

CPPR Analysis of Scottish Government Economic Targets

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EXECUTIVE SUMMARY

<u>Target 1A+B</u> – to raise the GDP growth rate to the UK level by 2011 and to match the GDP growth rate of the small independent EU countries by 2017

<u>Target review</u> – Scotland trails both the UK and the EU-7 small countries by some margin and has done so historically. Barring Scotland surviving a severe downturn better than others, as happened in the early 1990's, this target is likely to be difficult to achieve.

<u>Target 2</u> – to rank in the top quartile for productivity amongst our key trading partners in the OECD by 2017

<u>Target review</u> – the gap with the first country in the top quartile (Germany) is considerable and has increased in the most recent years, so this target is likely to be difficult to achieve.

 $\underline{Target\ 3A+B}$ – to maintain our position on labour market participation as the top performing country in the UK and close the gap with the top 5 OECD economies by 2017

<u>Target review</u> – the first part of the target is already achieved, whilst the second part looks achievable, even though the gap has grown of late.

<u>Target 4A+B</u> – to match average European (EU15) population growth over the period from 2007 to 2017, supported by increased healthy life expectancy in Scotland over this period

<u>Target review</u> – most recent projections for the first part of the target indicate that Scotland will achieve this target. Data for the second part is erratic although trending in the right direction.

<u>Target 5</u> – to increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017

<u>Target review</u> – recent data suggests that this target is already being achieved although the proportion is increasing very slowly. However, erratic movements in the data suggest caution needed in interpreting data.

<u>Target 6</u> – to narrow the gap in participation between Scotland's best and worst performing regions by 2017

<u>Target review</u> – recent data suggests that the trend in this gap is narrowing, although the latest year showed a small reversal.

<u>Target 7</u> – to reduce emissions over the period to 2011 and then to reduce emissions by 80 per cent by 2050

<u>Target review</u> – latest data shows emissions on a trending decline so that the short term target is currently being met.

Gaps in targets (latest assessment)

| Target | Gap |
|--|---|
| 1A To raise the GDP growth rate to the UK level | Around 0.6% p.a. higher growth rate needed (i.e. a |
| by 2011 | 27% increase) – based on last 5 year average |
| 1B To raise the GDP growth rate to match the | Around 0.6% p.a. higher growth rate needed (i.e. a |
| GDP growth rate of the small independent EU | 27% increase) – based on last 5 year average |
| countries by 2017 | |
| 2 To rank in the top quartile for productivity | Around 14.5 percentage points increase in |
| amongst our key trading partners in the OECD by | productivity required (little change in last 5-10 |
| 2017 | years). |
| 3A To maintain our position on labour market | No gap since beginning of 2005. |
| participation as the top performing country in the | |
| UK | |
| 3B To close the gap on labour market participation | Around 3 percentages points gap with 5 th placed |
| with the top 5 OECD economies by 2017 | OECD country, widening slightly in recent years |
| 4A To match average European (EU15) population | Expected to exceed target based on projected |
| growth over the period from 2007 to 2017 | population growth |
| 4B Increased healthy life expectancy in Scotland | Recent upward trend – but erratic suggesting |
| from 2007 to 2017 | caution needed in interpreting data |
| 5 To increase overall income and the proportion of | Incomes have been rising for all groups. Current |
| income earned by the three lowest income deciles | measures appear insufficient to change share |
| as a group by 2017 | accruing to the lowest three decile households. |
| 6 To narrow the gap in participation between | In all but one year, the gap between the top and |
| Scotland's best and worst performing regions by | bottom 3 performers narrowed annually since 1999 |
| 2017 | (the gap is currently 16 percentage points). |
| 7 To reduce emissions over the period to 2011 and | First part of the target is currently being met. The |
| then to reduce emissions by 80 per cent by 2050 | second part has not yet been defined for analysis. |

In summary, it would appear that:

- Two targets (1 and 2) are well away from being met
- Target (3A) is being partially met but the second part (3B) will require further action
- Target 5 is partially being met, but very slowly and there is unlikely to be major improvement without further action
- Three targets (4, 6, and 7) are already being, or are anticipated to be, met.

The picture overall is fairly positive for the Government. However, this view is rather clouded by the fact that it is the Government's prime targets, of higher growth and higher productivity, that are the two notable laggards. If the improvement in population growth comes about then this will help GDP growth but even then targets 1 and 2 remain very ambitious. Note, there are issues with the accuracy of the data for some targets, so assessments in some cases are preliminary.

INTRODUCTION

In November 2007 the Scottish Government published its new Economic Strategy document for Scotland, which clearly and unambiguously commits the Administration to economic growth as its principal goal and sets out bold targets for such growth. The Strategy considers the challenges Scotland faces in 7 key areas: growth; productivity; participation; population; solidarity; cohesion; and sustainability. In each of these areas a measurable target, or targets, have been set out by which the government "will be judged by the progress that we make towards them." These targets consist of:

By 2011:

- To raise the GDP growth rate to the UK level;
- To reduce emissions over the period to 2011.

In the longer term:

- To match the GDP growth rate of the small independent EU countries by 2017;
- To rank in the top quartile for productivity amongst our key trading partners in the OECD by 2017;
- To maintain our position on labour market participation as the top performing country in the UK and close the gap with the top 5 OECD economies by 2017;
- To match average European (EU15) population growth over the period from 2007 to 2017, supported by increased healthy life expectancy in Scotland over this period;
- To increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017;
- To narrow the gap in participation between Scotland's best and worst performing regions by 2017;
- To reduce emissions by 80 per cent by 2050.

At the end of November 2007, the Scottish Government published a series of technical notes related to the definition of each target and the data used to measure it. In this report we confine ourselves to presenting an early review of where Scotland is currently placed with respect to each target, in terms of whether the target has been (or is likely to be) met, and the size of the task required to 'close' any likely remaining gaps by the target date.

We do not provide any commentary here on whether we think the targets are optimal (e.g., whether other targets such as GDP per head of population should be used in addition or instead); such a discussion will appear in a follow-up report which is currently being compiled.² Instead, our analysis uses the data sources and baseline data outlined in the Technical Notes. We assume that meeting targets is meant to be sustainable. Our comparisons over time are based on longer term estimates such as annual average data and generally do not use shorter-term quarterly data.

We plan to undertake a similar exercise each year as new data become available, and we welcome any comments and feedback from interested parties.

¹ Scottish Government, 2007, http://www.scotland.gov.uk/Publications/2007/11/30090722/0

² We do however discuss at the end of the report some issues concerning the accuracy of data sources

TARGET 1A: TO RAISE SCOTLAND'S GDP GROWTH RATE TO THE UK LEVEL BY 2011

KEY HEADLINES

- ⇒ Scottish GVA growth lags considerably behind the UK and has done so for most of the last 30 years. Scotland tends to outperform the UK when the latter experiences a significant economic slowdown.
- ⇒ For Scotland to reach parity with the UK will require changes to the structure of the economy (i.e., changing the sectoral share of Scotland's GVA) alongside substantial productivity improvements.
- ⇒ The target requires parity by 2011, and presumably on a sustained basis. Consequently, the expected slowdown in the UK's economic growth may temporarily assist Scotland to achieve this target, but not necessarily on a sustainable basis.

THE DATA

Table 1: Scottish & UK GVA growth rates (%)

| | | | Annual average growth over last | | |
|----------------------------------|------|------|---------------------------------|-------------------------|----------------------|
| | 2006 | 2007 | 5 years (2003-2007) | 10 years (1998-2007) | 30 years (1978-2007) |
| Scotland | 2.6 | 2.2 | 2.2 | 2.1 | 1.9 |
| UK (inc oil & gas) | 3.0 | 2.9 | 2.8 | 2.8 | 2.4 |
| UK (excl oil & gas) ³ | 3.1 | 3.0 | 3.0 | 2.9 | 2.3 |

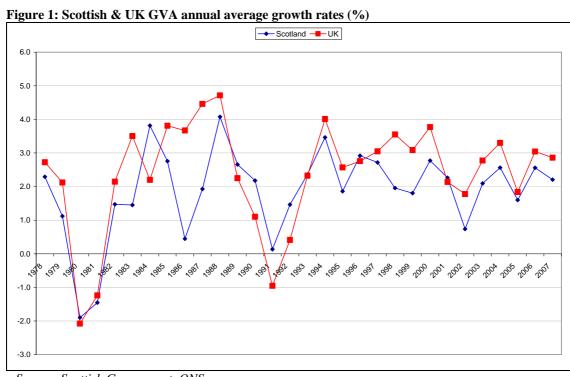
Source: Scottish Government, ONS

⇒ The latest Scottish GVA data signal the economy experienced a considerable slowdown in activity between 2006 and 2007. Growth in 2006 was 2.6% but, by 2007, Scotland grew at only 2.2% (see Table 1). Over the same period the UK experienced a much smaller reduction, down from 3.0% to 2.9% (or a fall from

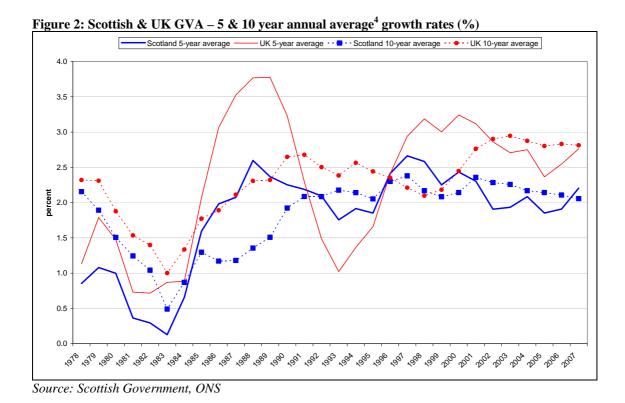
3.1% to 3.0% if oil & gas activity are excluded).

⇒ Comparing longer-term trends confirms Scotland's lagging performance against the UK (Figure 1). In the last 30 years Scotland has equalled or exceeded the UK growth rate in only 9 years; 1980, 1984, 1989-93, 1996 and 2001. In the last 10 years, 2001 was the only one where Scotland had a faster annual growth rate, 2.3% compared to 2.1% for the UK.

³ The Scottish Government's technical notes indicate that GDP for Scotland is GVA at basic prices, including *on-shore* north sea oil and gas. Similarly the UK figures are GVA including oil & gas for the UK, but of course the UK figures include on-shore and *offshore* oil and gas. Thus for Scotland, we have included on-shore oil and gas, with Table 1 including both sets of UK figures. Note using either series for Scotland/UK changes very little the underlying picture on the size of Scottish/UK gap in growth rates. Sources are given in the appendix.



Source: Scottish Government, ONS



 4 The 5 and 10 annual average growth rates are averages over the *preceding* 5 and 10 years.

- Whilst Scotland's underlying growth rate has improved over the last 30 years it still lags that of the UK (see Figure 2 and Table 1). Scotland's growth rose from 1.9% pa between 1978-2007 to 2.2% pa between 2003-2007. The UK has averaged 2.8% pa since 2003, up from 2.4% pa over the longer 30 year period.
- ⇒ Given this background, Scotland appears to be facing a considerable challenge if it is to reach parity with the UK by 2011. For example, to equal the UK's 2007 growth rate of 2.9%, Scotland would have needed to have increased its rate of growth by just under one third; equivalently, to have equalled the UK's annual average rate over the last 5 years would have required Scotland to have raised its rate of economic growth by around one-quarter.
- Although Scotland has tended to grow more slowly, there have been periods when it has exceeded the UK's growth rate. For example, between 1979 and 1981 both the Scottish and UK economies contracted by over 3%, and over the 5 years 1989-93 Scotland averaged a growth rate of 1.8% pa compared to only 1% for the UK. Thus there is some evidence that Scotland tends to out-perform the UK when the UK is experiencing a slowdown.
- ⇒ Recent growth forecasts are for a slowdown. The Treasury⁵ is forecasting a below trend (2.5-3% pa) growth rate for the UK for 2008 and 2009 of 1.75%-2.25% and 2.25%-2.75% respectively, before returning to trend. More recently, the IMF⁶ forecast the UK growth rate to be only 1.6% pa in both 2008 and 2009, but returning to trend growth of 2.7% by 2013. A slower UK growth rate may work in Scotland's favour to meet this target in the short term. If Scotland is less exposed to the effects of the credit-crunch, and the slowdown in public spending does not have a greater impact north of the border, then Scotland may achieve relatively faster growth compared to the UK, thus potentially helping it to achieve the 2011 target.
- Whilst parity by 2011 may be possible, the data also suggest that for this to be a sustained, step-change in growth at or around the Treasury trend rate for the UK, the Scottish economy will need to change. It will need to deliver productivity improvements in excess of that being delivered in the rest of the UK, increase its population levels and/or change its mix of economic activity.

⁵ HM Treasury (2008), Budget 2008 Report, Chapter B, http://www.hmtreasury.gov.uk/media/9/9/bud08 chapterb.pdf

⁶ IMF (2008), World Economic Outlook, http://www.imf.org/external/pubs/ft/weo/2008/01/index.htm. The EC Spring 2008 forecasts support this view of a slowdown in the UK in both 2008 and 2009(see, EC, Spring economic forecasts 2008 – 2009,

TARGET 1B: TO MATCH THE GDP GROWTH RATE OF THE SMALL INDEPENDENT EU COUNTRIES BY 2017

KEY HEADLINES

- ⇒ Scottish GVA growth lags considerably behind the EU-7 and has done so for most of the last 30 years
- ⇒ Comparing underlying trends highlights the challenge facing Scotland; the 5 year annual average for Scotland now stands at 2.2% compared to 2.8% for the EU-7. Based on the past 5-10 years, this is similar to the gap shown in Target 1A.
- ⇒ The target requires parity by 2017, but this needs to be on a sustained basis. Care is therefore needed in interpreting any relative improvement following the expected slowdown in growth for the EU-7 in 2008 and 2009. Parity on a sustained basis will require the same structural changes needed to achieve parity with the UK.

THE DATA

Table 2: Scottish & Small EU⁷ countries' GDP/GVA⁸ growth rates (%)

| | | | Average growth (pa) over last | | |
|--|------|--------------------------|-------------------------------|----------------------|-------------------------|
| | 2006 | 2007 ^a | 5 years (2003-2007) | 10 years (1998-2007) | 30 years (1978-2007) |
| Scotland | 2.6 | 2.2 | 2.2 | 2.1 | 1.9 |
| Small EU countries (weighted) | 3.8 | 3.1 | 2.8 | 3.1 | 2.7 |
| Small EU countries (unweighted) ⁹ | 4.1 | 3.5 | 3.1 | 3.6 | 3.2 |

^a 2007.Q4 data for Luxemburg is not yet available; thus the first 3 quarters for 2007 are used *Source: Scottish Government, OECD*

⇒ Scotland's latest annual average growth rate indicates a slowdown over 2006, down one fifth, from 2.6% in 2006 to 2.2% for 2007 (see Table 2). A similar reduction occurred for the EU Small Countries (EU-7), down from 3.8% to 3.1%.

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⁷ Sources are given in the appendix. The seven countries selected by the Scottish Government for this target are Austria, Denmark, Finland, Ireland, Luxembourg, Portugal and Sweden. The Scottish Government's rationale for this selection is that they are small comparator European countries which Scotland should be seeking to match. See www.scotland.gov.uk/Publications/2007/11/12115041/4.

To compare Scotland's performance with that of the chosen EU-7 countries we use Scottish GVA at

⁸ To compare Scotland's performance with that of the chosen EU-7 countries we use Scottish GVA at basic prices including data relating to Scotland's oil and gas activity, unlike Target 1A where oil and gas activity is excluded. Sources are given in the appendix.

⁹ The Technical Notes suggest the Scottish Government will be giving more weight to the growth rate of the EU-7 on a weighted rather than un-weighted basis. The difference between the two highlights the effect on the EU-7 average growth rates from the relatively small, but high growth, economies of Ireland (averaging 5.3% pa 2002-07) and Luxembourg (averaging 4.5% pa 2002-07).

- ⇒ Comparing longer-term trends confirms Scotland lags the EU-7:
 - From Figure 3, it can be seen that in the last 30 years Scotland has equalled or exceeded the EU-7's annual rate of growth in only 7 years (1978, 1984, 1988, 1992-93, 2001 and 2003) and in the last 10 years it has exceeded it in only 2 years (2001 and 2003).
 - As Table 2 highlights, Scotland's GVA growth averaged 2.2% pa between 2002 and 2007, compared to 2.8% pa for the EU-7 countries on a weighted basis (or 3.1% pa on an un-weighted basis). However, over a longer period the EU-7 have experienced a small slowdown in their underlying rate of growth compared to a small increase for Scotland. Between 1998-2007 the EU-7 grew at 3.1% pa but only 2.8% pa between 2002-2007. Over the same timeframe Scotland's annual rate of growth accelerated slightly from 2.1% pa to 2.2% pa.

Figure 3: Scottish & EU -7 GDP/GVA annual average growth rates (%)

Scottand EU-7 (weighted)

1.0

1.0

Scottand EU-7 (weighted)

1.0

1.0

Scottand EU-7 (weighted)

1.0

1.0

Scottand EU-7 (weighted)

1.0

Scottand EU-7 (weighted)

1.0

Scottand EU-7 (weighted)

- Source: Scottish Government, OECD
 - ⇒ Ireland¹⁰ and Luxembourg have experienced faster average rates of growth than the other members of the EU-7 in the last 5 years. However, Sweden and Austria account for over 40% of the EU-7 GDP and their annual average rates of growth since 2002 have been slower, at 3.2% and 2.4% pa respectively. Scotland's equivalent rate of growth was 2.2% pa.
 - Between 1992 and 1996 Scotland's underlying trend growth rate was higher (based on the 5 year annual average growth rate) at 2.4% pa compared to 2.0% pa for the EU-7. This is largely influenced by Scotland not experiencing the depth of the recessionary downturn the EU-7 faced in 1992. Again, Scotland

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¹⁰ The importance of net factor incomes from the rest of the world to some of the small European economies may mean GNP is the more appropriate measure of economic growth than GDP. This is particularly relevant for Ireland and Luxembourg where their economies have larger financial flows out to foreign owners than they receive from own companies located abroad.

appears to perform relatively better in the downturn but fails to keep pace once the EU-7 economies recover.

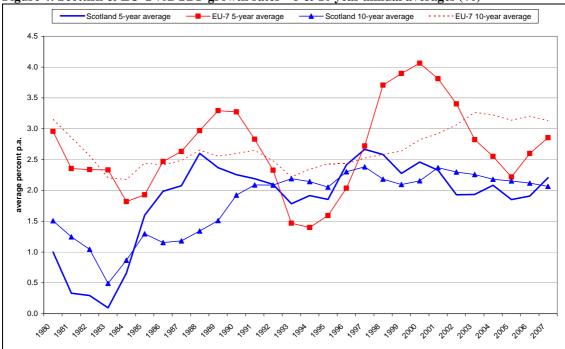


Figure 4: Scottish & EU GVA/GDP growth rates – 5 & 10 year annual averages (%)

Source: Scottish Government, ONS

The date for achieving this target is more than 9 years away. To forecast how Scotland is likely to be performing by then, either in absolute terms or relative to this selection of countries, is highly speculative. The IMF's short-term forecasts are for a considerable slowdown in growth (see Table 3) in the next 2 years, but it also envisages all 7 countries to be growing faster than their 2008 rate of growth by 2013. Whilst short-term reductions may work in Scotland's favour, as with the UK target, this is likely to be transitory. The structural changes needed for Scotland to achieve parity with the UK are similarly required for this target.

Table 3: Real GDP growth (%)

| | Forecast | | | | | |
|------------|----------|------|------|------|--|--|
| | 2007 | 2008 | 2009 | 2013 | | |
| Austria | 3.4 | 1.9 | 1.7 | 2.2 | | |
| Finland | 4.4 | 2.4 | 2.1 | 2.4 | | |
| Portugal | 1.9 | 1.3 | 1.4 | 2.3 | | |
| Ireland | 5.3 | 1.8 | 3.0 | 4.1 | | |
| Luxembourg | 5.4 | 3.1 | 3.2 | 3.5 | | |
| Sweden | 2.6 | 2.0 | 1.7 | 2.4 | | |
| Denmark | 1.8 | 1.2 | 0.5 | 1.6 | | |

Source: IMF, 2008

TARGET 2: TO RANK IN THE TOP QUARTILE FOR PRODUCTIVITY AMONGST OUR KEY TRADING PARTNERS IN THE OECD BY 2017

KEY HEADLINES

- ⇒ Scotland is currently ranked 17th for productivity amongst OECD trading partners, placing it at the top of the third quartile, just below the UK.
- ⇒ The productivity gap between Scotland and the bottom country in the top quartile was 14.3 percentage points in 2006.
- ⇒ There has been little change in Scotland's relative ranking (and the size of the 'productivity gap') in the last 5-10 years.

THE DATA

Table 4: Scottish and UK productivity levels

| | Scotland | UK |
|---|-----------|------|
| GDP per hour worked in 2006 (USA=100) | 78.7 | 82.0 |
| Ranking in 2006 (out of 31) | 17 | =13 |
| Productivity gap in 2006 with 8 th ranked country ¹ | 14.3 | 11.0 |
| Average ranking | | |
| last 5 years | 18 | 14 |
| last 10 years | 18 | 16 |
| Average percentage points productivity gap with 8th ranked | d country | |
| last 5 years | 14.5 | 11.3 |
| last 10 years | 14.0 | 11.4 |

The country ranked 8th is the lowest country in the top quartile

Source: OECD and ONS

⇒ Based on the latest OECD and ONS data for 2006¹¹, Scotland is ranked 17th for productivity amongst OECD trading partners (Table 4 and Figure 5). This places Scotland in the top of the third quartile, just below the UK (ranked 13th)¹²and Switzerland (ranked 16th) who are at the bottom of the second quartile, and Spain (18th) and Italy (19th) who are just below Scotland (see Figure 5).

¹¹ Sources are given in the appendix. Note data are measured in GDP at current prices (US\$) in Purchasing Power Parity relative to the total number of hours worked (average hours per person multiplied by total employed). Scottish figures have been obtained using ONS data that excludes North Sea oil and gas.

¹² Note in 2006, Canada, Finland and the UK are jointly ranked 13th.

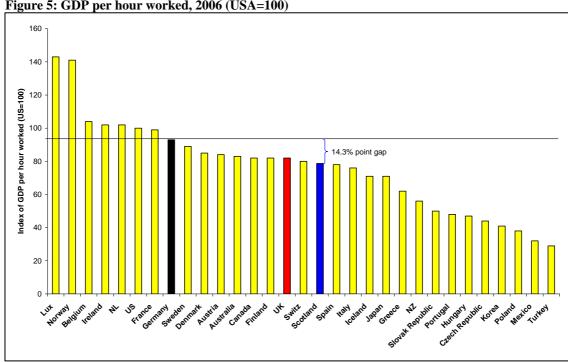


Figure 5: GDP per hour worked, 2006 (USA=100)

Source: OECD and ONS

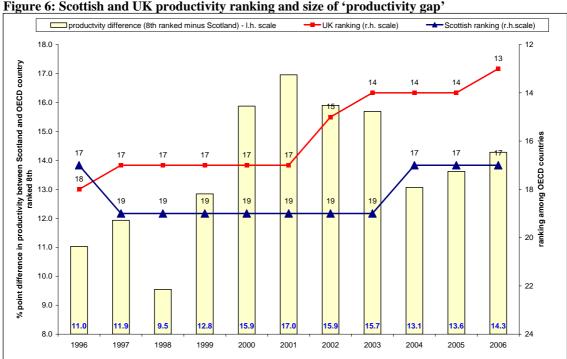


Figure 6: Scottish and UK productivity ranking and size of 'productivity gap'

Source: OECD and ONS

 \Rightarrow The bottom of the top quartile is occupied by Germany in 2006. The productivity gap between Germany and Scotland was 14.3 percentage points, indicating that the Scottish productivity index in 2006 would have needed to be

¹³ Luxemburg has very high productivity because of its geographical position and the impact of commuting from outside Luxemburg, while Norway benefits significantly from North Sea oil and gas.

above 93 for Scotland to have been in the top quartile. Put another way, Scottish productivity in 2006 would have needed to have been over 17.7% higher than it actually was, giving an indication of the size of the increase needed for Scotland to meet the government's target.

⇒ In relation to longer-term performance (and therefore it's underlying position), Table 4 and Figure 6 show that Scotland's relative position based on the last 5 and 10 years of data is broadly equivalent with the 2006 outcome; Scotland is similarly ranked throughout and the size of the productivity gap remains around 14 percentage points relative to whichever OECD country¹⁴ is ranked 8th. In contrast, the UK has seen slow improvements in its relative productivity level.

¹⁴ Germany, but also to a lesser extent Denmark, have occupied 8th position since 1996.

TARGET 3A: TO MAINTAIN OUR POSITION ON LABOUR MARKET PARTICIPATION AS THE TOP PERFORMING COUNTRY IN THE UK

KEY HEADLINES

- ⇒ Scotland has the highest employment rate of any of the 4 countries comprising the UK; based on the latest data, it has a 1.6 percentage point gap in its favour vis-à-vis England (which is ranked second).
- ⇒ This is a relatively recent phenomena with Scotland moving ahead of England at the beginning of 2005
- ⇒ To be able to gauge whether Scotland's position is sustainable will require an analysis of the sources of the job growth and whether employment has grown as output and productivity growth have occurred.

THE DATA

Table 5: Employment rates^a (for population aged 16-59/64) for UK countries

| Scotland | England | Wales | Northern Ireland | | |
|-------------------------|----------------------|-------------------------------------|--|--|--|
| 76.5 | 74.9 | 71.5 | 69.8 | | |
| Average employment rate | | | | | |
| 76.7 | 74.6 | 71.7 | 70.2 | | |
| 75.3 | 74.9 | 72.0 | 69.0 | | |
| 73.9 | 74.9 | 70.4 | 68.0 | | |
| | 76.5 76.7 75.3 | 76.5 74.9 76.7 74.6 75.3 74.9 | 76.5 74.9 71.5 76.7 74.6 71.7 75.3 74.9 72.0 | | |

^a Figures are percentages

Source: Labour Force Survey (ONS)

⇒ Based on the latest Labour Force Survey (LFS) data for the UK (October-December 2007), Scotland had the highest employment rate¹⁵ of any of the 4 countries comprising the UK (Table 5). Currently, it has a 1.6 percentage point gap in its favour vis-à-vis England (which is ranked second). Scotland moved ahead of England at the beginning of 2005 (Figure 7),¹⁶ with a particular advantage throughout 2007. However, Figure 7 shows that until very recently England has had a significantly higher employment rate.

⇒ With regard to Scotland's ability to maintain its position as the top performing country, Table 5 and especially Figure 7 show that since 2001 all the devolved

¹⁵ Defined as the number of working age people in employment divided by the total number of working age people. Working age is defined as males aged 16-64 and females aged 16-59 when looking at the comparisons within the UK. For international comparisons the working age population is defined as 15-64. Sources are given in the appendix.

¹⁶ Although employment rates converged in the first half of 2006 (in 2006.Q2, England actually had a 0.1 percentage point advantage)

countries of the UK have seen considerable improvements in their employment rates, against a fairly flat performance for England, with Scotland performing particularly well since the end of 2006.

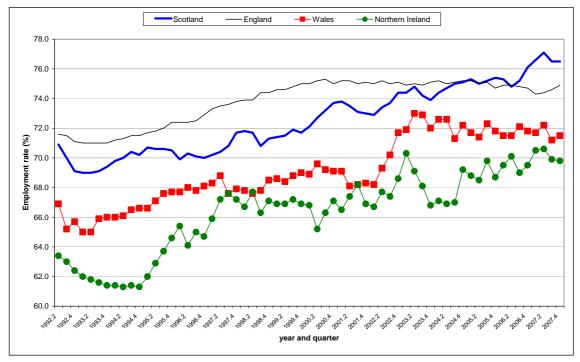


Figure 7: Employment rates (for population aged 16-59/64) for UK countries, 1992.q2-2007.q4

Source: Labour Force Survey (ONS)

⇒ To be able to gauge whether Scotland's position as the best performing country is sustainable will require an analysis of the sources of the job growth – e.g., whether it has mostly been in the public sector because of (until recently) relatively high levels of real spending (on public services), or whether employment has grown as output and productivity growth have occurred (which given our earlier analysis of Targets 1 and 2 might seem less likely).

TARGET 3B: TO CLOSE THE GAP ON LABOUR MARKET PARTICIPATION WITH THE TOP 5 OECD **ECONOMIES BY 2017**

KEY HEADLINES

- The latest OECD data for 2006 shows that Scotland was ranked equal 10th on the basis of its employment rate. The gap between Scotland and New Zealand (which is ranked 5th) was some 3.2 percentage points in 2006.
- The gap between Scotland and the top 5 OECD economies did narrow between 1999 and 2004, but there is evidence that the gap has widened in the last two years.

THE DATA

⇒ The latest OECD data is for 2006¹⁷, showing that Scotland was ranked equal 10th (with the USA) on the basis of its employment rate amongst OECD countries (Table 6 and Figure 8). The gap between Scotland and New Zealand (which is ranked 5th) was some 3.2 percentage points in 2006.

Table 6: Employment rates (for population aged 15-64) for certain OECD countries

| | Scotland | UK |
|---|------------|------|
| Employment rate 2006 ¹⁸ | 72.0 | 71.5 |
| Ranking in 2006 (out of 31) | =10 | 12 |
| Employment gap in 2006 with 5 th ranked country ¹ | 3.2 | 3.7 |
| Average ranking | | |
| last 5 years | 10 | 10 |
| last 8 years | 11 | 9 |
| Average percentage points employment gap with 5th ranke | ed country | |
| last 5 years | 3.0 | 2.7 |
| last 8 years | 3.7 | 2.8 |

¹ The country ranked 5th was: New Zealand (2004-06); Netherlands (2001-2003); and US (1999-2000). Source: OECD and Eurostat

⇒ Table 6 and especially Figure 9 show that the gap between Scotland and the top 5 OECD economies did narrow between 1999 and 2004, but that there is some evidence that the gap has widened in the last two years. That is, despite the significant employment growth experienced in Scotland post 2005, the top OECD countries (and particularly New Zealand) have done even better.

¹⁷ Sources are given in the appendix.

¹⁸ Note, different sources, different population groups, and different time periods are used in comparison with Table 5.

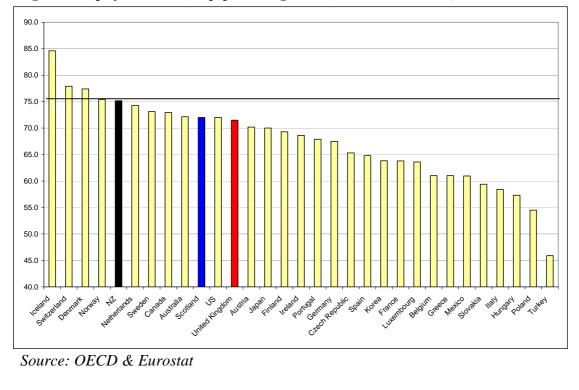
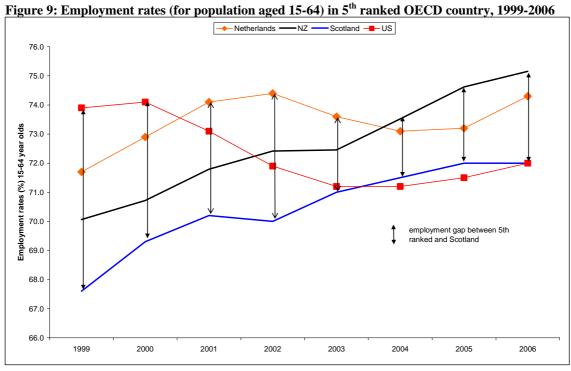


Figure 8: Employment rates (for population aged 15-64) in OECD countries, 2006



Source: OECD & Eurostat

TARGET 4A: TO MATCH AVERAGE EUROPEAN (EU15) POPULATION GROWTH OVER THE PERIOD¹⁹ FROM 2007 TO 2017

KEY HEADLINES

- ⇒ Scottish population growth has lagged considerably behind the EU15 for the last 30 years
- ⇒ More recently, due mainly to higher net in-migration but also an improvement in the natural change (births-deaths), Scotland has narrowed this gap.
- ⇒ Projections by the General Register Office for Scotland (GROS), and Eurostat, show Scotland to be growing at a faster pace than the EU15 over the period up to 2017.
- **⇒** These projections imply that the Target is on course to be met

THE DATA

Table 7: Scottish & EU15²⁰ population growth rates (%)

| | 1996-2001 | 2001-2006 | 2005-2006 | 2007-2017 |
|----------|-----------|-----------|-----------|-----------|
| Scotland | -0.5 | 1.0 | 0.4 | 2.8 |
| EU15 | 1.5 | 2.8 | 0.5 | 2.8 |

Source: GROS and Eurostat

- \Rightarrow Longer run data²¹ shows Scotland having been out-grown by the EU15 in population terms in each decade since the 1960's.
- ⇒ For the 1970's and 1980's this was due to Scotland's population declining while the EU15's continued to grow.
- ⇒ Between the second half of the 1990's and the first half of the 2000's the EU15 population growth rate rose from an average of ¼ of a percentage point a year to around ½ a percentage point a year. Over the same periods Scotland moved from negative growth to positive (Figure 10).
- ⇒ In particular, Scotland has closed the gap with the EU15 growth rate since 2004.
- ⇒ Projections over the target period 2007-2017, show that Scotland (at 2.8% overall growth) will grow at the same rate as the EU15 (latest estimates for the EU15 are for growth of 2.8% 2007-2017) see Figure 11. Obviously these are only projections and the assumptions used to compile them may not turn out to be accurate. However, they remain the best estimates available.

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¹⁹ The expression "over this period" means that the EU15 growth rate is matched by Scotland over the whole period 2007-2017.

²⁰ EU15 projections based on growth rates estimated using a 2005 base year, adjusted for 2006 outturn.

²¹ Longer run population data for the EU15 is taken from the Eurostat.

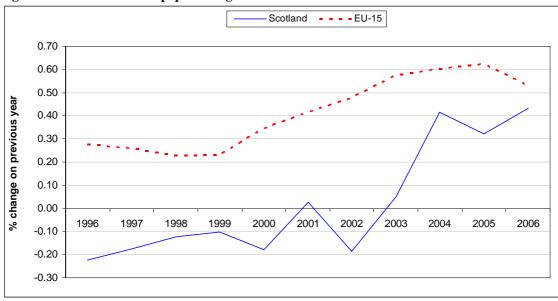
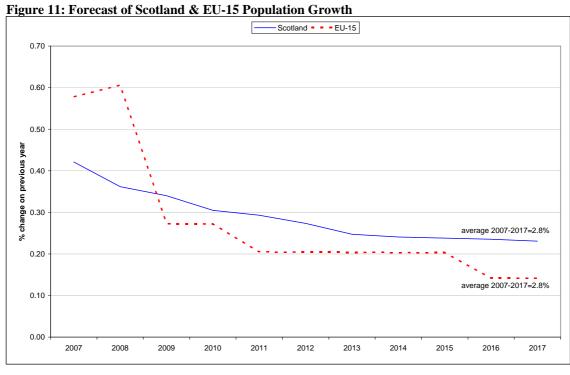


Figure 10: Scottish & EU15 population growth

Source: GROS and Eurostat

⇒ Figure 11 illustrates the average growth rates (actual and projected) for Scotland and the EU15. In doing so it highlights how much Scotland has caught up in recent years, with the Scottish average overtaking that of the EU15 around 2009.



Source: GROS and Eurostat

TARGET 4B: TO INCREASE HEALTHY LIFE EXPECTANCY IN SCOTLAND OVER THE PERIOD FROM 2007 TO 2017

KEY HEADLINES

- ⇒ Healthy life expectancy²² (HLE) in Scotland has an erratic record over the 25 year period 1980-2005.
- ⇒ While the trend might be seen to be up, for both men and women, this progress is by no means steady. For example, HLE for women was unchanged between 1990 and 2000, and fell between 2002 and 2005.

THE DATA

Table 8: Scottish Healthy Life Expectancy (HLE) and Life Expectancy (LE) in years [showing data for men and women 1980-2005 and average annual increase]

| | HLE male | HLE female | Diff (F-M) | LE male | LE female | Diff (F-M) |
|-------------------|------------|------------|-------------|------------|------------|------------|
| 1980 | 62.6 | 65.9 | 3.3 | 68.7 | 75.1 | 6.4 |
| 1985 | 64.3 | 67.5 | 3.2 | 70.0 | 75.8 | 5.8 |
| 1990 | 65.7 | 68.0 | 2.3 | 71.2 | 77.1 | 5.9 |
| 1995 | 64.7 | 67.8 | 3.1 | 72.1 | 77.7 | 5.6 |
| 2000 | 65.0 | 68.0 | 3.0 | 73.3 | 78.7 | 5.4 |
| 2001 | 65.6 | 68.6 | 3.0 | 73.3 | 78.8 | 5.5 |
| 2002 | 65.5 | 68.6 | 3.1 | 73.5 | 78.9 | 5.4 |
| 2005 | 66.9 | 68.4 | 1.5 | 74.6 | 79.6 | 5.3 |
| Av growth (80-05) | 0.27% p.a. | 0.15% p.a. | -0.12% p.a. | 0.33% p.a. | 0.23% p.a. | -0.10 p.a. |

Source: ScotPHO and SG Technical Notes

⇒ The measure of HLE used by the Scottish Government relates to annual estimates of HLE based on "good" and "fairly good" assessment using Self Assessed Health (SAH²³), where HLE is measured "at birth", rather than at age 65. Alternative measures include (i) annual estimates of HLE without Limiting Long-term Illness and (ii) ability to perform Activities of Daily Living "unassisted".

⇒ Table 8 illustrates the erratic nature of the HLE data, for both men and women, suggesting caution needs to be used in assuming too much from these trends. For example, there are large annual jumps, both up and down in the data. This is

²² Healthy life expectancy is defined to be the average number of years that a new born baby could be expected to live in 'good health'. The discrepancy between healthy and total life expectancy, therefore, indicates the number of years likely to be spent in 'poor health'.

²³ Self Assessed Health (SAH) is based on the question – "Over the last 12 months would you say your health on the whole has been – Good, Fairly good or Not good?"

exemplified in the 2002-2005 changes where the male HLE jumps up by 1.4 years while the women's HLE declines by 0.2 of a year, resulting in a femalemale differential halving in this period from 3.1 years to 1.5 years. Such a result is difficult to explain or believe.

- ⇒ Table 8 also shows that the erratic year-by-year nature of HLE data is much more pronounced than that exhibited for actual life expectancy (LE). Not only does the female-male differential fall more gradually but there are no years for which LE for men or women actually falls, unlike HLE. This suggests that there may be problems with the sample source (General Household Survey) or that SAH (which is self assessed) is correlated with other variables.
- ⇒ Based on Table 8 (and Figure 12) the target might be said to be trending in the right direction but this result is more obvious for men than for women. Since 2001 HLE for Scottish women has been falling based on the data taken from the Technical Notes. However, ONS data on HLE suggests that females have done better in recent years (although this levels off in 2003), while males HLE saw a relatively large fall in 2004 (the latest year for which ONS data is available). Hopefully the promised updating and expanding of HLE information in spring 2008, on the ISD website, will help clarify the data situation.

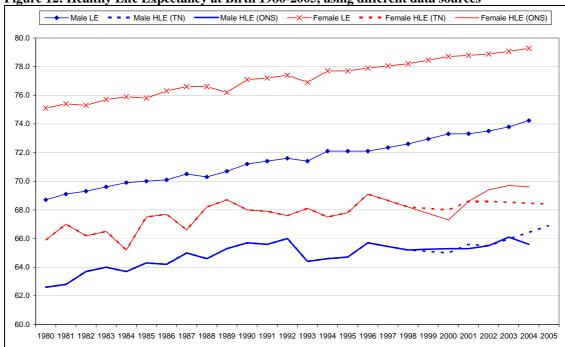
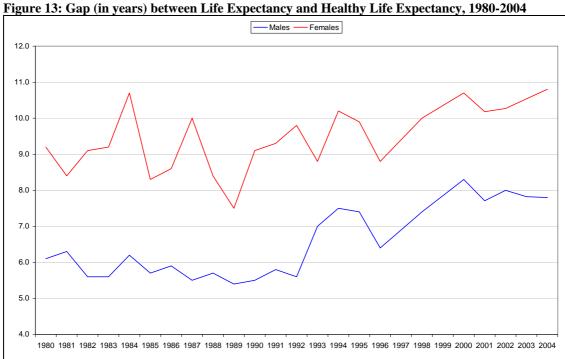


Figure 12: Healthy Life Expectancy at Birth 1980-2005, using different data sources^a

^a TN = data taken from Technical Notes; ONS = Office for National Statistics data

Source: ScotPHO, ONS and SG Technical Notes

⇒ Using the data provided in the Technical Notes, Figure 13 suggests that healthy life expectancy has actually fallen behind increases in life expectancy for men and especially women in recent years.



Source: ScotPHO and SG Technical Notes

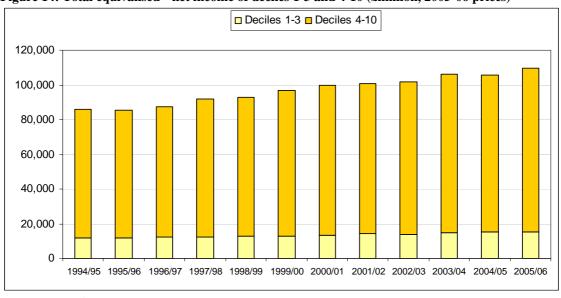
TARGET 5: TO INCREASE OVERALL INCOME AND THE PROPORTION OF INCOME EARNED BY THE THREE LOWEST INCOME DECILES AS A GROUP BY 2017

KEY HEADLINES

- ⇒ In all but one year, Scotland's total income levels have grown year on year, in real terms, since 1994-95: up from £86.1 billion to £109.5 billion²⁴.
- ⇒ The lower 3 deciles have experienced faster rates of growth in income compared to the rest in both the last 5 years (2.8% pa compared to 2.1% pa) as well as the last 10 years (2.4% pa compared to 2.2% pa).
- ⇒ However, these increased growth rates have only led to the lower 3 decile households marginally increasing their share of total income (it remains at between 13-14%) over the last 12 years. Greater redistributive measures will be required if a substantially more equitable distribution of net incomes in Scotland is to be delivered.
- ⇒ Assessment of this target is preliminary given concerns over the erratic nature of some of data, in particular that for the top decile.

THE DATA

Figure 14: Total equivalised²⁵ net income of deciles 1-3 and 4-10 (£million, 2005-06 prices)



Source: Scottish Government

2/

²⁴ Unless otherwise stated, all values are in 2005-06 prices.

²⁵ The Scottish Government's definition of equivalised net income is: income from all sources (including earnings, benefits, tax credits, pensions, and investments) after deductions for income tax, national insurance contributions, council tax, pension contributions and maintenance payments but before deductions for housing costs such as rent and/or mortgage payments. Equivalisation sums the income of all householders, adjusts it to reflect the composition of the household, and applies the resulting income to all householders.

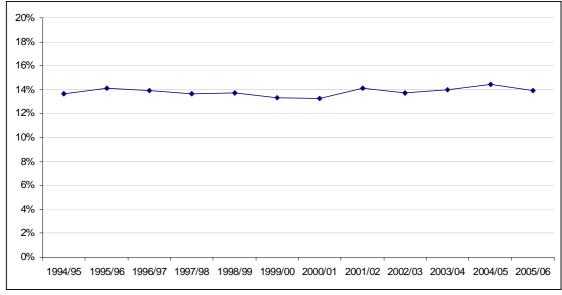
⇒ Between 1994-95 and 2005-06 Scotland's householders have benefited from a 27% real terms increase in net incomes, rising from £86.1 billion to £109.5 billion. Over the same 12 year period, those in the lower three income deciles benefited by more, experiencing a 30% real terms increase, with total income rising from £11.7 billion to £15.2 billion (see Figure 14 and Table 9).

Table 9: Scottish equivalised net income, £ million (05-06 prices) & %

| | | Deciles 1-3 | Deciles 4-10 |
|-------------------|--------------------|-------------|--------------|
| Total incomes | 1994-95 | £11,740 | £74,390 |
| | 2005-06 | £15,240 | £94,280 |
| Growth rates | 1994-95 to 2005-06 | 30% | 27% |
| | 1999-00 to 2005-06 | 18% | 12% |
| Growth rates (pa) | 1994-95 to 2005-06 | 2.4% | 2.2% |
| (f.t.) | 1999-00 to 2005-06 | 2.8% | 2.0% |

Source: Scottish Government

Figure 15: Share of total equivalised net income for deciles 1-3 (%)



Source: Scottish Government

- ⇒ On a per annum basis, income growth of households in the lower 3 deciles exceeded those in the upper deciles. Between 1994-95 and 2005-06, lower income households have seen a 2.4% pa increase compared to 2.2% pa for those in deciles 4-10. Since 1999-2000, growth rates have widened even further; those in deciles 1-3 have experienced a 2.8% pa increase compared to only 2.0% pa for those in deciles 4-10.
- ⇒ Whilst the lower decile households have benefited from year on year real increases in their net incomes, this has not been accompanied by a significant increase in their share of total household incomes (see Figure 15). In 1994-95 the incomes of the lower 3 deciles amounted to 13.6% of all income, rising to

13.9% by 2005-06. The maximum achieved throughout the period was 14.4% in 2004-05.

⇒ Faster economic growth can provide greater means for politicians to assist those in the lower income deciles (although the evidence is that usually the reverse happens). However, economic growth alone is unlikely to be sufficient for this target to be achieved. Significant redistributive measures will probably be required to ensure a more equitable distribution of income in Scotland.

TARGET 6: TO NARROW THE GAP IN PARTICIPATION²⁶ BETWEEN SCOTLAND'S BEST AND WORST PERFORMING REGIONS BY 2017

KEY HEADLINES

- ⇒ Since 1999, the bottom 3 performing local authority regions have increased their collective employment rate. In 2006 this was 66.1%, up from 58.2% in 1999. The latest data show a Scottish employment rate of 75.7% whilst the top 3 performing local authority regions achieved a rate of 81.8%.
- ⇒ Glasgow has consistently been in the bottom 3 performing local authority regions but it too has benefited from increases in employment.
- ⇒ The gap between the top and bottom 3 performers has been narrowing since 1999 to under 16 percentage points, and is down from the 25 percentage points gap seen in 1994.

THE DATA

Table 10: Employment rates (%)

| | 1994 | 2006 |
|--|------|------|
| Scotland | 70.1 | 75.7 |
| Top 3 ²⁷ local authority regions | 84.2 | 81.8 |
| - Shetland (11 times) | 87.1 | 85.3 |
| - Orkney (9 times) | 74.4 | 83.2 |
| Bottom 3 local authority regions | 58.9 | 66.1 |
| - Glasgow (13 times) | 56.3 | 64.6 |
| - Clackmannanshire (7 times) | 70.1 | 71.9 |
| Gap between top 3 and bottom 3 local authorities | 25.3 | 15.7 |

Source: ONS

The employment rate of the bottom three local authority regions has risen from 58.9% in 1994 to 66.1% by 2006 (see Table 10 & Figure 16). Whilst Glasgow has been in this group throughout, it has still experienced substantial increases in its employment rate (i.e. the percentage of people of working age who are actually employed), rising from 56.3% to 64.6%. Clackmannanshire has been in the bottom group in 7 of the 13 years 1994-2006.

2

²⁶ The participation rate is defined as the number of people employed, and those actively seeking work, divided by the working-age population. However, the data actually used for this target by the Scottish Government is not the participation rate but the employment rate (which excludes those actively seeking work). Sources are given in the appendix.

²⁷ The top 3 have also included Highland and Perth & Kinross (3 times each), Aberdeenshire, East Renfrewshire, Eilean Siar, Moray and the Scottish Borders (all twice) and Argyll & Bute, Midlothian and West Lothian (all once). The 3 bottom local authority regions have also included East Ayrshire, North Ayrshire and North Lanarkshire (5 times each), West Dumbartonshire and Inverclyde (twice) and Dundee City and Eilean Siar (both once).

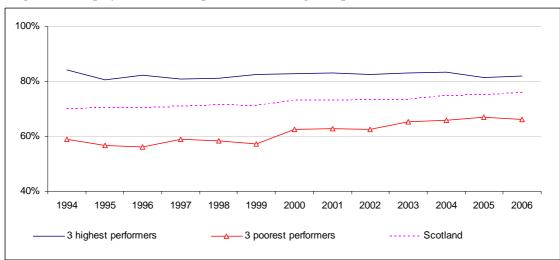


Figure 16: Employment rate of top and bottom 3 regional performers (%)

Source: ONS

- ⇒ In 2006, the Scottish employment rate was 75.7% whilst the three top performing regions achieved an average rate of 81.8%. Shetland, at 85.3% in 2006, has been the top performer in 9 years out of the 12 year period. Orkney, at 83.2%, has been the 2nd best performer for 6 years and the top performer in 2.
- ⇒ The bottom 3 performers have experienced an increase in their employment rate whereas the top three performers experienced a reduction. This difference means regional performances are converging (see Figure 17). The gap in employment between the top and bottom three performing local authority regions was 25 percentage points in 1994 and has diminished to around 16 percentage points by 2006. This recent period of narrowing in local authority performance started in 1999. However, the latest data shows a small widening of this gap.

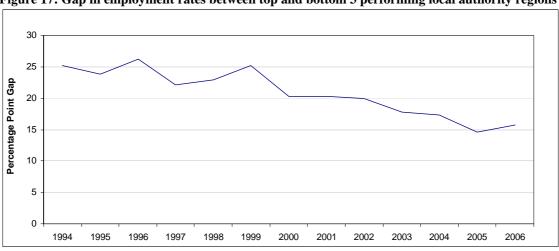


Figure 17: Gap in employment rates between top and bottom 3 performing local authority regions

Source: ONS

TARGET 7A: TO REDUCE GREENHOUSE GAS EMISSIONS OVER THE PERIOD TO 2011

KEY HEADLINES

- ⇒ It is estimated that Scotland accounted for roughly 8.4% of total emissions (on a carbon equivalent basis) in the UK in 2005.
- ⇒ Since 2000 Scotland has reduced its carbon emissions year-on-year suggesting it will deliver on this short-term environment target.
- ⇒ Unallocated emissions (from oil and gas activity as well as from emissions air traffic form Channel Islands and Isle of Man) have been rising over the same timescale and accounted for 2.8% of total emissions in 2005.

THE DATA

Table 11: Allocation of Emissions of Greenhouse Gases (Mt Carbon equivalent)

| | 1990 | 1995 | 2000 | 2005 | % change 1990 - 2005 |
|---------------------------|-------|-------|-------|-------|-------------------------|
| England | 168.1 | 151.6 | 140.5 | 139.1 | -17 |
| Scotland | 17.6 | 17.0 | 16.8 | 14.9 | -15 |
| Wales | 15.0 | 14.0 | 15.3 | 13.7 | -9 |
| Northern Ireland | 6.0 | 6.2 | 6.0 | 5.6 | -7 |
| Unallocated ²⁸ | 4.1 | 4.7 | 4.8 | 5.0 | +22 |
| Total | 210.8 | 193.5 | 183.4 | 178.3 | -15 |

Source: ONS

As Table 11 indicates, Scotland's share of carbon emissions in the UK was estimated to be 14.9 Mtonnes carbon (MtC) equivalent. This represents a 15% reduction since 1990 (see Figure 18). This reduction would largely have been gradual and consistent year on year but for the sharp 5% decrease between 1999 and 2000 which was repeated in all 4 countries.

- ⇒ Only England delivered a greater reduction in its share of carbon emission between 1990 and 2005 at 17% (see Table 11). Unallocated emissions have however, risen by more than 20% since 1990, up form 4.1 MtC equivalent to 5 MtC equivalent in 2005.
- ⇒ Scotland accounted for 8.4% of total UK emissions (on a carbon equivalent basis). This is down from 8.8% in 1995.
- ⇒ The share of emissions that are Unallocated (ie, related to oil and gas emissions and aviation emissions from the Channel Islands and the Isle of Man) have, however, risen from 1.9% in 1990 to 2.8% by 2005.

²⁸ Unallocated emissions arise form offshore oil and gas installations and domestic aviation emissions from flights originating in the Crown Dependencies (Channel Islands, Isle of Man).

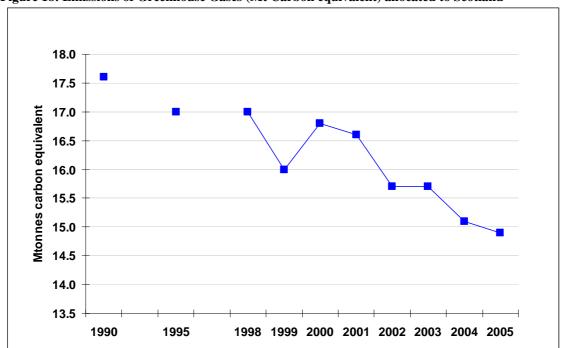


Figure 18: Emissions of Greenhouse Gases (Mt Carbon equivalent) allocated to Scotland

Source: AEA Energy & Environment, August 2007

TARGET 7B: TO REDUCE GREENHOUSE GAS EMISSIONS by 80% OVER THE PERIOD by 2050

The source of data to be used for the longer-term Target 7B is still to be defined.

DATA SOURCES AND ISSUES

The data sources used in this report are provided in Table A.1, which also links to the on-line source for each data series. This generally follows the sources provided by the Scottish Government in their Technical Notes²⁹, but in some cases we were not able to fully match the data presented in these Technical Notes, and other cases it is not clear which is the correct data to use. Here we summarise the issues by target:

- <u>Target 2</u> We have been unable to replicate Scotland's ranking of 14th by productivity in the Technical Notes. The Scottish Government have suggested to us that this is simply because of revisions to the data since they published the Technical Notes. Note also, Scottish data uses GDP excluding oil and gas (as presented in the Technical Notes), since Scottish productivity is based on UK Regional Accounts data.
- <u>Target 3B</u> We have Scotland in 10th place by employment rate, behind Australia, whereas the Technical Notes put Scotland in 9th place ahead of Australia. This may again be due to revisions or because either Eurostat or OECD data is available (and these differ slightly)³⁰.
- Target 4B The link provided in the Technical Notes did not provide any data for HLE after 2000, although figures are given for 2001, 2002 and 2005 in the document. The Chart 2 reference specifies that the figures for 2000-05 come from the Information Services Division (ISD) Scotland but we have been unable to access this data. Data has therefore been taken from the ONS for 2001-04 while the 2000 figure comes from the report to which the Technical Notes refers us. This means that our figures do not match the figures given for 2000, 2001, 2002 and 2005 in the Technical Notes, and Figure 12 makes clear that the differences are not trivial. More generally, the figures fluctuate more than would be expected over time, particularly for women.
- <u>Target 5</u> The total net equivalised income data contains some unexplained and unlikely movements over time for the top income decile.
- <u>Target 6</u> Data for the employment rate, by local authority, was taken from the Labour Force Survey prior to 2004. We are informed this is the same source as that used in the Technical Notes, but we have not been able to precisely replicate the chart contained in the Technical Notes.

³⁰ We took the Scottish employment rate (using a working age of 15-64) from the Eurostat website. All other employment rates come from Eurostat apart from that of Australia, Canada, Korea, Mexico and NZ, which are taken from the OECD.

²⁹ Scottish Government, 2007, http://www.scotland.gov.uk/Publications/2007/11/30090722/0

| Table . | A1: Data Sources used Variable | Source | Web address |
|---------|---|--------------------------|--|
| 1A | Scottish GDP UK GDP | SG ONS | http://www.scotland.gov.uk/Resource/Doc/933/0055510.xls http://www.statistics.gov.uk/StatBase/tsdataset.asp?vlnk=204&More=N&All=Y |
| 1B | Scottish GDP Small EU Countries Annual GDP Small EU Countries Quarterly GDP | SG OECD OECD | http://www.scotland.gov.uk/Resource/Doc/933/0055510.xls http://stats.oecd.org/wbos/Default.aspx?usercontext=sourceoecd http://stats.oecd.org/wbos/Default.aspx?usercontext=sourceoecd |
| 2 | Scottish Productivity OECD Countries Productivity (USA=100) OECD Countries Productivity (2000=100) | ONS OECD OECD | http://www.statistics.gov.uk/StatBase/tsdataset.asp?vlnk=4858&More=N&All=Y http://stats.oecd.org/wbos/Default.aspx?usercontext=sourceoecd http://stats.oecd.org/wbos/Default.aspx?usercontext=sourceoecd |
| 3A | UK Countries Employment | ONS | http://www.statistics.gov.uk/statbase/tsdtables1.asp?vlnk=lms |
| 3B | European Countries OECD Countries Employment | Eurostat OECD | http://epp.eurostat.ec.europa.eu/portal/page? pageid=0,1136162,0 45572076& dad=portal& schema=PORTAL http://stats.oecd.org/wbos/Default.aspx?usercontext=sourceoecd |
| 4A | Scottish Population Scottish Population Projections EU-15 Population & Projections | GROS GROS Eurostat | http://www.gro-scotland.gov.uk/files1/stats/1855-2006-population.xls http://www.gro-scotland.gov.uk/files1/stats/projected-population-of-scotland-2006-based/projected-population-of-scotland-2006-based/projected-population-of-scotland-2006-based.pdf http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CD-06-001-01/EN/KS-CD-06-001-01-EN.PDF |
| 4B | Healthy Life Expectancy (1980-2000) Healthy Life Expectancy (2001-2004) Healthy Life Expectancy (2000, 2001, 2002 & 2005) | ScotPHO ONS SG | http://www.isdscotland.org/isd/files/HLE_report_2004.pdf http://www.statistics.gov.uk/downloads/theme_health/HealthExp200102.xls http://www.scotland.gov.uk/Resource/Doc/933/0056554.pdf |
| 5 | Scottish Income Deciles | SG | http://www.scotland.gov.uk/Resource/Doc/1034/0054084.xls |
| 6 | Scottish Regions Employment (1994-98) Scottish Regions Employment (1999-03) Scottish Regions Employment (2004-) | Nomisweb Nomisweb | https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=14&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=47&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=95&Session_GUID={20BBEB4B-56C6-4bttps: |
| 7A | Emissions of Greenhouse Gases | AEA | http://www.airquality.co.uk/archive/reports/cat07/0709180907_DA_GHGI_report_2005.pdf |

| Table A2: Navigation to be used when reaching web page Variable Source | | | Steps |
|---|---|--------------------------|---|
| 1A | Scottish GDP UK GDP | SG ONS | |
| 1B | Scottish GDP Small EU Countries Annual GDP Small EU Countries Quarterly GDP | SG OECD OECD | National Accounts - Annual National Accounts - Main Aggregates - Gross Domestic Product National Accounts - Quarterly National Accounts - Volume and Price Indices |
| 2 | Scottish Productivity OECD Countries Productivity (USA=100) OECD Countries Productivity (2000=100) | ONS | |
| | | OECD | Productivity - Productivity Levels and GDP per capita - OECD Estimates of Labour Productivity Levels |
| | | OECD | Productivity - Labour Productivity Total Economy - Labour Productivity Growth |
| 3A | UK Countries Employment | ONS | |
| 3B | European Countries OECD Countries Employment | Eurostat OECD | General and regional statistics - Regional statistics - Regional employment - LFS series - Employment rates by sex and age, at NUTS levels 1 and 2 (%) Labour - Labour Force Statistics - LFS by sex and age - LFS by sex and age |
| 4A | Scottish Population Scottish Population Projections EU-15 Population & Projections | GROS GROS Eurostat | |
| 4B | Healthy Life Expectancy (1980-2000) Healthy Life Expectancy (2001-2004) | ScotPHO ONS | |
| 5 | Scottish Income Deciles | SG | |
| 6 | Scottish Regions Employment (1994-98) Scottish Regions Employment (1999-03) Scottish Regions Employment (2004-) | Nomisweb Nomisweb | |
| 7A | Emissions of Greenhouse Gases | AEA | |