FISCAL SUSTAINABILITY

ISSUES FOR THE FINANCE COMMITTEE WORK PROGRAMME 2012

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Introduction

This paper provides some background for the forthcoming work programme of the Finance Committee. The work programme focuses on the long-run fiscal sustainability of the Scottish budget. Four aspects of this issue will be considered during January and early February. These are: demography (11th January 2012), inequalities and social deprivation (18th January 2012), universal services (25th January 2012) and alternative funding methods (1st February 2012). This paper provides an introduction for the Committee to each of these. It makes no judgement on constitutional arrangements, but points out differences where relevant. Before considering these issues, however, it explores what is meant by long-run fiscal sustainability.

Fiscal Sustainability

Under current constitutional arrangements, 90 per cent of the Scottish budget is determined by a block grant defined by the Barnett Formula and voted by the UK Parliament1. The Scottish Government does not have borrowing powers. There is therefore limited power to vary the Scottish budget. In these circumstances, how can new fiscal pressures, such as those brought about by demographic change, be dealt with under the Scottish budget?

There are two main cases. Consider first the case where similar pressures on government spending are being experienced in other parts of the UK. Since the same pressures are occurring throughout the UK, these can be termed symmetric budgetary pressures. Then, under current funding arrangements, the UK government is likely to take specific fiscal actions to deal with these issues in England, Wales and/or Northern Ireland. Assuming that the associated spending does not fall within the set of reserved issues, as defined in the Scotland Act, the Scottish government will receive an additional allocation through the Barnett formula. The Scottish Government is not under any pressure to follow the policies which this additional spending supports in the rest of the UK, but any actions it chooses to take is constrained by the size of the Barnett “consequential”, which Scotland receives as a result of the increased spending by the UK government.

For example, as a result of demographic pressures, the UK government might decide to spend an additional 10% on social care in England. Scotland will receive an additional allocation as a result of this decision, and, given that it faces similar demographic pressures, may decide to allocate additional funds to social care. If it decides to allocate more than 10%, these additional resources

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1 Other contributions to the Budget come from non-domestic rates, council tax and fees and charges levied by government agencies. In addition, under current constitutional arrangements, the Scottish Parliament has the power to vary the standard rate of income tax by 3p in the pound.
have to be found from within its existing budget: if it decides to allocate less than 10%, it can redirect the residual funds to other uses. Since social care is not a reserved issue, the Scottish government is under no obligation to follow the specific policies on which the additional funding in England is spent.

Even if it does decide to adopt similar strategies, the additional costs to the Scottish budget will reflect the relative efficiency of social care delivery in Scotland and England. Thus the Scottish government could follow policies designed in England, but spend less than the additional 10% of its budget, if social care delivery in Scotland was more efficient than in England.

This argument is contingent on an assumption that the UK government identifies future fiscal pressures within its own jurisdiction and takes appropriate action. The latter requires sufficient political opinion to be mustered in support. One example where this has arguably not been the case is that of social care. The Royal Commission on Long-Term care reported in 1998 and a number of other reviews and commissions have recommended change in the delivery of social care services in England. Yet little has happened due to the lack of political leadership. Thus, on January 3rd 2012, 60 charities and user groups wrote a letter to the Daily Telegraph pleading for some political consensus around what is now generally perceived to be the critical state of England’s social care system.

The second case is where the fiscal pressures are asymmetric. This could arise because there is pressure for additional spending in Scotland that is not mirrored elsewhere in the UK, or there is pressure for additional spending in the rest of the UK that is not mirrored in Scotland. Current funding arrangements are not well-suited to this case and there is no formal mechanism for dealing with them. This partly reflects the lack of any legal framework underpinning the Barnett Formula.

A key issue, therefore, for the relevance of existing funding arrangements is the extent to which Scotland is demonstrably different from the rest of the UK in respect of long-run fiscal pressures. Neither Scotland, nor the rest of the UK is unique in respect of issues such as demographic change. All major countries are developing strategies to deal with this issue.

However, on issues such as infrastructure development, policy clearly works in quite different contexts North and South of the border. For the rest of the UK, there is no equivalent of the £1.6 billion that is required for the replacement Forth crossing. Scotland has no equivalent of the £14.8 billion Crossrail project, which will provide a railway network underneath Central London. Scotland may get an unexpected capital windfall as a result of Crossrail, but will have no specific assistance from the UK government for the Forth crossing replacement. One might argue that over a long period, the effects of such projects on either side of the border might even out. This seems a rather flimsy case to support current arrangements. It is based, as is the Barnett formula, on the notion
that relative population size determines infrastructure need. This does not take population density into account. Unless there are massive congestion issues in the more densely populated area, one would expect that the average per capita cost of infrastructure would be higher in the area with lower population density, if one’s objective was to produce a similar quality of infrastructure in both areas.

Two further examples expose the dangers of relying on a loose funding arrangement, the Barnett Formula, where one of the parties, HM Treasury, controls the outcomes. The first is the funding arrangements for the London Olympics, which was ruled outside the Barnett Formula, and therefore did not generate Barnett "consequentials" in Scotland, Wales and Northern Ireland, as would normally have been the case. In addition, much of the National Lottery funding has been diverted to the Olympics, depriving sport in Scotland of resources. It is unlikely that additional economic activity in Scotland associated with the Olympics will compensate for this loss. Though less important financially, the second example is the lack of Barnett "consequentials" from expenditure on new jails in England. This again illustrated the fragility of the arrangements underpinning Barnett Formula.

To conclude the discussion of how existing funding arrangements may be affected by additional fiscal pressures, one might expect that those pressures that are experienced throughout the United Kingdom will result in changed levels of funding for the Scottish Government as a result of the Barnett Formula. However, not all pressures for additional spending are experienced symmetrically in Scotland and the rest of the UK. This is particularly relevant for a large infrastructure projects. The effect on the Scottish Budget is potentially either positive or negative, depending on the location of the new infrastructure. However, HM Treasury has been prepared to override the Barnett Formula on occasion. This raises uncertainty over the robustness of the Barnett Formula and weakens the ability of the devolved territories to engage in long-term fiscal planning.

The Barnett Formula does not link taxes raised in Scotland with the level of public spending in Scotland. It has been argued that this implies that Scotland faces a "soft" budget constraint\(^2\). If a link between taxes and spending existed, it is argued that Scottish politicians will be forced to give more priority to policies that support economic growth. Clearly there are differences over the extent of tax powers that might be devolved. The Scotland Bill mainly limits these to a variation in income tax rates. The Scottish Government would wish to see a much wider range of taxes being devolved, including corporation tax. Much of the debate around this issue hinges on empirical questions about the extent to which different tax regimes influence growth and the extent to which politicians will

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\(^2\) See, for example MacDonald and Hallwood (2006), "The Economic Case for a Scottish Fiscal Autonomy: with or without Independence"
respond to a new fiscal environment. For a variety of reasons, these are difficult to resolve and will not be discussed here.

The notion that Scotland faces a soft budget constraint is open to interpretation. The Scottish Government does not raise much of the cash that it spends, but once given an allocation by the UK government, that allocation is fully binding. Thus, even within the existing framework, increased spending on some services to accommodate perceived increases will require resource transfer from other areas of the budget.

Loss of resources from portfolios tends to be strongly resisted. This is an example of what is known as “loss aversion” – the loss felt in giving up something is greater than the gain from acquiring it. This leads to a “status quo” effect – things tend to stay the same. Status quo effects tend to run strongly within government departments for organisational, social and human resource reasons. Bell (2011) suggests that allocations to the portfolios in the Scottish Government did not change substantially from 2002-03 to 2010-11 – perhaps an example of the status-quo effect. To departments facing loss of funding, the existing fiscal arrangements certainly provide a “hard” budget constraint.

However, all extensions of fiscal powers beyond the existing Barnett Formula arrangements would not be tenable without additional borrowing powers. This is because all the proposals involve a substantial increase in the capacity of the Scottish Government to raise taxes. The value of tax revenues will be always be subject to more uncertainty than the value of a block grant from the UK government. There may also be delays in the collection of tax revenues. Borrowing provides an essential mechanism to smooth government spending around such variations in revenue. Without prejudging whether such powers may come to the Scottish Government, a discussion of borrowing is nevertheless a useful context around which to frame the debate about long-term pressures on the Scottish budget.

Additional spending pressures require additional funding sources. Sovereign states in control of their own currency can meet such pressures either by increasing taxation, increasing borrowing or printing money. Recent discussions, including Hughes Hallett (2011) suggest that it is unlikely that Scotland would adopt its own currency should it become independent and would most likely opt to remain with sterling. This would mean interest rates and monetary policy being set by the Bank of England and would rule out the option of monetising the debt – printing money. This leaves the possibilities of increased taxes or borrowing.

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Borrowing is a mechanism for altering the profile of consumption over time (Buiter 2004)\(^5\), irrespective of whether that borrowing is used to support current or capital spending. Borrowing is unfair to future generations if it maintains the consumption of the current generation at the expense of future generations. This is known as the issue of inter-generational equity. These are important issues that have not been seriously addressed in the debates around changes in Scotland’s constitutional settlement.

If the Scottish Government borrows from the markets, one important question for potential investors will be the state of Scotland’s public finances. If no other government guarantees the debt, investors will wish to be assured that they will be repaid by the Scottish Government.

One way of assessing fiscal sustainability is to consider the “tax gap”. That is the difference between the current tax rate and the tax rate that would be consistent with a stable borrowing profile – the sustainable tax rate. A stable borrowing profile implies that the debt does not grow exponentially or become unfundable. Countries like Greece, Spain and Italy have found that their current tax rate is being assessed by the markets as being less than the sustainable rate. Hence the pressure for austerity measures – higher taxes and lower spending - in these countries. Calculation of the sustainable tax rate is complex and depends on forecasts of future growth, spending etc. There are also important linkages between aggregates such as taxation and growth that are not covered by such calculations. Nevertheless, influences on the sustainable tax rate include:

- Higher growth rates mean that the government can satisfy its creditors with a lower tax rate
- Higher spending and transfers imply that the markets will believe that a higher tax rate is necessary to keep the debt sustainable
- Similarly, higher real interest rates the sustainable tax rate. This illustrates one of the key linkages between fiscal and monetary policy. If Scotland was in a currency union with the rest of the UK, these real interest rates would be influenced by economic conditions outwith Scotland.
- A higher initial debt to GDP ratio also increases the sustainable tax rate. Clearly this would be heavily influenced by the constitutional settlement.

This paper does not seek to estimate what the sustainable tax rate for Scotland might be. Rather it seeks to introduce the issues associated with tax sustainability as a precursor to the discussion of upward pressures on government spending that might cause the sustainable tax rate to rise. It does, however, present evidence on Scotland’s actual aggregate tax rate from data that has recently

become available. While there has been data on public spending in Scotland for some time, recent useful statistical work by the Scottish Government\(^6\) means that it is now possible to calibrate levels of taxation in Scotland. These are shown in Figure 1. They express taxes raised in Scotland as a share of Scottish GDP, both including and excluding the effects of North Sea Oil. The inclusion or exclusion of oil does not have a substantial effect on the tax rate, presumably because the average rate of oil taxation is around the same as the rate of taxation in the rest of the economy.

Figure 1 implies that taxation accounts for 35p of every £1 generated in the Scottish economy. Comparisons with other countries are shown in Figure 2, which gives taxes as a share of GDP in a number of developed countries in 2010. Scotland’s tax rate is closest to that of the UK as a whole, which is not surprising given that tax rates are broadly uniform throughout the UK.

It worth noting that the Scandinavian countries have high overall tax rates relative to the UK and Scotland. None of these experienced sovereign debt problems during 2011. However, touching on the discussion of the sustainable tax rate, most countries that had sovereign debt problems had lower tax rates than Scotland in 2010.

Among the countries included in Figure 2, it is clear that the UK and Scotland have aggregate tax rates that are slightly below average. Within a small range, increased taxes in Scotland to meet future budgetary pressures would not substantially affect its tax competitiveness, at least against the countries included in Figure 2. Indeed if all members of this group were exposed to the same fiscal pressures, then Scotland’s position within the tax ranking might not change.

**Figure 1: Tax Revenue as Share of GDP: Scotland 1998-2010**

![Graph showing tax revenue as share of GDP for Scotland 1998-2010](image)

Source: Scottish Government

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\(^6\) See the Scottish National Accounts Project (SNAP) at [http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/SNAP](http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/SNAP)
This discussion is predicated on the assumption that Scotland will receive additional powers over taxation and borrowing in the near to medium term. If this is the case, then the pressures on the budget that are discussed in the remainder of this paper may be met by increasing taxation and/or borrowing. Borrowing has to be done in a manner that is consistent with long-run fiscal stability. On the other hand, future Scottish governments may decide not to borrow and to keep taxes at or below their current level. In this case, pressure to increase spending on some budgets will require compensating reductions in other programmes.

**Demography**

Demographic change is one of the main prospective pressures on the Scottish budget. Increased life expectancy among Scots over the period 1951 to 2009 is shown in Figure 3. During this period, life expectancy of Scottish males increased from 64.4 to 75.8 years. The life expectancy of females increased from 68.7 to 80.3 years. In 1980, male life expectancy was 69.1 years, while that of females was 75.3 years. Males retiring at 65 in 1980 could only expect to live for a further 4.1 years and females if they retired aged 60 could expect to live for 15.3 years. In 2009, Scottish males could expect to live for 10.8 years after retirement aged 65, while women retiring aged 60 could expect a further 20.3 years of life. The average number of years spent in retirement has increased substantially in recent decades. The age at which workers actually retire has only recently started to adjust to the change in life expectancy after actually declining during the 1990s and the early part of
the last decade. The most important change has been the gradual equalisation of state retirement ages, which will bring female retirement up to age 65 in the near future.

**Figure 3: Life Expectancy in Scotland 1951-2009**

![Life Expectancy Graph](source: General Register Office Scotland)

One can calibrate the economic impact of increasing life expectancy by calculating the “old-age dependency ratio”. The international convention is that this ratio is calculated by dividing the population aged 65+ by those aged 15 to 64. This ratio broadly measures the number of retirees that have to be supported by each economically active person. Eurostat projections for the old age dependency ratio in a variety of European countries for the period 2010 to 2050 are shown in The Committee might wish to note the challenges posed by demographic change that face all European countries, including Scotland.

**Figure 4.** The UK will have one of the smallest increases in Europe, partly because life expectancy is lower than in many European countries and because the UK is almost alone in experiencing net immigration of younger people. Nevertheless, all of the countries will experience a substantial rise in the old age dependency ratio in the period to 2050.

This will put considerable strain on welfare systems in Europe. Either they will have to be cut back, taxes raised or borrowing increased. Increased borrowing seems unlikely given the crisis of sovereign debt in the Eurozone. And increasing taxes may be self-defeating if, as a result, economic activity
continues to shift to Asia. This leaves those European politicians who are trying to increase resources to support older people in a very difficult position.

The Committee might wish to note the challenges posed by demographic change that face all European countries, including Scotland.

**Figure 4: Old-Age Dependency Ratio European Countries 2010-2050**

Similar old-age dependency ratios can be calculated for Scotland and for Scottish local authorities using population projections constructed by the General Register Office Scotland. These are shown in Figure 5. First, note that the estimate for Scotland in 2010 is similar to that for the UK as a whole at around 25%. However, there is wide variation within Scotland, from Dumfries and Galloway where it was closer to 35% in 2010, to Glasgow, where it was only 19%. This very low figure in Glasgow is due partly to its much lower life expectancy than other parts of Scotland and to the attractiveness of a large city to young people, which boosts the size of the economically active population. All parts of Scotland are expected to experience some increase in the old age dependency ratio between 2010 and 2030, but the increase is likely to be concentrated in rural
areas. A number of authorities will have old-age dependency ratios in excess of 50% by 2030. It is important that such variation within Scotland is understood and taken into account in setting budgets.

The Committee may want to consider the budgetary implications of the divergent tendencies in old-age dependency ratios between urban and rural Scotland.

It may also wish to investigate the implications of increasing the retirement age on restraining the growth in the old-age dependency ratio.

Figure 5: Old-Age Dependency Ratio, Scottish Local Authorities 2010-2030

Source: General Register Office Scotland

The most rapidly growing group in the population is the “oldest old”. Figure 6 shows the proportion of the population aged 85+ in each Scottish local authority in 2010, 2020 and 2030. For Scotland as a whole, this share doubles over this time period, from 1.9 per cent to 3.8 per cent. But for some local authorities, the increase is much more dramatic. By 2030, it is expected that more than 5% of the populations of South Ayrshire, Argyll & Bute, the Shetlands and East Dunbartonshire will be aged over 85. Because of the continuous influx of young people, it is not expected that there will be any substantial increase in the proportion aged 85+ in Glasgow and Edinburgh.
One very important issue for both the health and social care budgets that directly relates to the "oldest old" is the prevalence of dementia. Dementia is a debilitating disease with no known cure. Its prevalence rises steeply with age. This prevalence is shown for Europe in Figure 7. At age 60, a very small proportion of the population have dementia. One of the more likely causes of dementia at younger ages is alcoholism. However, as people age, the prevalence grows sharply so that by age 85, 12% of men and 17% of women have symptoms of dementia. For those aged 90 and above, more than 20% of men and 30% of women are likely to experience dementia.
Figure 6: Proportion of Population Aged Over 85, 2010, 2020 and 2030

Source: General Register Office Scotland

Figure 7: Prevalence of Dementia by Age Group (Europe)

Source: Alzheimer’s Disease International [http://www.alz.co.uk/adi/pdf/prevalence.pdf]
Another measure of the effects of ageing on health and social care needs is “healthy life expectancy” (HLE). This is the length of time that an individual can expect to live free of chronic or debilitating disease. Measures of HLE have been calculated throughout the UK for some time. The Committee might wish to note the challenge of the likely increase in the number of Scots with dementia and also the importance of preventative measures in improving healthy life expectancy.

Figure 8 shows values of life expectancy and healthy life expectancy for males and females in each of the UK nations for the period 2007-09. Scots typically have shorter periods of chronic illness than the UK average. For men, the difference is small, but women in Scotland have, on average, a shorter period of disability than those in any other part of the UK. The differences reflect differences in overall life expectancy and also geographic variations in patterns of chronic disease across the UK. Differences in spells of chronic illness provide some indication of relative demands on the health service in different parts of the UK, an issue to which we now turn.

The Committee might wish to note the challenge of the likely increase in the number of Scots with dementia and also the importance of preventative measures in improving healthy life expectancy.

Figure 8: Life Expectancy and Healthy Life Expectancy at Age 65 2007-09

Source: Government Actuary’s Department
**Health Care**

One of the main areas in which population ageing is expected to affect government spending is in health care. Spending per head on medical services in Scotland in 2009-10 was £1972 per head. This compared with £1847 in England, £1947 in Wales and £2146 in Northern Ireland. In recent years, the growth in health spend per head has been much more rapid in England than in Scotland. Between 2005-06 and 2009-10, spending per head in England grew by 29 per cent, while in Scotland it grew by only 19 per cent. This reduced the difference between Scotland and England in per capita expenditure on medical services from 16 per cent in 2005-06 to 7 per cent in 2009-10. The rapid increases in real spending on health during the last decade more reflected political pressure than changes in the demand for health care that could be attributed to objective trends, such as population ageing. Ageing trends in Scotland and England have been broadly similar, yet health spending has apparently grown faster in England, at least in recent years. However, the difference between Scotland and England in health spending per head is relatively small compared to the differences across OECD countries (see Figure 9).

**Figure 9: Health Spend Per Head 2008 (Euro PPP)**

Source: OECD

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The conventional view is that the demand for healthcare increases with age and that an ageing population will put great stress on developed economies due to the increasing demands of their health care systems. There is an alternative argument that health expenditure is concentrated towards the end of life and that the relationship between age and health expenditure is not all that strong once proximity to death is allowed for.

An example of this was investigated in the United States. Medicare costs were projected to increase in real terms by 9% per annum when no account was taken of proximity to death, whereas if this effect is included in the analysis, the projected growth rate falls to 2% per annum\(^8\).

And a recent longitudinal survey in the US showed that a person with no functional limitation at age 70 had a life expectancy of 14.3 years and expected cumulative healthcare spending of around $136,000. In contrast, someone with a limitation in at least one activity of daily living had an expectancy of 11.6 years and expected cumulative expenditure of around $145,000. This suggests that improvement in HLE might not significantly reduce health expenditure.

The Committee may want to consider the extent to which ageing as such puts pressure on the health budget.

**Social care**

The demand for social care will increase as the population ages. This is partly the result of increased numbers of frail older people, but importantly also an outcome from the increased numbers of older people affected by dementia. Successive Scottish governments have made it a priority to encourage a shift from institutional care to home care. Between 2002-03 and 2009-10, the number of care clients receiving free personal care in care homes increased by 12 per cent, while those receiving personal care at home increased by 40 per cent. In 2009-10, there were almost 5 care clients receiving personal care at home for each client receiving care in a care home.

It has been some time since projections of care costs were made by the Scottish Government. The most recent were constructed in 2004 as part of the Range and Capacity Review\(^9\). Main results are shown in Table 1.

http://www.scotland.gov.uk/Publications/2004/07/19665/40321
Table 1: Range and Capacity Review Estimates of Costs of Care for Older People

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2009 (% inc.)</th>
<th>2014 (% inc.)</th>
<th>2019 (% inc.)</th>
<th>% Increase overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS expenditure</td>
<td>£318m</td>
<td>£385m (21%)</td>
<td>£472m (22%)</td>
<td>£579m (23%)</td>
<td>82%</td>
</tr>
<tr>
<td>LA expenditure</td>
<td>£765m</td>
<td>£928m (21%)</td>
<td>£1,134m (22%)</td>
<td>£1,392m (23%)</td>
<td>82%</td>
</tr>
<tr>
<td>Private expenditure</td>
<td>£318m</td>
<td>£382m (20%)</td>
<td>£464m (22%)</td>
<td>£567m (22%)</td>
<td>78%</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>£1,402m</td>
<td>£1,695m (21%)</td>
<td>£2,070m (22%)</td>
<td>£2,538m (23%)</td>
<td>81%</td>
</tr>
</tbody>
</table>


By 2019, total expenditure was expected to rise to £2.5bn, 81 per cent above its 2004 level. Of this total, £567m was expected to come from private sources – mostly care home fees. If this forecast is accurate, and economic growth is weak during this decade, then expenditure on the costs of care for older people is likely to exceed 2 per cent of GDP by the end of this decade. A key issue is how these costs are divided between public and private sources at a time when public resources are limited.

The Committee may want to explore whether these forecasts of social care expenditure are still relevant and whether they might be revisited.

The Scottish Government is exploring alternative modes of care delivery. It is introducing a bill which provides a legal framework for Self-Directed Support (SDS) during this session. It will give care clients the right to control the types of care and support that they receive within budgetary constraints set by local authorities. This Bill is perhaps the most significant example of the transfer of power to the consumers of public services since the Scottish Parliament was reintroduced. It accords with argument of the Commission on the Future Delivery of Public Services (the Christie Commission) that control of producers over Scottish public services should be reduced.

The demographic data suggest that there will be a more rapid expansion of demand for chronic care relative to acute care. Older people will be living with long-run illnesses, such as dementia. The attempt to reallocate resources from acute care to long-term care, which has been entrusted to Community Health Partnerships (CHPs) has not been entirely successful. Audit Scotland’s 2011 Review of CHPs\(^1\) concluded that:

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“CHPs were set up in addition to existing health and social care partnership arrangements in many areas. This has contributed to duplication and a lack of clarity of the role of the CHP and other partnerships in place in a local area.” (P 4)

“While there is variation among CHPs against a range of performance indicators, limited progress has been made at a Scotland-wide level.” (P 4)

The report concluded that NHS boards and councils should:

• work with the Scottish Government to streamline existing partnership arrangements to secure efficiency and effectiveness and ensure they add value
• put in place transparent governance and accountability arrangements for CHPs and update schemes of establishment and other governance documents to ensure these are accurate
• have a clear joint strategy for delivering health and social care services which sets out roles and responsibilities, processes for decision-making and how risks will be addressed
• clearly define objectives for measuring CHP performance which reflect the priorities in the national guidance; agree what success looks like; and implement a system to report performance to stakeholders
• collect, monitor and report data on costs, staff and activity levels to help inform decisions on how resources can be used effectively
• improve CHP financial management and reporting information
• involve GPs in planning services for the local population and in decisions about how resources are used” (P 5)

The demand for health and social care services for older people is likely to increase substantially due to the demographic pressures discussed earlier. It is therefore disappointing that the bodies set up to facilitate change in the delivery of care should be seen to be falling so far short of expectations by Audit Scotland, particularly when, in 2009/10, CHPs managed approximately £2.9 billion of NHS expenditure.

Note that the Scottish Government has announced that an £80m Health and Social Care Change Fund will be available for Partnerships in 2012/13, with £80m committed for 2013/14 and £70m for 2014/15. This is intended to develop services that promote the independence and wellbeing for older people at home or in a homely setting. The idea is to use the Change Fund to help redirect the approximately £4.5 billion per year that is spent on health and social care provision for people aged
over 65 years. This is a laudable initiative, but the relative size of the budgets illustrates the inbuilt inertia in health and social care spending.

From the client perspective, it is difficult to understand where the boundaries between health and social care lie. But health care is the responsibility of the NHS while falls on local authorities. Social care, other than personal care, is means tested, whereas health care is free at the point of delivery. Social care is delivered by local authorities, which are democratically elected. Health care is delivered by health boards which do not have the same democratic mandate. Health boards regularly pay local authorities to provide care services – a process known as resource transfer. But this process lacks clarity and transparency, which makes it difficult for bodies like the Finance Committee to assess its effectiveness and value for money.

One characteristic of social care expenditure is that there is a high degree of variation in provision across local authorities. This may reflect differences in policy between authorities, but may also reflect differences in the efficiency of delivery. Evidence from the inspectorate suggests that better outcomes are not necessarily associated with higher levels of spending.

Social care is likely to be one of the main areas where demographic change will exert upward pressure on the Scottish budget. One of the areas in which there appears to be some opportunity for further efficiency gains is in the integration of social and health care. This might be an area that the Committee would wish to consider. Further, while the introduction of free personal care may have led to a more satisfactory social care service in Scotland than in England (though at some cost), many care clients still face funding difficulties both in care home fees and in charges for non-personal care at home. The UK government has promised a White Paper this spring which will take into account the Dilnot Report, which has recommended the capping of care charges at £35,000 and increased capital limits to encourage saving. This will have implications for Scotland which the Committee may wish to reflect upon.

The Committee may wish to consider how the forthcoming White Paper on the Funding of Social Care in England will affect Scotland.

Pensions

Public sector pensions are a potential source of significant pressure on the Scottish budget in the next decade. Public sector pensions are largely classified as “defined benefit” schemes. Defined benefit schemes predominate in the public sector. With these schemes, the value of the pension is defined in relation to length of employment and earnings. The value of the pension is often set in relation to the product of length of service and peak salary.
Under defined contribution schemes, the pension depends on the returns that can be earned from the accumulated contributions built up from member and employer contributions. In these schemes, members, rather than employers, take the risk on the returns available from the accumulated contributions at the time of retirement. For the public sector, the taxpayer is often the lender of last resort to a scheme which cannot meet its pension commitments.

The structure of public sector pensions in Scotland is fragmented. There are six main schemes: local government, teachers, the NHS, the civil service in Scotland, police and firefighters. Of these, only the local government scheme is funded. In a funded scheme, members contributions are saved and invested and their pensions are subsequently drawn down from these investments. The other schemes are unfunded, which broadly means that the contributions from current employees and employers fund current pensions. Employers’ contributions to these schemes vary between 11 per cent and 25 per cent. Employee contributions are around one third of employer contributions.

Audit Scotland found that in 2009/10, the six schemes paid out £2.8 billion to pensioners while public bodies contributed £2.2 billion and employees £814 million. In March 2010, there were 172,300 pensioners and dependants in the five unfunded schemes, an increase of 13 per cent on 2005. The number of pensioners in the local government scheme increased by 11 per cent to 141,400 between 2005 and 2010.

The treatment of pensions within public sector accounts is complex. Employer contributions generally fall within Departmental Expenditure Limits (DEL). This is the part of the budget for which the Scottish Parliament has direct responsibility. In 2009-10, these cost a total of £2.2billion.

Employee contributions must be around one third of this total, and are indirectly also paid from DEL. The value of contributions increased by 19 per cent in real terms in the 5 years preceding 2009-10, reflecting real wage increases and increased employment in the public sector. Employers’ contributions to the three largest unfunded schemes account for around 3.4 to 3.7 per cent of the Scottish Budget.

Spending on pensions to scheme members is treated differently depending on the scheme. Teachers’ and NHS pensions are paid through Annually Managed Expenditure (AME). The Scottish Government does not have to reduce spending elsewhere if AME increases. Annual fluctuations are paid for by HM Treasury. In contrast, funding for police and firefighters’ pensions comes from DEL. The reasons for the different accounting treatment of these schemes are not clear.

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The schemes are subject to regular actuarial revaluation to estimate their future solvency. There are many uncertainties associated with this process, including the life expectation of scheme members, which may differ from the population as a whole. Such a revaluation led to the Scottish Public Pensions Agency estimating that total payments to pensioners for the NHS and teachers’ schemes would exceed employers’ and employees’ contributions after 2010/11, with the gap rising to £489 million by 2014/15 (see Figure 10). Without action, this gap would likely risk further because pensions are linked to the Retail Price Index, which has been growing more rapidly than earnings on which contributions are based. A change from the RPI to the Consumer Price Index (CPI) as the basis for pension indexation will not be sufficient to prevent the gap increasing. However, as mentioned above, current arrangements imply that deficits will be met by the Treasury through AME.

**Figure 10: Projected Contributions and Payments from Scotland’s Five Main Public Sector Pensions**

![Graph showing projected contributions and payments](image)

Source: Audit Scotland

Note that with current male life expectancy, a “pension pot” of £275,000 is required to provide an annual pension of £30,000. Clearly, such a sum can only be built up with consistency of employment and a relatively high salary.

Audit Scotland made a number of recommendations in respect of the public sector pension schemes. It argued that the Scottish Government should:

- provide a clear statement of the aims and objectives of the public sector pension schemes in Scotland
- ensure that it is meeting these aims and objectives by putting in place arrangements to scrutinise pension provision across the public sector in Scotland, within the context of other aspects of public sector pay and conditions;
• consider increasing the role of experts to strengthen scrutiny and decision-making
• consider whether differences among schemes in areas such as contribution rates and level of benefits are necessary to realise the objectives of each scheme within the legal and financial constraints which apply,

The Committee may wish to revisit these points raised by Audit Scotland.

Aside from the costs of public sector occupational pensions, the authorities also bear the costs of the state pension, which is a mainstay of the income of many pensioner households. State pensions are within the benefits system and therefore are reserved to Westminster. If the future Scottish government had ability to set its own welfare benefits, then the size of the state pension would be an important budgetary decision.

Figure 11 below shows the average weekly income for pensioner adults in both Scotland and the UK for the period 1996-97 to 2009-10. These incomes include income from all pensions, including the state pension and occupational pensions. Over this period there has been little difference between Scotland and the UK as a whole in average weekly pension income. The increase in pension income lagged behind earnings during most of this period since wage rates wages were increasing more rapidly than prices. More recent data will show pensions growing faster than earnings as a result of the recession.

Figure 11: Weekly Adult Pension Income

Source: Family Resources Survey
While pension income is broadly similar between Scotland and the rest of the UK, it lags well behind that in many other developed countries. One way to measure the generosity of pensions is to take the ratio of average pensions to average earnings. This is known as the pension replacement ratio.

**Figure 12: Net Replacement Ratio for Average Earners by Country**

Figure 12 shows the latest data on net (i.e. after tax) pension replacement ratios for different countries in the OECD. The UK has one of the lowest replacement rates among developed countries. Given that Scotland does not differ significantly from the UK as a whole. In respect of pension income, one can reasonably conclude that Scotland would also have a relatively low net pension replacement ratio. Interestingly, Ireland has the lowest replacement ratio.

Small pensions are one of the root causes of poverty among older people. Larger pensions create funding difficulties for national governments. It is notable that the replacement ratio for pensioners increase is greater than 100% - implying that Greeks’ net income increases on retirement. Funding difficulties are magnified in those countries with the greatest life expectancy, many of which border the Mediterranean.
The Committee may wish to consider the budgetary implications of changing pension strategies for Scotland.

Inequalities and social deprivation

Scotland is a very unequal society in the sense that there is a very large gap in income between the richest and poorest households within Scotland. Inequality is a long-run issue. UK inequality has been rising, with occasional pauses, since 1975. It has risen in most advanced economies, but the UK and the USA stand out as having experienced the largest increases in inequality in recent years. Some of the recent developments in inequality have been summarised by the OECD:

“In OECD countries today, the average income of the richest 10% of the population is about nine times that of the poorest 10% – a ratio of 9 to 1. However, the ratio varies widely from one country to another. It is much lower than the OECD average in the Nordic and many continental European countries, but reaches 10 to 1 in Italy, Japan, Korea, and the United Kingdom; around 14 to 1 in Israel, Turkey, and the United States; and 27 to 1 in Mexico and Chile” (OECD 201112)

Inequality is caused by a variety of economic and social forces. But the most important driver has been the increasing inequality of earned income.

One important symptom is the increase in the rewards to skill – the difference in the wage of skilled workers compared to the unskilled has grown in most advanced economies in recent decades. A special case of the gap between the skilled and unskilled is measured by the so-called “graduate premium” whose size has been an important issue in the debate about tuition fees in the UK.

There have also been large increases in inequality within occupations. This may a belief among employers that movements away from rigid pay scales help scan increase productivity.

One driver of the gap between skilled and unskilled workers has been the effects of technical change – which can be thought of as the effects of computerisation and the introduction of machinery able to do the tasks that would previously been done by the unskilled. On the other hand, the effects of trade (competition from Asia) and immigration (from Europe) may also have had a negative effect on the demand for unskilled workers. Hence the rise in the premium for skill and the associated increase in income inequality. Even though the supply of skilled workers has been growing (e.g. increased HE participation rates), the negative effects on the demand for the unskilled has led to a continuing decline in their wage relative to that of skilled workers.

One can investigate whether inequality in Scotland differs substantially from that in the rest of the UK. Figure 15 shows the ratio of annual earnings at the 90th and 10th percentiles for different parts of the UK in 2011. This approximates to the OECD measure described above of the ratio between the incomes of the richest 10% and the poorest 10%. Scotland has a relatively low ratio compared with the UK as a whole and substantially lower than the Southeast or London. Part of the difference may reflect the rather larger public sector in Scotland, where earnings differentials are typically smaller than in the private sector.

**Figure 13: Annual Earnings 2011: Ratio of 90th to 10th Percentile**

![Annual Earnings: Ratio of 90th to 10th Percentile](image)

Source: ONS, Annual Survey of Hours and Earnings 2011 (Provisional)

Thus, for example, changes in Scotland’s economic structure, and in particular have played an important role in the increase in inequality. For example, the decline in manufacturing has led to the loss of many skilled manual jobs that would have, in the past, provided jobs paying close to the average wage, which helped reduce inequality.

While Figure 15 shows the disparity of earnings, which is the main driver of inequality, the analysis of poverty relies more on total net income from all sources and focuses on households, from which most spending decisions are made, rather than individuals. This means that one takes account of
benefits and taxes, which reduce income inequality. Note that the Scottish Government provides a regular update of poverty statistics.\textsuperscript{13}

Two further adjustments are frequently made. Housing costs have a major effect on the ability of households to purchase goods and services. Two households with the same incomes but differing housing costs will have differing abilities to purchase goods and services such as food and power. Similar considerations apply to households with different numbers of children. Two households with the same income, where one has no children and the other has five, will also have differing abilities to purchase standard goods and services. Thus for the purposes of the analysis of poverty, household incomes are usually compared, after making adjustments for housing costs and for the number of children. The adjustment for the number of children is described as equilvalisation.

Figure 16 shows data from the Households Below Average Income (HBA I) dataset for the period 1997-98 to 2009-10. It uses the same measure of the ratio of the 90th to the 10th percentile but in this case applied to equilvalised net household income after taking account of housing costs. It compares Scotland with the U.K.’s whole and with London, a relatively richer area, and the North-East of England, a relatively poorer area. The data again show that income inequality is lower in Scotland than in the UK, though the difference is relatively small. Clearly, income inequality in the London area is substantially greater in comparison to the UK as a whole.

\textsuperscript{13} See, for example: http://www.scotland.gov.uk/Topics/Statistics/Browse/Social-Welfare/IncomePoverty/CoreAnalysis#a1
Deprivation tends to be generational. The Chief Medical Officer, Harry Burns, has argued that some of Scotland's most deprived communities have little interaction with the rest of Scottish society. He also argues that early years intervention can play a vital role in improving the health, well-being and development of young people in Scotland is the deprived areas.

The Committee may want to consider how inequality, poverty and the lack of social mobility affects economic performance and the costs of provision of public services in Scotland.

Universal services

I have touched on the issue of universal services in a previous paper for the Finance Committee\textsuperscript{14}. This section follows the same general lines of argument. It deals first with some philosophical issues and then discusses some practicalities.

One way to think of universal benefits is that they provide the citizen with full insurance against certain risks. The UK is almost unique in providing full insurance against healthcare needs - the National Health System. Scotland provides full insurance against the need for personal care. Countries differ substantially in the range of risks that the cover for their citizens and in the extent of

cover. Full coverage implies that the service is free: less than full insurance implies that the individual has to make a co-payment (or contribution) towards the cost of the service. Most European countries’ health systems involve co-payment.

Means testing implies cost sharing. Costs to taxpayers are generally lower under means testing compared with universalism. There is a danger of moral hazard with full insurance. This means that the insured do not take actions to avoid the risk. An example is unemployment insurance, which may make workers take less action to avoid losing their jobs and to get back into employment.

Where services are offered to those that are willing to pay, the taxpayer loses out. One example of such willingness to pay is the increasing participation in schemes to redirect their Winter Fuel Allowance to charity. Some citizens clearly feel that this benefit should be means tested, rather than universal. This is in the same is an example of Lester’s argument that universal benefits emphasise common group identity and reduce the focus on the "undeserving" poor.

On the other hand, universal benefits are difficult to rescind because they tend to attract supporters with the ability to deploy political pressure to resist change. By definition universal benefits will be offered to parts of society that are more able to mobilise political support than are the poor. Current and future taxpayers are rarely as well organised – and anyway, the loss to the individual taxpayer will be much smaller than the gain to the recipient of a universal benefit.

Universal benefits may also increase societal preference for redistribution, since the benefits of the system are seen to be available to all. In contrast, means testing may lead to the stigmatisation of those receiving benefits. Means testing also discourages savings because individuals have an interest in letting their assets fall below means test limits. This issue is particularly important in relation to long-term care, not just in Scotland, but throughout the UK. Current means testing limits of £23,000 encourage older people to divest their assets either through consumption or bequest. As mentioned previously, one of the proposals put forward by the Dilnot Commission on social care in England, which may apply to Scotland, is that this limit increase to £100,000. This should reduce the extent of dissaving by older people.

At a practical level, any spending saved by the imposition of means testing has to be set against the costs of administering means testing. This can be both expensive and intrusive. Attempting to fine tune systems to maximise taxpayer benefit may be self-defeating due to increasing administrative costs.

Means testing also carries risks associated with both fraud and low take-up. Individuals may fraudulently claim benefits by misrepresenting their income and/or wealth. The benefit authorities then have to set up systems to combat fraud. Others who are eligible may not be reached by the system and miss out as a result. Low take-up is thought to be a particular problem amongst benefits for older people, but the evidence suggests that most of those who do not claim would not have received a high level of benefit.

The Commission on the Future Delivery of Public Services\(^\text{16}\) recommended that the setting of universal benefits in Scotland should be made more transparent. It also recommended changing eligibility rules as a means of managing costs. One difficulty with the control of eligibility criteria is that there is a danger of legal challenge claiming unfairness. This might arise, for example in relation to the non-availability of free personal care to those aged less than 65, the non-availability of free tuition to students from England, but not Scotland or the EU etc.

The Independent Budget Review\(^\text{17}\) was less supportive of universal benefits: The Panel believed that the continuing provision of a range of universal services on the same basis as at present is unlikely to be affordable in the face of the projected financial challenges. Alternative approaches should, therefore, be considered as a matter of urgency.” (Independent Budget Review para 5.2).

In particular it highlights

- concessionary travel;
- free personal and nursing care;
- prescription charges;
- eye examinations;
- free school meals; and
- tuition fees.

and discusses a range of savings that might be made across these entitlements by changing eligibility criteria and/or requiring co-payment. However, there might be an argument for putting in place a general mechanism to ensure that decisions about entitlements are not binding on future generations. For example, in the US, tax concessions are frequently passed with a time limit, implying that their costs are reviewed periodically.


The Committee may wish to consider how best to monitor the costs of universal services and whether some mechanism, other than by controlling eligibility, should be put in place to ensure that their costs are controlled.

**Funding methods**

There is a growing consensus that past mechanisms for investment in deprived communities have had limited success. This is based partly on the belief that it the volume of financial support is less important than the incentives facing the stakeholders. As a result, new methods of intervention are being explored. These include payment by results contracts and social impact bonds.

Payment by results schemes involve providing direct incentives to individuals to change behaviours that may be having an adverse effect on themselves or on their communities. This concept can be extended to organisations that receive some financial reward for each client that they persuade to change their behaviours.

Social impact bonds are contracts. Where funding is raised from socially motivated investors aimed at improving social outcomes. If that improvement is verified, then the investor receives their initial stake plus an additional financial return from the government. Verification is almost inevitably because it is very difficult to establish a credible *counterfactual* – what would have happened had the social intervention not taken place.

The size of the financial return is contingent on the size in the improvement in social outcomes. The public sector pays only if the intervention succeeds, reducing the risk that it faces. The focus is on outcomes rather than outputs.

Those involved in trying to improve the social outcomes have to form a contract which takes account of work already being done by the public sector. At present, the main example of such bonds is in Peterborough, where the investors are principally charitable trusts or individuals of high net worth. Once these bonds have some track record, they may be able to attract commercial financial investors.

This is clearly a funding mechanism that is in its infancy. Table 2 below shows the complexity of the processes involved in setting up a social impact bond at HMP Peterborough. Should commercial investors be attracted, a great deal of attention will have to be paid to the nature of the contract to ensure that the investors' behaviours are aligned with the objectives of those improving outcomes for those living in deprived areas.
Though this is as yet a relatively recent innovation, the Committee may wish to monitor the effectiveness of such novel financing mechanisms and, should they be successful, argue for their extension to deprived communities in Scotland
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