

Financial Scrutiny Unit Briefing

The Size of the Public Sector

19 June 2013

13/36

Richard Marsh and Jim Dewar

On most measures the public sector comprises a larger share of the economy in Scotland than in the rest of the UK. However the size of the public sector can be measured in different ways including public expenditure expressed as a percentage of economic output, government current consumption as a share of all current consumption and public sector employment as a share of all employment.

This briefing explains these terms, provides Scottish data for each measure, shows how the data have changed over recent years, and provides comparisons with the whole of the UK.



CONTENTS

EXECUTIVE SUMMARY	3
BACKGROUND	4
<i>DEFINITIONS</i>	<i>4</i>
<i>PUBLIC EXPENDITURE AS A PERCENTAGE OF GDP</i>	<i>4</i>
<i>GOVERNMENT CONSUMPTION AS A PERCENTAGE OF TOTAL FINAL CONSUMPTION</i>	<i>5</i>
<i>PUBLIC SECTOR JOBS AS A PERCENTAGE OF ALL JOBS</i>	<i>5</i>
TRENDS: SCOTLAND AND UK	<i>6</i>
SOURCES	11
RELATED BRIEFINGS	12

EXECUTIVE SUMMARY

The scale of government involvement in the economy can be measured in a variety of ways. This briefing considers the merits and limitations of three such measures:

- public spending as a percentage of GDP
- government consumption as a percentage of total consumption
- public sector jobs as a percentage of all jobs

Data for each of these are presented for Scotland and the UK.

Since 1999 and ignoring the output of North Sea oil and gas, public spending relative to GDP has been consistently higher in Scotland than in the whole of the UK but the gap has been narrowing. However, when a geographic share of North Sea oil and gas is included in Scottish GDP then there is little difference relative to the UK.

Government current consumption as a share of total current consumption in Scotland rose steadily until 2009 but has since begun to decline. Scottish government consumption as a share of total current consumption has remained consistently above the figure for the whole of the UK.

In line with the convention adopted by the Treasury, the figures for public sector jobs have been adjusted to exclude the effect of the nationalisation of financial institutions. The share of all jobs in the public sector is also consistently higher in Scotland than in the UK. The gap narrowed a little until 2011 but widened in 2012 in part due to a change in definition.

BACKGROUND

Public expenditure in the UK expressed as a percent of Gross Domestic Product (GDP) increased from 36.3% in 1999-00 to 47.3% in 2009-10 but is forecast to decline to around 39% by 2015-16 (HM Treasury, 2012).

Public expenditure in Scotland as a share of GDP excluding North Sea oil and gas has also increased since 1999-00 but from a higher base.

This briefing does not discuss the merits of more or less public spending or a larger or smaller public sector but attempts to provide factual information on public expenditure, public consumption and public sector jobs in Scotland, shows how the figures have changed in recent years and provides comparisons with the UK.

DEFINITIONS

In making comparisons, it is clearly important that the data being compared refer to the same thing. However comments on the size of the public sector often quote different measures as though they were interchangeable. The following measures are useful in describing different aspects of government activity:

- Public expenditure as a percentage of GDP measures how much is spent by government, whether funded by taxes or by borrowing, expressed as a percentage of total domestic output
- Government consumption as a percentage of total final consumption measures how much of total final consumption is consumed by government acting on behalf of citizens, either individually or collectively
- Public sector employees as a percentage of all workers is an indication of the size of the public sector and hence, given certain assumptions about value added per employee in each sector, how much of total output is produced in the public sector

PUBLIC EXPENDITURE AS A PERCENTAGE OF GDP

Public expenditure as a percentage¹ of Gross Domestic Product (GDP) is the most frequently quoted of the three measures. It has the merit that, for most countries, statistics on total government expenditure and GDP are readily available at national level; statistics are collected and presented in a reasonably consistent manner through time and between countries; and the concept is widely understood.

Public expenditure as a percentage of GDP shows the proportion of national output spent by government. However public expenditure includes the cost of providing services e.g. health, education, defence; and transfer payments e.g. pensions, job seekers allowance, interest payments. While the distinction may be immaterial to the taxpayer, the economic impact is important. Transfer payments leave the final spending decision with the recipient of the payment while provision of public services is decided on behalf of users with the service often

¹ GDP is a net measure and public expenditure is a gross measure, it may be more accurate to refer to the figures as a ratio rather than a percentage.

provided by the public sector. Public expenditure as a percentage of GDP therefore invariably exceeds the proportion of national output consumed by government.

Note that because transfer payments are included in public spending and private spending, public expenditure of, say, 51% of GDP does not mean that private expenditure or the size of the private sector is only 49%.

On the other hand, public expenditure does not include income raised through the sale of goods and services by public corporations e.g. Scottish Water, the Post Office. Thus public expenditure as a percentage of GDP differs from the proportion of national output produced by the public sector. It measures how much of national output is raised in taxes plus borrowed by government but it is only one measure of the scale of government economic activity.

Public expenditure as a percentage of GDP is most useful as a measure of the level of taxation and public borrowing relative to the output of the economy. However, due to the inclusion of transfer payments, it is not necessarily the best measure of the size of the public sector.

GOVERNMENT CONSUMPTION AS A PERCENTAGE OF TOTAL FINAL CONSUMPTION

Government consumption as a percentage of total final consumption is a measure of how much of domestic consumption of goods and services is determined by government. Government consumption covers the cost of goods and services provided by government to the citizen and paid for by taxation and, possibly, borrowing rather than by charges to the user e.g. health services, education, defence. It excludes transfer payments and excludes services which are paid for directly by the user rather than funded by taxation, even though the goods or services may be produced by the public sector e.g. postal services.

Total final consumption includes the consumption of government, households and Non-Profit Institutions Serving Households (NPISH). Consumption by households covers those normally resident in Scotland and excludes tourists. NPISH includes universities, colleges, associations and membership bodies (including charities).

Government consumption as a percentage of total final consumption is therefore a good measure of the scale of government activity funded by taxes. However because transfer payments are not included it does not provide an indication of overall taxation levels.

PUBLIC SECTOR JOBS AS A PERCENTAGE OF ALL JOBS

The ratio of public sector jobs to all jobs is a good indicator of the size of the public sector. Again the concept is widely understood but if used as a proxy measure of the contribution of the public sector to the economy, then this assumes that on average public sector and private sector jobs have equal economic weights.

The reason for using jobs rather than the value of the output is that, for outputs financed by taxation, there is no market value which can be used to convert outputs into money for comparison with the rest of GDP. Calculating value added is notoriously difficult to measure for services like health, education and defence. In the absence of such data, the number of jobs in the public sector as a percentage of all jobs is a good indicator of the relative size of the public sector.

TRENDS: SCOTLAND AND UK

Public Expenditure

Table 1 below shows Scottish public spending and Scottish GDP with and without a geographic share of oil and gas produced from the UK continental shelf. Output from the UK continental shelf is generally included in UK GDP figures but often excluded from Scottish GDP.

Scottish public spending is shown expressed as a percent of GDP excluding and including offshore oil and gas. UK public spending as a percent of UK GDP is shown for comparison.

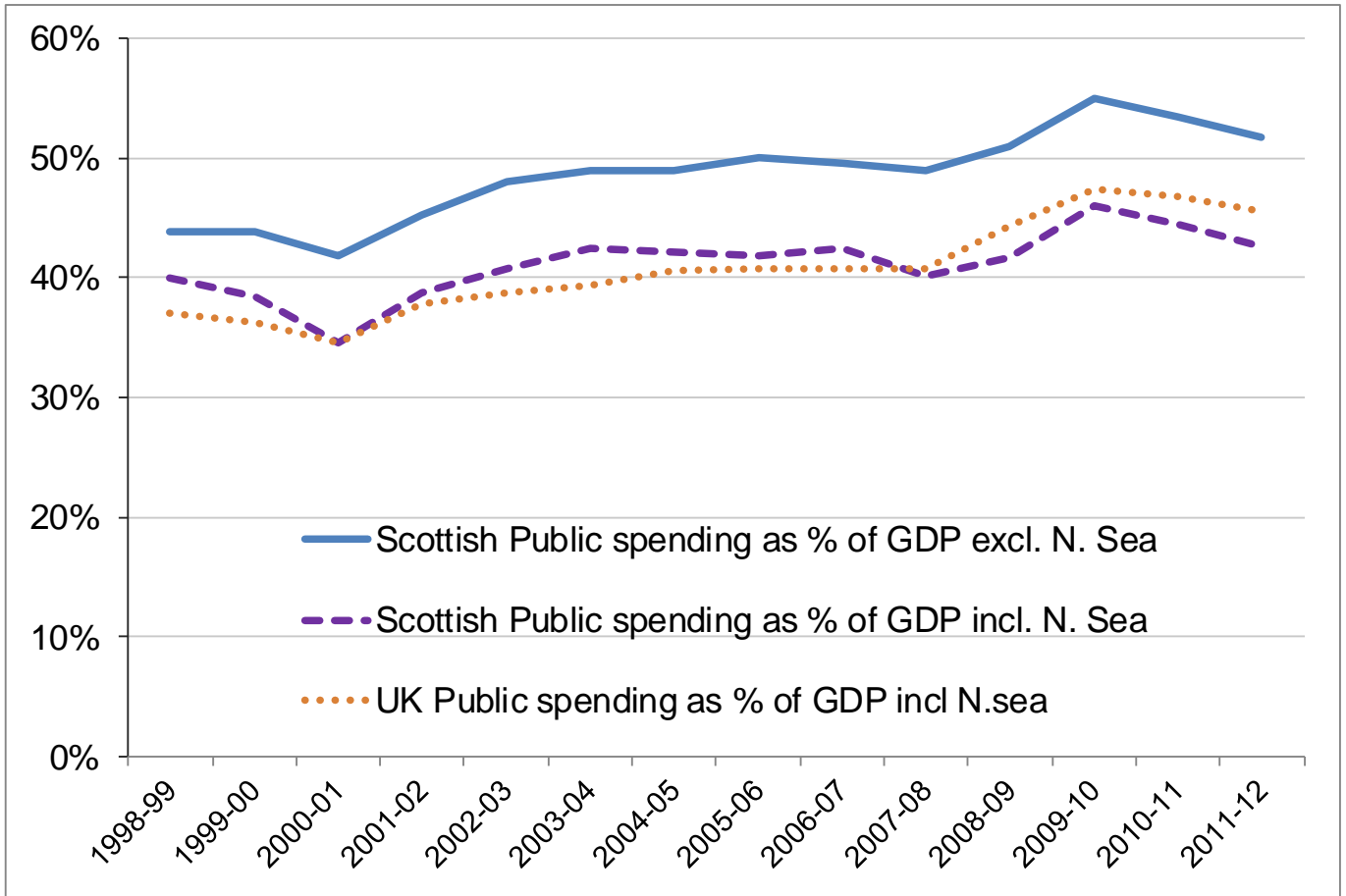
Table 1: Public Spending as % of GDP: Scotland and UK

	Scotland					UK
	Public Spending £bns	GDP on shore £bns	GDP inc N.sea £bns	Public spending as % of on shore GDP	Public spending as % of GDP inc N.sea	Public spending as % of GDP inc N.sea
1998-99	31.8	72.5	79.4	43.8%	40.0%	37.0%
1999-00	32.9	74.9	85.5	43.9%	38.4%	36.3%
2000-01	32.5	77.9	93.9	41.8%	34.6%	34.6%
2001-02	37.0	81.8	95.5	45.3%	38.7%	37.8%
2002-03	40.7	84.7	99.7	48.1%	40.8%	38.8%
2003-04	44.0	89.9	103.4	48.9%	42.5%	39.4%
2004-05	46.7	95.3	110.6	49.0%	42.2%	40.6%
2005-06	50.0	100.0	119.5	50.0%	41.8%	40.8%
2006-07	52.9	106.6	124.8	49.6%	42.4%	40.7%
2007-08	55.9	114.2	139.4	49.0%	40.1%	40.7%
2008-09	59.0	115.7	141.5	51.0%	41.7%	44.4%
2009-10	62.0	112.9	134.9	55.0%	46.0%	47.4%
2010-11	64.0	119.7	143.8	53.5%	44.5%	46.8%
2011-12	64.5	124.7	150.9	51.7%	42.7%	45.5%

Sources: Scottish Government, HM Treasury

Chart 1 shows public spending as a percent of Scottish and UK GDP excluding and including a geographic share of North Sea oil and gas in Scottish GDP.

Chart 1: Public Spending as a percent of GDP: Scotland and UK



Sources: Scottish Government, HM Treasury

Excluding North Sea oil and gas from Scottish GDP, public spending in Scotland has been around 7-10 percentage points higher than in the UK but when North Sea oil and gas is included in Scottish GDP then there is little difference between Scotland and the UK.

GOVERNMENT CONSUMPTION

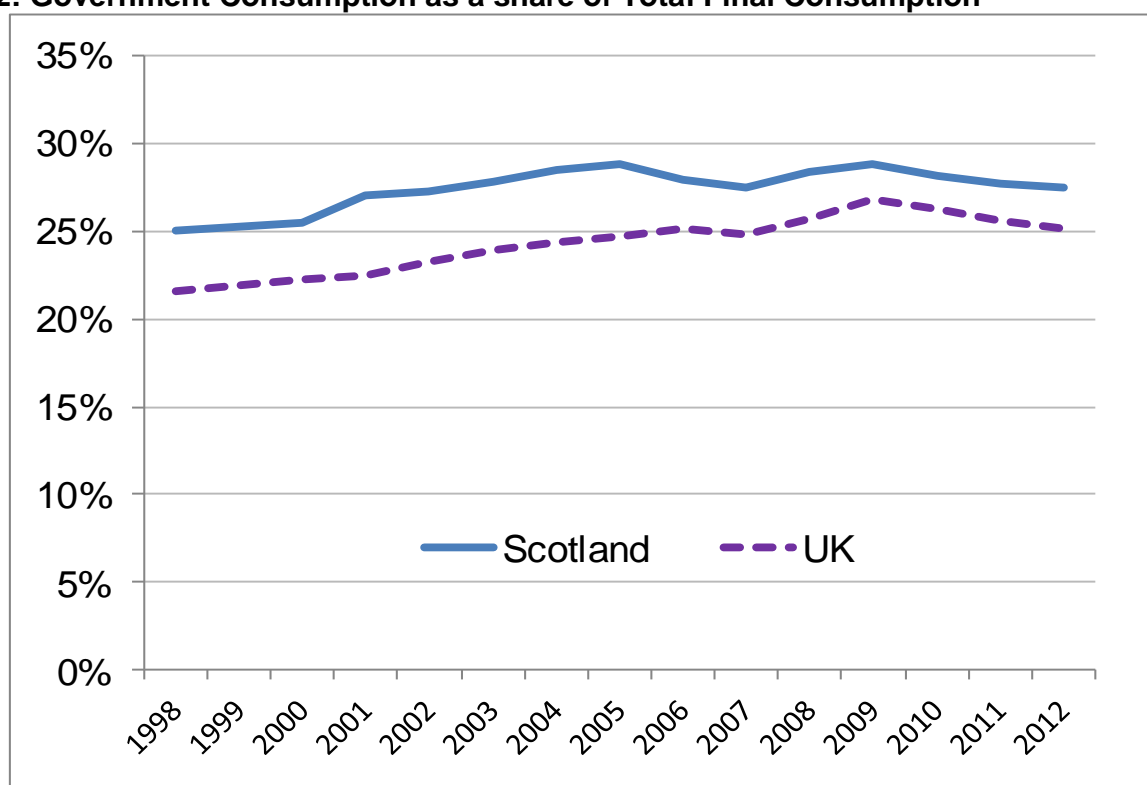
Table 2 and Chart 2 compare government consumption as a percentage of total final consumption for Scotland and the UK. Figures are taken from the Scottish National Accounts Project (SNAP). Government consumption is the sum of central and local government final consumption. Total final consumption is the sum of consumer consumption, not for profit institutions serving households (e.g. charities), plus central and local government consumption. Consumption by foreign tourists is excluded.

Table 2: Government Consumption as Share of Total Consumption: Scotland and UK

	Scotland			UK		
	Government Consumption £bns	Total Consumption £bns	%	Government Consumption £bns	Total Consumption £bns	%
1998	15.5	62.0	25.0%	156.7	726.4	21.6%
1999	16.5	65.4	25.3%	169.7	774.8	21.9%
2000	17.6	69.1	25.5%	181.9	820.8	22.2%
2001	19.9	73.7	27.0%	194.6	864.6	22.5%
2002	21.1	77.5	27.3%	212.6	913.9	23.3%
2003	22.7	81.8	27.8%	232.6	971.4	23.9%
2004	24.6	86.4	28.5%	250.9	1,027.4	24.4%
2005	26.7	93.0	28.8%	268.3	1,084.2	24.7%
2006	26.9	96.6	27.9%	285.1	1,135.5	25.1%
2007	28.1	102.4	27.5%	295.2	1,191.2	24.8%
2008	30.1	105.9	28.4%	315.6	1,227.4	25.7%
2009	30.0	104.2	28.8%	327.9	1,224.2	26.8%
2010	30.4	108.0	28.1%	335.0	1,276.6	26.2%
2011	30.5	110.4	27.7%	335.7	1,311.6	25.6%
2012	31.6	114.8	27.5%	340.5	1,354.2	25.1%

Sources: Scottish Government, ONS

Chart 2: Government Consumption as a share of Total Final Consumption



The figures show that government consumption in Scotland has been on average around 3% points higher than in the UK. The gap has narrowed slightly as government consumption rose across the UK up to 2009.

PUBLIC SECTOR JOBS

Table 3 and Chart 3 present data on public sector jobs (headcount) in Scotland and the UK. Figures are published quarterly but Q2 figures have been used as a proxy for full year figures.

Further Education and Sixth Form Colleges in England were reclassified to the private sector in June 2012. This had the effect of reducing the number of public sector jobs in the UK by about 200,000 jobs or 0.7% of all jobs. This is shown in the Chart as a step change in the share of public sector jobs in the UK in 2012. Without the reclassification, the reduction in the public sector share of all jobs between 2011 and 2012 would have been around 0.7% point in the UK compared to a 0.4% point reduction in Scotland.

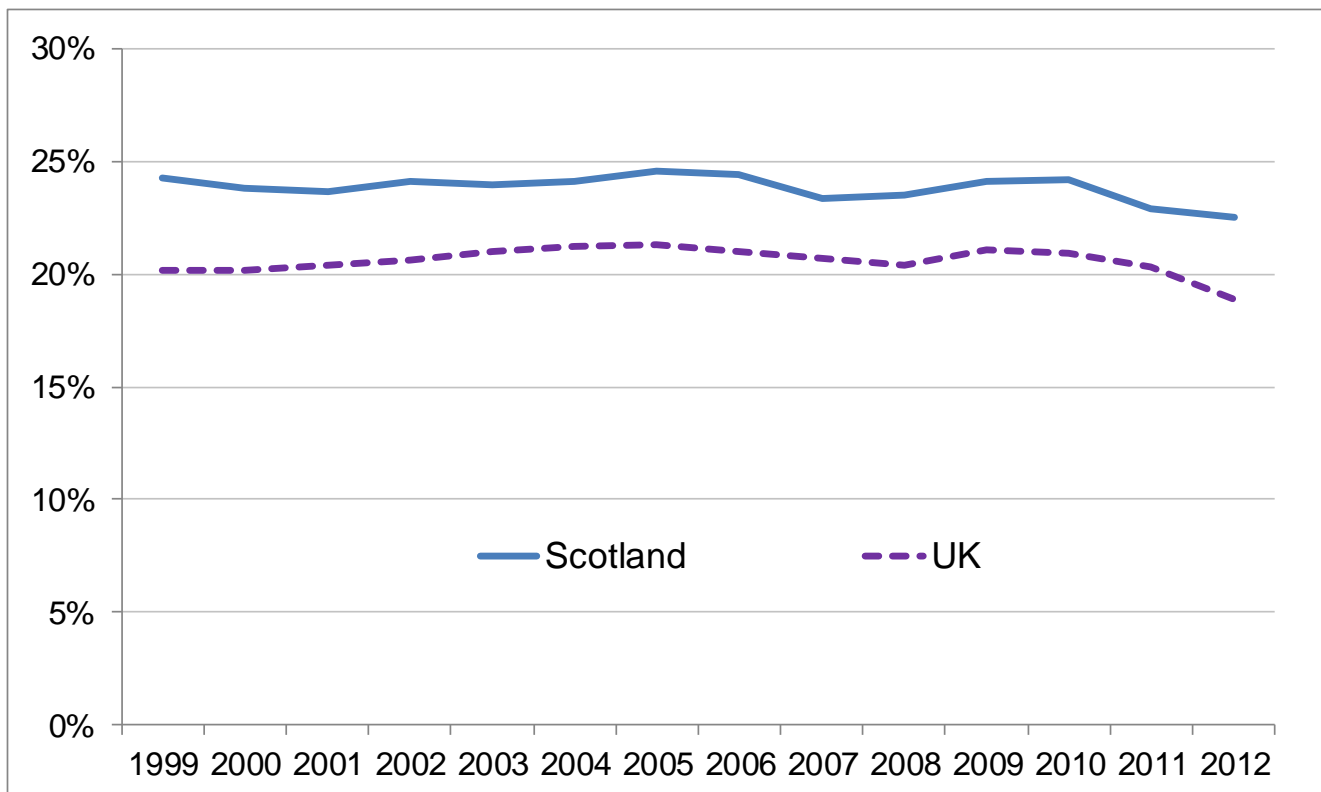
Data for Scotland up to Q1 2013 is available and shows that public sector employment in Scotland has fallen further. Non-seasonally adjusted figures for Q1 2013 show public sector employment at 551.9 thousand jobs accounting for 22.0% of all jobs in Scotland.

Table 3: Public Sector Jobs as a Share of All Jobs: Scotland and UK

	Scotland			UK		
	Public sector jobs excluding financial sector 000s	All jobs 000s	Public sector share of all jobs %	Public sector jobs excluding financial sector 000s	All jobs 000s	Public sector share of all jobs %
1999	545.6	2,245	24.3%	5,467	27,115	20.2%
2000	549.9	2,306	23.8%	5,548	27,528	20.2%
2001	552.8	2,335	23.7%	5,641	27,699	20.4%
2002	561.5	2,332	24.1%	5,747	27,881	20.6%
2003	574.2	2,396	24.0%	5,910	28,194	21.0%
2004	587.4	2,441	24.1%	6,028	28,419	21.2%
2005	598.1	2,429	24.6%	6,129	28,776	21.3%
2006	602.0	2,467	24.4%	6,094	29,030	21.0%
2007	596.4	2,553	23.4%	6,040	29,205	20.7%
2008	596.9	2,536	23.5%	6,017	29,508	20.4%
2009	597.7	2,480	24.1%	6,092	28,831	21.1%
2010	591.7	2,448	24.2%	6,097	29,118	20.9%
2011	569.3	2,489	22.9%	5,899	29,130	20.3%
2012	554.8	2,465	22.5%	5,580	29,560	18.9%

Sources: Scottish Government, ONS

Chart 3: Public Sector Jobs as a Share of All Jobs: Scotland and UK



The figures show that the share of public sector jobs in Scotland was generally 3-4 percentage points more than in the UK. The gap narrowed a little up to 2011 but widened in 2012, this was not solely due to the reclassification of colleges in England.

SOURCES

Office for National Statistics (2013a) *Public Sector Employment, Q4 2012* [Online] Available at: <http://www.ons.gov.uk/ons/rel/pse/public-sector-employment/q4-2012/index.html>

Office for National Statistics (2013b) *Quarterly National Accounts, Q4 2012* [Online] Available at: <http://www.ons.gov.uk/ons/rel/naa2/quarterly-national-accounts/q4-2012/stb-quarterly-national-accounts-q4-2012.html>

Scottish Government (2013a) *Public Sector Employment in Scotland: Statistics for 1st Quarter 2013* [Online] Available at: <http://www.scotland.gov.uk/Resource/0042/00424407.pdf>

Scottish Government (2013b) *Scottish National Accounts Project: An Experimental series of historical fiscal balances for Scotland 1980-81 to 2011-12* [Online] Available at: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/GERS/RelatedAreas/LRfiscalbalances2013>

Treasury (2012a). *Budget 2012* [Online] Available at: http://www.hm-treasury.gov.uk/budget2012_documents.htm

Treasury (2012b) *GDP Deflators at market prices, and money GDP* [Online] Available at: http://www.hm-treasury.gov.uk/data_gdp_fig.htm

Treasury. (2012c) *Public Expenditure Statistical Analysis 2012 Table 4.1* [Online] Available at: http://www.hm-treasury.gov.uk/d/pesa_complete_2012.pdf [Accessed 27 Nov 2012]



SPICe

The Information Centre

RELATED BRIEFINGS

[SB 10/88 The Size of the Public Sector](#) 1st December 2010

Scottish Parliament Information Centre (SPICe) Briefings are compiled for the benefit of the Members of the Parliament and their personal staff. Authors are available to discuss the contents of these papers with MSPs and their staff who should contact Richard Marsh on extension 85377 or email richard.marsh@scottish.parliament.uk. Members of the public or external organisations may comment on this briefing by emailing us at spice@scottish.parliament.uk. However, researchers are unable to enter into personal discussion in relation to SPICe Briefing Papers. If you have any general questions about the work of the Parliament you can email the Parliament's Public Information Service at sp.info@scottish.parliament.uk.

Every effort is made to ensure that the information contained in SPICe briefings is correct at the time of publication. Readers should be aware however that briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

www.scottish.parliament.uk