian context and East Germany in the German context.

The supply-side effects noted in the Green Book[6] which can reduce the crowding out effect are in general those effects which can increase the long term capacity of the economy, for example by increasing human capital through education.
This implies that we need to take into account not only the level of public expenditure but also what it is spent on.

[6] The Green Book is HM Treasury's guidance for the appraisal and evaluation of public sector expenditure.

It is also important to determine how efficient the public sector is in producing its outputs. One needs to recognise that any increases in public sector outputs might balance any losses in private sector outputs.
At the same time, inefficiencies in the public sector will reduce overall output if more efficient private sector funding is displaced.

It is very difficult to measure crowding out in practice. Even the size of public sector expenditure can be hard to determine. Capital investments in the public sector can be channelled through PFI/PPP vehicles[7] and there has been a trend for outsourcing of public services. For example, a report for the EC estimates that the UK public sector outsourcing market will grow from £45bn. in 2005 to £67bn. by 2006-07 (EC, 2005). It is even more difficult to establish the effectiveness of public sector spending.

However, there are ways to investigate the extent of crowding out in Scotland more indirectly, by firstly examining evidence from the rest of the UK and the rest of the world, and by secondly investigating what current evidence suggests about crowding out in Scotland.

UK and International evidence

It is difficult to establish objectively what international evidence says about the relationship between government expenditure and growth.

Certainly, a simple correlation, which is often presented to disprove any negative link, shows there are a number of countries which have high expenditure levels and are economically high performers, including most of the Scandinavian countries.

[7] Even across PFI/PPP projects it is difficult to classify this spending accurately. Some PFI/PPP projects are more akin to funding vehicles, enabling off balance-sheet borrowing, while others go as far as encompassing frontline service delivery as well as public infrastructure/capital investment.

Simple correlations can, however, be misleading. They do not take into account the many other factors which can influence expenditure and growth. Any economic modelling exercise which investigates this link has to take into account causal relationships, i.e. why does growth differ, with the size of the public sector only one of the explanatory variables.

The OECD has been researching this issue in detail and has used econometric analysis to investigate the impact on investment and growth of the overall 'size' effect, the role of the tax structure and the composition of expenditure. The analysis concludes that:

"The results of the analysis tentatively support the hypothesis that the size of government has a detrimental impact on growth. The overall tax burden is estimated to have a negative impact on output per capita … . The composition of expenditure also appears to be important … there is also some evidence that the extent of public sector involvement in the economy may be negatively associated with the rate of accumulation of private capital, suggesting a further indirect impact on economic growth via its effect on investment." (OECD, 2004, p. 38-39)

Economic commentators generally believe that there is a degree of trade-off between equity and efficiency when increasing the size of the public sector, i.e. that those countries with relatively low levels of public spending can achieve higher levels of efficiency while those with a larger public sector can increase income equality (see for example Afonso, Schuknecht & Tanzi, 2003). Evidence for the UK often discusses public spending in the context of productivity, which broadly measures how efficiently goods and services are produced in the economy.
In general, productivity performance in the UK lags behind other competitors. One possible cause of this gap is the size of the public sector. On this issue, Martin Wolf notes that:

"A second and more plausible reason could be the sharp rise in public spending as a share of GDP.

True, Finland, Sweden and Austria have all enjoyed faster productivity growth than the UK over the past decade, despite heavier tax burdens.
But the rising share of public spending in GDP must have a downward impact on productivity growth, since (admittedly imperfect) measures of public sector productivity show a decline." (Martin Wolf, 8.11.2005)

In the same article, he also notes that the UK's productivity performance might be linked to the relatively low levels of private investment while acknowledging that investment only explains about 40% of the rise in business sector productivity since the mid 1960s.

Similarly, the Economist notes that:

"the public sector has been showered with money. Since 1999-2000, government spending has risen by a staggering five percentage points of GDP. Public services employ only a fifth of all workers but have been responsible for nearly half the increase in the total number employed in the past five years."

The Economist clearly notes that public sector efficiency is the key but believes that recent results have been disappointing:

"The switch in resources from the private to the public sector was always likely to lower overall productivity growth since it is difficult to raise efficiency in labour-intensive services such as education. Yet the damage has been even worse than expected. In the National Health Service, for example, which has devoured so much extra cash, efficiency has been declining by about 1% a year." (The Economist, 21.1.2006, p. 31)

The disappointing productivity performance of the UK economy has led Graeme Leach, the Chief Economist of the Institute of Directors, to call for bringing public spending under control by growing public sector spending below GDP growth rates at 1.5% (FT, 3/3/2006).

In a speech to the National School of Government conference in June 2006, Tony Blair warned that unless it could be demonstrated that services had radically improved alongside the large funding increases, public consent for this investment would be in jeopardy.

So what is the situation in Scotland and is there any evidence of crowding out in Scotland? This paper first establishes the current fiscal position in Scotland to investigate whether there is crowding out through tax or borrowing (fiscal and public finance crowding out). We will then examine what evidence there is on public sector efficiency and resource crowding out, before examining the current levels of private sector investment and their link to public sector spending.

Scottish fiscal balance and crowding out

The Scottish budget works very differently from the budget in independent countries. In essence, Scotland does not raise its own taxes, with spending levels being determined by transfers from the UK government according to the Barnett formula[8].

Overall per capita public spending levels are higher in Scotland than in the rest of the UK, with economic activity (as measured by GDP and GDP growth) somewhat lower. This means that the public sector occupies a significantly larger part of GDP in Scotland than the rest of the UK, a situation mirrored in public sector employment figures.

The recent increases in public spending in the rest of the UK have also led to the difference between expenditure and taxes in Scotland becoming wider.

[8] A detailed examination of the Barnett formula is beyond the scope of this paper. In essence, the Barnett formula means that HM Treasury transfers a fixed percentage (determined by population size) of each spending increase in the rest of the UK to Scotland. As Scottish public spending is higher per capita than UK spending, this should lead in the long run to an equalisation of spending levels. However, not all spending falls under the Barnett formula and differing population trends have reduced the impact of the Barnett formula significantly.

Determining the Scottish fiscal balance is not straightforward and there tends to be a significant amount of argument over the exact amounts, mainly hinging around how central UK expenditure (such as defence) is allocated to Scotland and how much Scotland would receive of UK oil revenues. Most analysts agree that Scotland has a public sector deficit that is persistent over time (see for example Hinze (2004), Goudie (2002) or Simpson, D. et al (1999)).

Latest figures suggest a net borrowing figure of around 12.9% of GDP (excluding all oil revenues), compared to 3.7% in the UK as a whole. Even if all UK oil revenues were allocated to Scotland, the net borrowing figure would still be 6.2% of Scottish GDP (Scottish Executive, 2005)[9].

General government spending provides an expenditure measure consistent between Scotland and the UK. Shown in Figure 2, general government spending is one of the aggregate demand components in the expenditure approach to measuring GDP. General government spending figures are available from national accounts produced by the ONS and from Input-Output tables produced by the Scottish Executive. These figures are lower than those shown in Figure 1 as they exclude items such as depreciation and net investment.

General government spending as a share of the Scottish economy has been rising over the last five years for which data are available[10]. By 2002 spending as a share of GDP was 8.4 percentage points higher in Scotland than for the UK as a whole.

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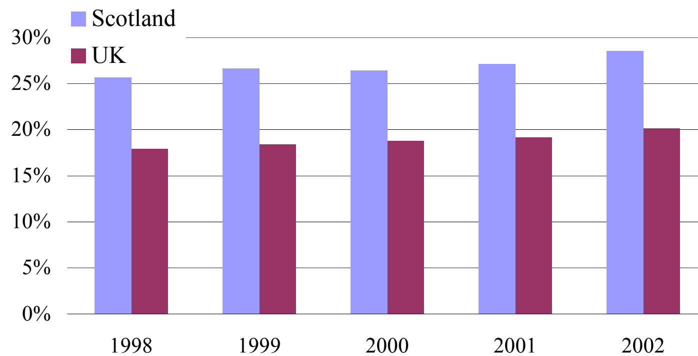
[9] It is worth noting that the changes to taxes on oil production in the North Sea and changes to the world market price of oil could significantly change the public sector revenue from oil and, depending on allocation, could reduce the Scottish public sector deficit. However, given that any public sector deficit in Scotland is currently not financed through Scottish taxes, this would not change the overall argument on crowding out presented in this paper.

[10] There is an unfortunate time lag in the availability of comparable data over time which hampers the analysis and debate on issues such as public sector spending and crowding out. The authors would strongly support efforts to improve data quality and availability in this field.

Figure 2: Current Government spending as a share of GDP



SOURCE: Office for National Statistics, Scottish Executive
NOTES: General Government Spending as a proportion of Gross Domestic Product (GDP) at current market prices

For Scotland, the impact of the rise in public spending is cushioned by not having to raise the funds directly:

"An increase in government expenditure in Scotland does not necessarily imply an automatic increase in taxation, although the financing of Scottish expenditure as part of UK policy will have implications for Scotland." (Rhatigan & Carter, 2005)

Similarly, Scotland would not have to increase borrowing, meaning that any increases in spending financed through this way would not impact to the same degree. This means that while there is the potential for partial crowding out, in line with general trends in the rest of the UK, the situation would not be significantly worse in Scotland[11].

However, it is important to consider overall expenditure in the context of the economy.

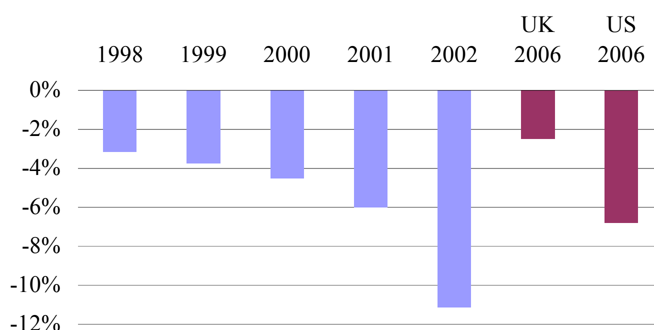
[11] The usual mechanism for public finance crowding out is through increases of the interest rate. Government expansion financed by borrowing leads to higher interest rates by creating a greater demand for money. This will in turn reduce investment which is sensitive to the interest rate. This counteracts the expansionary effect of government deficits and can affect long-term supply-side driven economic growth. The key fiscal and montary levers are not devolved, making this mechanism applicable to the UK but not directly to Scotland. Scotland is in a currency union with the rest of the UK so a distinct monetary policy is impossible.

MacKay and Bell comment that:

“The rapid increase in public expenditure in Scotland from 1998 must have been accompanied by a substantial deterioration in Scotland’s trade balance with the rest of the world.” (MacKay & Bell, 2006)

This is borne out by the figures. The Balance of Trade position for Scotland is now a deficit of around 11.1% of GDP, shown in Figure 3. Government Expenditure and Revenue in Scotland (GERS) for 2002-03 shows net government borrowing[12] at 11.6% of Scottish GDP, excluding North Sea Oil (Scottish Executive, 2005b).

Figure 3: Scottish balance of trade as a share of GDP



SOURCE: Scottish Executive, The Economist (UK and US)
NOTES: Balance of trade includes exports, imports and tourism receipts. UK and US figures show projected current account balances as a share of GDP

Given that Scotland does not have its own currency and cannot raise capital on international markets, the balance of trade position and government net borrowing should be about the same. Either measure for Scotland is nearly double that of the current account deficit projected for the United States in 2006 and over four times the deficit projected for the UK as a whole.

[12] Net borrowing (NB) is simply defined by GERS as the difference between expenditure and receipts, excluding North Sea oil revenues. The Executive does not borrow on the capital markets to fund this gap, rather it is financed through the Barnett transfers from Westminster.

This link between the size of the public sector and the Scottish trade deficit has also been noted by other commentators:

"Allowing for the crudeness of all these figures, Scotland is certainly running a hefty [trade] deficit that is only affordable because of the large public sector deficit." (Kerevan, G. in Jamieson, 2006, p. 59)

As has been discussed above, in some detail, a number of commentators have pointed out that the size of the public sector impacts directly on productivity, and that the public sector:

"plays a direct part in Scotland's productivity gap. Scotland is more dependent than the rest of the UK on the public sector for jobs and output: ... So concerns about the greater risk in Scotland of public sector activity crowding out private sector employment or willingness to start businesses appear to be valid. However, … the tax burden is less, 41% compared with 45%. … Still, Scotland is not out of line with international averages on either the revenue or expenditure side. The crucial issue is the efficiency of the public sector." (Coyle, Alexander & Ashcroft, 2005, p. 27)

Evidence on the efficiency of Scottish public services seems to point to similar difficulties to the rest of the UK[13]. A number of studies have shown that the Scottish public sector could use the additional funding more effectively (see for example Audit Scotland, 2006a and 2006b, on the Scottish NHS, MacKay & Bell (2006) or Craft (2005)) but there is no hard evidence that suggests that Scotland is performing significantly worse than the rest of the UK.

[13] There is a link between the efficiency and the level of the deficit, namely fiscal autonomy. Some commentators have argued that having responsibility for raising the taxes which finance expenditure would encourage a higher degree of fiscal accountability (see for example Blow, Hall & Smith, 1996 or The Economist, 20.5.2006).

Overall, the evidence suggests that Scotland is insulated to a degree by the current fiscal arrangements as higher taxes or greater borrowing in Scotland does not finance higher levels of spending, specifically. This implies that the macro-economic mechanisms which would result in crowding out, such as for example a rising cost of borrowing due to movements in the interest rate, will not apply in Scotland any more than in the rest of the UK. Current evidence suggests that the level of investment is not significantly below that of competitors. (Scottish Executive, 2006)

However, Scotland has a very significant Balance of Trade deficit with the rest of the UK, reflecting the higher level of public spending, which is likely to impact on the economy in the longer term:

"If classical crowding out does not seem to apply in Scotland (as of now) that does not mean to say that the vast growth in the state has been good for the economy. Making allowance for uncertainties in the official statistics, we can say that public spending equivalent to at least 10% of Scottish GDP is being funded externally. No economy can escape the consequences of an inflow of expenditure equivalent to 10 per cent of GDP, particularly if the money is going largely into wages and salaries." (Kerevan, G. in Jamieson, 2006, p. 57)

It should also be noted that there is a general concern across the UK about an increasing fiscal imbalance, high levels of spending and the associated levels of crowding out. This will also impact on the Scottish economy, for example through the UK interest rate.

Resource crowding out

When considering crowding out, we also need to consider resource crowding out. Resource crowding out would result from

the public sector using scarce resources which are then not available to the private sector or only at a higher price.
There are two broad areas where this might occur – in capital investment (for example through capacity constraints in the construction industry) and through the labour market[14].

In terms of capital investments, there is evidence of capacity constraints in the construction sector. In part these are created by record capital investment in areas such as schools and hospitals. Paradoxically, there also appear to be specific constraints in areas where the public sector needs to provide public infrastructure to support development (for example, water/sewage infrastructure or transport infrastructure).

In these areas, spending on infrastructure might support private sector investment, rather than hindering it, reinforcing that what the spending is on will influence the degree of crowding out[15].

In the 2004 Spending Review (see Scottish Executive, 2005a), the Executive detailed its spending plans, setting out a rise in planned annual capital investment from just under £2.3bn in 2004-05 to over £3bn in 2007-08, an increase of over 30% over the period. This does, however, underestimate the total level of public sector investment, as hospitals and schools built through PFI/PPP are not fully reflected – for example, the school buildings programme is around £3bn investment by 2009, but annual expenditure reflected in the Executive's spending plans is only around £100m per annum, reflecting the Executive's contribution to the Local Authorities' PPP contracts.

It is difficult to assess how much of this investment is into public infrastructure which directly facilitates private sector investment

[14] In general, resource crowding out in the labour market occurs when there is 'full employment', i.e. there is not a large pool of readily available labour which employers can draw from.
[15] For example, Aschauer (1988) found that the decline in private sector productivity in the US economy was 'matched, or slightly preceded, by a precipitous decline in additions to the net stock of public non-military structures and equipment.' (p. 13). In his later research, Aschauer (1990) shows that public sector 'productive' investment leads to increases in private sector investment, noting that this type of investment does not seem to lead to 'crowding out'. However, later studies concluded that Aschauer's findings over-estimate this effect and that there is a modest positive effect (SACTRA, 1999, p. 57-58). For a review of this literature, see also Page (2005).

or into the delivery of public services such as health, education or social housing.
Despite transport being the largest single area for Scottish Executive investment by 2007-08 (and with high growth rates over the period), on balance, the spending plans set out by the Scottish Executive tend to focus on public services rather than public infrastructure, in areas such as public services such as Local Authorities, housing, health and education[16]. This ties in with the UK government emphasis on investing in new assets to fulfil its aim of creating 'world-class public services' (Page, 2005).

It is also important to take into account not only the investment in physical capital (such as infrastructure) but also the investment in human capital through for example education. If investment into human capital raises the overall productive capacity of an economy (by for example increasing skills levels and consequently productivity), it can have a positive impact on overall output.

However, taking together investment into those areas which are most closely linked to physical and human capital[17] suggests that less than ¼ of public spending[18] is aimed at these policy areas, with almost 60% being committed to Social Protection and Health and Community Care (Scottish Executive 2005b). This emphasis on spending has been criticised by some commentators:

"Unlike European regional governments, the political leadership of the Executive has been backward looking and focused on redistribution and social justice issues rather than looming economic problems.

[16] Scottish Water, as a publicly owned company, also invests significantly in infrastructure – estimated in Building a Better Scotland at a minimum of £1.8bn over the period 2002-03 to 2005-06. However, it is difficult to determine which proportion of this is devoted to facilitate new private sector investment in residential and commercial developments.
[17] Education and Training, Enterprise and Economic Development, Science and Technology, Employment and Transport.
[18] Identifiable public expenditure as defined in GERS.

This is all too understandable given the vast subsidies that flowed from London as Chancellor Gordon Brown raised taxes. But the result has further exacerbated the Scottish trade deficit and placed the sustainability of the economy on a perilous footing." (Kerevan, G. in Jamieson, 2006, p. 68)

A recent investigation into spending on economic development in Scotland concluded that:

"According to the Scottish Executive, and the First Minister, the growth of the Scottish economy is the first priority of the Executive. The principal tool available to the Executive in pursuing that priority is the Executive's £23,000 million budget. Although issues of definition are disputed, there is clear evidence that this priority does not impact strongly on the Executive's strategic spending choices." (Wood, 2005)

In terms of the labour market, an investigation by the Scottish Item Club (Ernst & Young, 2005) suggested that over the period 2000-2005, the private sector added 120,000 jobs in the Scottish economy with the public sector adding 70,000 (about 5/8 and 3/8 respectively). This places Scotland mid-league of UK regions in terms of public sector growth rates. However, Scotland started from a high rate comparatively and in 2005 it still had the fourth highest public sector employment relative to population.

Further, employment is more focused in health and public administration rather than education, which can make the most impact on long run growth. The report concludes that current public spending is unsustainable and that Scotland, in line with the rest of the UK, will face tough choices in the years ahead.

It is important to recognise that crowding out in the labour market is likely to have the most impact at the high-wage end of the labour market. On average, public sector workers tend to be better paid than private sector.

David Bell notes that:

"There is something called the public sector premium. That means that people with the same set of characteristics – 40-year-old males, for example, or 25-year-old females – will earn somewhat more in the public sector than in they do in the private sector. That premium is larger in Scotland than it is down south and that is the kind of evidence which makes me a little worried that there is some element of rent seeking in Scotland, which could be made worse by continued rapid growth in public sector expenditure in Scotland."

Evidence suggests that the biggest gap in productivity between Scotland and the rest of the UK is among the top end of earners (see Marsh, Mosca & Zuleeg, 2005).

Given the higher levels of public sector employment at higher wage rates[19], the evidence seems to suggest a degree of labour market crowding out. This is an area of research which requires further investigation, especially as data of the impact of wage settlements in public services, such as McCrone or the NHS wage settlements, become apparent. MacKay and Bell conclude that:

"The Scottish Executive continues to pretend that extra public expenditure is an investment rather than additional current expenditure. On the contrary, the evidence is that the bulk of increased public expenditure has gone into higher wages and salaries for those employed in the public sector without any compensation in improved services." (MacKay & Bell, 2006)

[19] For example, recently published data from Futureskills Scotland (2006) shows that from 1993/95 to 2001/03 public sector graduate employment had increased from 45% to 47% while private sector graduate employment had fallen from 55% to 54%. This level of graduate employment in the public sector contrasts with overall public sector employment of around 25%. Similarly, the Higher Education Statistics Agency suggests that out of 12,800 leavers from Scottish Higher Education in 2004-05, 5,200 went into public administration and defence, social security, education, health and social work. (The Herald, 15.8.2006)

Overall, there seems to be evidence of a degree of resource crowding out, accompanied by relatively low spending on infrastructure in contrast to overall public service capital investment.

Economy-wide impacts

Alongside claims about 'crowding out', there is an issue concerning the existence of an inverse relationship between successful economic development and government intervention in the economy. The issue is often phrased in terms of 'dependency' of the economy on public sector employment and growth generation.

It is generally recognised that the public sector should only intervene if there is a strong economic (efficiency) or equity (social) rationale[20] and that markets tend to deliver outcomes more efficiently:

"Public sector involvement starts from the premise and historical observation that the private sector and economic markets are generally better able to make efficient decisions about the conduct of economic activity than the public sector. However, where markets do not operate efficiently, the public sector may be able to contribute to longer run supply side improvements." (FEDS, p. xiv)

This implies that, in general, public sector growth cannot replace private sector growth. Government intervention should clearly be driven by market failures (and equity considerations), rather than simply to generate economic activity:

[20] "Equity-led policies focus on distributing or shifting output within an economy. These interventions will not be first and foremost directed at increasing overall national output, but at changing the distribution of this output. But even in equity-led policies efficiency objectives have to be pursued." (Scottish Executive, 2004, Background Analysis to FEDS, p. 22)

‘In principle, there should be a clear weakness in the market or broader economic system that inhibits the attainment of Executive objectives before intervention would be justified.’ (FEDS, p. xiv)

This clearly states that public sector spending should not replace private sector economic activity – rather it only comes into play when clear economic and social objectives cannot be achieved through the market. In this context, it is important to note that the view of public spending as a positive injection into the economy is still prevalent with many commentators. For example, Alf Young notes that:

“The state in Scotland may now be spending more than half the wealth generated in Scotland each year, but, despite the saga of the parliament building, it certainly doesn't spend it all on itself. Some 60% or more of public sector revenue budgets go directly on wages and salaries. They, in turn, get recycled into consumption (and investment) in the commercial marketplace. Public procurement keeps an awful lot of private sector companies in business. If it weren’t for public-realm commissions, Scotland's construction sector would be a fraction of its size. Scottish Water, alone, claims that around half of all construction activity north of the border is now focused on renewing its crumbling infrastructure.” (Alf Young, 7.11.2004)

It is debatable how much of the construction sector is Scottish based and how much of this funding will benefit non-Scottish companies. More importantly, the implication of public spending being a driving force of the economy needs to be questioned. The argument relies on economic activity and employment being basically a fixed amount that would lie idle if there was no public sector activity. Economic theory would suggest that unless there is significant under capacity in the economy (for example in a recession), these resources would be used productively[21].

[21] This is often termed the ‘lump of labour fallacy’, i.e. treating a variable such as the amount of economic activity or the number of available jobs as constant.

A detailed investigation of the figures also reveals that additional public spending is unlikely to lead to additional economic activity in Scotland unless supply side effects are present. As shown above, the net government borrowing for Scotland is roughly equivalent to the balance of trade position. The balance of trade deficit is deducted from the value of the economy, as measured by the Gross Domestic Product (GDP).

In other words some public sector revenue does get recycled but if production in the Scottish economy is not increased then it will draw in imports from outside of Scotland meaning that the position of the economy, in terms of GDP, does not improve - although the composition of the economy may be very different.

The evidence suggests that much recent growth in Scotland has been driven by public sector expansion rather than sustainable private sector activity. Professor David Bell has estimated that the private sector in Scotland has grown by 12.8% since 1998 while the public sector has increased by 19.3%. Over the same period, the public sector in the UK has grown at a similar rate, at 20.7%, but private sector growth was significantly higher than in Scotland at 20.1%. (Scotsman, 24.2.2006) The Financial Times estimates that in the period 1997-2003, private sector growth in Gross Value Added (GVA) outpaced public sector growth in London and the South East but that the situation was the reverse in the North of England and Scotland. In Scotland, average annual GVA growth in the public sector was over 3%, more than double the growth rate in the private sector. The FT notes:

"So weak was the private sector in peripheral areas of the UK that, while it accounted for 80 per cent of economic growth nationally, it brought only 72 per cent of growth in Scotland and 66 per cent of growth in Wales and the North East of England." (FT, 20/3/2006)

Thus, there seems to be strong evidence that the 'dependence' on public sector growth and employment is significantly greater in Scotland than in the rest of the UK, especially in the South-East. While there is no reason to presume that the current level of transfers will not be sustained, this implies that Scotland remains dependent on public sector funding for its growth performance. From an economic policy perspective, a more dynamic, private sector economy is unlikely to result from increased spending levels.

The latest Government Expenditure and Revenue in Scotland (GERS) publication (Scottish Executive, 2005b) shows that aggregate government expenditure in Scotland increased from £34.0 billion in 1999-00 to just over £45.3 billion by 2003-04. Of this increase, 60.4% was associated with increased net borrowing whilst 39.6% was associated with an increase in aggregate receipts.

Public expenditure figures underpinning GERS show that aggregate government expenditure across the UK rose to £454.2 billion from £340.9 billion between 1999-00 and 2003-04 (HM Treasury, 2005). Based on the net borrowing figure provided in the latest GERS publication, 46.3% of the increase in aggregate public expenditure across the UK was associated with increased net borrowing whilst 53.7% was associated with an increase in aggregate receipts.

Conclusions

This paper has investigated the current evidence for crowding out in Scotland and has taken into account the unique funding mechanism of Scottish public expenditure. In line with previous research, the evidence suggests that Scotland is insulated from fiscal/borrowing crowding out by not having to raise additional spending within Scotland.

However, there are concerns over UK public expenditure trends and any UK-wide impacts will also be felt in Scotland.

The research acknowledges that public sector spending can be economically productive but points to a range of sources which suggest relatively low public sector productivity in recent years. There are also some indications that the large scale public sector investments are leading to resource crowding out, especially at the higher wage end of the labour market and in the construction sector.

The research acknowledges that ‘productive’ public sector investment in areas such as transport and utilities can stimulate economic activity but currently there are few indications that the balance of public sector investment is aimed at enhancing economic development.

Overall, the research concludes that some degree of crowding out is evident in the economy.

The authors thus agree with the following statement:

“It is difficult to demonstrate, in any particular case, that public expenditure has ‘crowded out’ private sector activity. But it is even more difficult to resist this conclusion in Scotland’s case”. (MacKay, D. in Jamieson, 2006, p. 83)

The research also suggests that the unprecedented increases in public spending are directly related to a large balance of trade deficit. This balance of trade deficit is likely to persist unless public spending can increase the supply side capacity of the economy. The evidence suggests that growth in the Scottish economy is not driven by the private sector and rising public sector employment and spending is not going to help to reduce public sector dependency. There are a number of difficult years ahead with tighter public finances being predicted in Scotland and the rest of the UK.

While there is evidence of crowding out and a negative impact on economic growth, this is not to say that a reduction in public sector spending and employment is necessarily the best way ahead. Public spending and investment is often aimed at delivering high quality public services and to deliver social justice and equity objectives.

In these areas, it might be acceptable to trade-off some private sector activity to achieve social objectives. However, the trade-off between private sector activity and public sector growth needs to be acknowledged. Furthermore, it is also important to consider how the Scottish Executive could enhance long-term economic growth.

As public spending growth rates will be relatively low in the next few years, together with the Barnett formula, this is likely to lower public spending as a percentage of GDP in Scotland. Rather than cutting public spending in absolute terms, it will be critical to ensure that public spending growth is kept under control and that any spending is as productive as possible.

This necessitates driving forward efficiency gains and involving the private sector where it can be demonstrated that the private sector can deliver more efficiently. To have a distinct effect on public sector efficiency, and on front line public service delivery, these efficiency gains will have to come in those areas where there are large scale spending commitments, namely local government, health and education. Such efficiency gains would also free limited resources to enable focusing on productive investment as described below.

It will also be important to ensure that as much public sector funding as possible is used to enhance private sector economic development. The public sector can support private sector development, for example through ensuring that the right skills and infrastructure developments are available where demand is created by high economic growth.

The Framework for Economic Development in Scotland sets the right overall structure but there is no concrete action attached to FEDS.

One possible way of focusing the investment activity on those areas where there are the highest returns for the economy is by setting down long term development plans, as for example in Ireland where a National Development Plan (NDP) has been in operation from 2000-2006 and where a new NDP is being drafted for 2007-2013. Such a long-term plan can help finance large infrastructure projects (by being able to space funding requirements) and sets out clearly the priorities for investment in physical and human capital.

While there are a range of different economic development plans in Scotland, for example different spatial economic development plans and Smart Successful Scotland, as well as a developing National Transport Strategy, there is no coherent and consistent overall plan which brings together the different policy areas and sets out the key overall priorities as well as potential trade-offs.

Such an overall plan would enable a rigorous appraisal process for public funding, setting out clearly where and how the investment will feed into economic growth – and, by exclusion, also clearly demonstrate where funding is aimed at social justice, regeneration or re-distribution. Such a process of prioritisation would also ensure that a level of public investment is locked in at an early stage, ensuring that economic growth remains the key priority when public funding comes under pressure. Finally, such a plan can clearly identify the key priorities for economic growth, for example being able to identify whether rural transport links or inter-urban connections need to be prioritised.

This would be a clear way in which the Scottish Executive can demonstrate that it is putting economic growth first. Without such an emphasis it is difficult to see how the large spending increases can continue to be justified and it is likely that the Executive will come under increasing pressure to cut spending growth. In the long run, an emphasis on growth and productive investment is likely to reduce Scotland's dependency on transfers from Whitehall and will increase productivity overall through increased private sector activity.

In the long run, this will ensure that Scotland plc. generates the economic activity which can sustain Scottish public sector employment and spending through Scottish taxes.

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