

**FIRST ANNUAL REPORT OF THE  
SCOTTISH COUNCIL OF ECONOMIC ADVISERS  
DECEMBER 2008**

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# CONTENTS

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	<b>Page</b>
<b>The Scottish Council of Economic Advisers</b>	3
<b>Chairman's Preface</b>	5
<b>Executive Summary</b>	7
<b>A. Overview of Scotland's Economic Progress</b>	
1. Overview of Scotland's Economic Progress	15
<b>B. Achieving the Purpose Targets</b>	
2. Improving the Productivity of the Scottish Economy	22
3. Achieving Scotland's 2011 Growth Target	28
4. Achieving Scotland's 2011 Emissions Target	33
5. Addressing Economic Inactivity in Scotland	38
<b>C. Addressing Drivers</b>	
6. Planning	43
7. Education and Skills in Scotland	45
8. Infrastructure	50
<b>D. Scottish Economic Statistics</b>	
9. Scottish Economic Statistics	55
<b>Annex A: Future Work Programme</b>	59



# **The Scottish Council of Economic Advisers**

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Lord Smith of Kelvin



## Chairman's Preface

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Scotland is a country with tremendous economic assets. Even so, the nature of international competition, combined with the sharp deterioration in the global economy, makes the case for action to promote sustainable growth all the more compelling.

In June 2007, the First Minister established the Scottish Council of Economic Advisers to advise him directly about the best way to increase sustainable economic growth in Scotland. We have therefore, focused explicitly on the delivery of the Scottish Government's Purpose as set out in the Government Economic Strategy:

*to focus the Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.*

The purpose of the Council is very clearly to advise. Decisions are left to government and elected officials – which is as it should be. The Council is not partisan and each member serves in a completely voluntary capacity. Our purpose is not to direct the Scottish Government; rather, it is to make recommendations to the Scottish Government and lend our expertise and experience where we can. It is my hope that the usefulness of the Council will be such that it would survive any change of government and continue to advise on Scotland's long-term competitiveness.

The original model for the Council was a hybrid of the US President's Council in Washington, DC and the Governor's Council in California. Both Councils do the bulk of their work in conversation with government. The President's Council publishes an annual account of statistics and rationales for government policy and the Governor's Council publishes nothing, doing all of its advising directly to the Governor.

The Scottish Council publishes the minutes of its meetings<sup>1</sup> and this First Annual Report provides a brief overview of the balance of some of our thinking and conversations over the course of the year. It is in the nature of the Council's advisory function that totally open discussion is encouraged. Unanimity is not always achieved. Suffice to say, there are several distinguished economists around the table! This Report is a concise account of the Council's deliberations. However, I do believe that the recommendations presented in this Report represent a balanced view of the Council's thinking at this time.

It is my belief that the work of the Council should be oriented toward longer-term strategic thinking rather than a source of instant reaction to current events. It is also inevitable that after just four meetings, different topics have been covered to different degrees and are therefore at varying stages. Most of the Report is definitely work in progress.

Over the course of the year, we have considered the Scottish Government's Purpose targets on growth and emissions for 2011 and on participation and cohesion. The Council has also reviewed how productivity gains underpin the Government Economic Strategy and how what we know about productivity growth can be used to serve the Scottish Government's targets.

In discussing a range of policies to meet these targets, we have had discussions about the importance of developing the Scottish economy's areas of comparative advantage and the longer-term contributions of education and skills and infrastructure. We hope that the points we raise can be addressed to shore up Scotland's competitiveness.

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<sup>1</sup> The minutes of Council meetings are available on the Scottish Government website:  
<http://www.scotland.gov.uk/Topics/Economy/Council-Economic-Advisers/Meetings>

In more detail, the Council has also considered how to address the inhibitor to growth that is the current planning system – a major concern to the business community – and how to improve Scottish economic statistics so that we will have clearer signposts of how policies are working and how the economy is performing.

In each of these areas, the Council offers some key recommendations for the Scottish Government to consider.

The Council's work and much of its conversations to date have been framed by the constitutional world in which Scotland currently finds itself. Over the past year, however, all major political parties have advocated *some* form of constitutional change and much of this debate has centred on economic powers. It is our belief that any conversation on fiscal powers should be undertaken with the clear ambition of making Scotland more internationally competitive.

In the coming year the Council will keep exploring how to give the Scottish economy greater competitive edge and how to boost growth. We will continue to advise on planning and developing better sources of capital. We will also consider: the Scottish Government's longer term Purpose targets on growth, emissions, population, productivity and solidarity; and the key sectors that are vital in building and developing Scotland's comparative advantage. And, as the international economic climate changes, we will continue to offer advice on navigating developing trends.

I thank the Council for its work over the past year.

A handwritten signature in black ink, appearing to read 'G Mathewson', with a large, sweeping flourish at the end.

Sir George Mathewson  
December 2008

# EXECUTIVE SUMMARY

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1. The Scottish Council of Economic Advisers was established in June 2007 to advise the First Minister directly about the best way to increase sustainable economic growth in Scotland. The Council has therefore explicitly focused on the delivery of the Scottish Government's Purpose as set out in the Government Economic Strategy<sup>2</sup>:

*to focus the Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.*

2. Since the Council was established it has met four times. Details on the membership of the Council and the minutes of all meetings can be found on the Scottish Government website: <http://www.scotland.gov.uk/Topics/Economy/Council-Economic-Advisers>.

3. This First Annual Report sets out in greater detail the Council's analysis and discussion of the challenges involved, and the action required, to make real practical progress in delivering the Scottish Government's Purpose and Purpose targets (presented below). The Council welcomes this opportunity to share its insights on those areas it has discussed to date and to signal its future work programme.

Purpose Targets	
<b>Economic Growth (GDP)</b>	<ul style="list-style-type: none"><li>• To raise the Gross Domestic Product (GDP) growth rate to the UK level by 2011</li><li>• To match the growth rate of small independent EU countries by 2017</li></ul>
<b>Productivity</b>	<ul style="list-style-type: none"><li>• To rank in the top quartile for productivity amongst our key trading partners in the OECD by 2017</li></ul>
<b>Participation</b>	<ul style="list-style-type: none"><li>• To maintain our position on labour market participation as the top performing country in the UK and to close the gap with the top five OECD economies by 2017</li></ul>
<b>Population</b>	<ul style="list-style-type: none"><li>• 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</li></ul>
<b>Solidarity</b>	<ul style="list-style-type: none"><li>• To increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017</li></ul>
<b>Cohesion</b>	<ul style="list-style-type: none"><li>• To narrow the gap in participation between Scotland's best and worst performing regions by 2017</li></ul>
<b>Sustainability</b>	<ul style="list-style-type: none"><li>• To reduce emissions over the period to 2011</li><li>• To reduce emissions by 80% by 2050</li></ul>

4. In this First Annual Report, the Council makes 22 specific recommendations to the Scottish Government. A number of additional considerations are also identified.

## Overview of Scotland's Economic Progress

5. The global economy today looks very different than it did at the first meeting of the Council in September 2007. Since that time, we have seen the bursting of the largest asset bubble in history and, in its wake, the onset of both the most severe financial crisis since the outbreak of the First World War and a recessionary pandemic that has swept across the

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<sup>2</sup> Scottish Government (2007), *The Government Economic Strategy*:  
<http://www.scotland.gov.uk/Publications/2007/11/12115041/0>.

world's advanced economies. The economic impacts of the 'credit crunch' have been compounded by rising commodity prices and high rates of inflation which are now forecast to recede in the coming months, bringing the potential threat of deflation. Whilst we have experienced difficult economic conditions before, the speed of the events we have witnessed over the past few months is unprecedented. This has provoked a coordinated international government response to stabilise the financial system.

6. The UK economy is forecast<sup>3</sup> currently to be the worst affected of the major advanced economies over the next year owing to its relatively high degree of household indebtedness, overvaluation of property prices, dependence on financial services and limited fiscal room for manoeuvre. Although Scotland is in many respects better placed to weather the downturn than the UK as a whole, it is clear that the economic outlook for the Scottish economy is both unusually challenging and uncertain. Economic growth in Scotland has already slowed significantly.

7. Scottish businesses, households, public and third sector organisations face a testing period ahead from weaker demand in the economy and tighter credit constraints. Although inflation is forecast to fall sharply in 2009, increases from earlier in 2008 are still feeding through to reduce the disposable income of businesses and households. These challenging economic conditions act to reinforce the importance of the Scottish Government's Purpose to enhance Scotland's sustainable economic growth.

8. Although the gaps between annual GDP growth rates in Scotland and both the UK and small European countries have narrowed in recent quarters – consistent with the Scottish Government's growth targets – the policy focus must remain on the structural elimination of these gaps.

## Improving the Productivity of the Scottish Economy

9. As a matter of arithmetic, Gross Domestic Product (GDP) can be analysed as the product of the following factors: population; labour force participation; and, output per worker (productivity). Projections for population growth in Scotland over the next 30 years suggest that the working age population will shrink. Participation rates in Scotland are close to historical highs. Consequently, increased sustainable economic growth in Scotland depends critically on increasing productivity.

10. The Council endorses the approach taken in the Government Economic Strategy to promote key sectors – forming clusters of similar high tech/high productivity firms is a realistic strategy for Scotland.

11. Scotland has tended to be dominated by low productivity sectors relative to the UK, with more industries being less productive and fewer more productive. The Scottish Government therefore needs to focus on policies that increase the general level of productivity across the board (through education and skills, better business practices and infrastructure) and increase the share of high productivity industries in national output, with specialised skills, services and external economies of scale.

12. Concentrating on labour productivity alone may not produce any tangible benefits if capital productivity turns out to be lower than elsewhere. Analysis undertaken by the Council suggests that this must be the case in Scotland. It would therefore be better to adopt policies that increase all types of productivity.

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<sup>3</sup> International Monetary Fund (IMF) and Organisation for Economic Co-operation and Development (OECD)

13. The Council recommends that the Scottish Government:

- **Recommendation 1:** increases the general level of productivity in the workforce, especially through skills and training, and the share of high productivity firms and industries in national output;
- **Recommendation 2:** further encourages the development of key industries and sectors, and facilitates the formation of clusters with external economies of scale, critical mass for skills and specialised industries (links to Recommendation 4); and
- **Recommendation 3:** improves capital and total factor productivity, alongside labour productivity.

14. The Council is undertaking further analysis on productivity and will provide advice to the Scottish Government on specific measures that could be taken to achieve Scotland's 2017 productivity target in due course.

### Achieving Scotland's 2011 Growth Target

15. The Council's assessment of the challenges involved in meeting the 2011 growth target requires: identifying policy issues directly relevant to short-term growth which lie within the competence of the Scottish Government; reviewing and prioritising those long-term policy initiatives that might be expected to have material short-term impact; and advising the Scottish Government to continue to make Scotland's voice heard with policy-makers who control the economic levers at UK and European levels.

16. The Council recommends that the Scottish Government:

- **Recommendation 4:** strengthens the competitive advantage of Scotland's businesses by clarifying the potential problems in each of the key sectors identified in the Government Economic Strategy and identifying how government policies can be more supportive (links to Recommendation 2); and
- **Recommendation 5:** develops a range of policies that provide for greater efficiency in the provision of government and infrastructure services and accelerates the move to measure public sector activity by output rather than input.

### Achieving Scotland's 2011 Emissions Target

17. The Council expects that the Scottish Government will achieve its 2011 emissions target but recognises that it will be much more difficult to meet its 2050 emissions target.

18. The main options for the Scottish Government are to reduce energy demand and/or to alter the mix of energy used to generate electricity. Despite recent falls, a sustained rise in international energy prices over the longer term would undoubtedly have an impact on the pattern of energy demand. The Council is also conscious that, in international terms, many emissions reduction measures that have a negative cost are still not being taken up.

19. In terms of altering the balance of supply, if Scotland builds no further nuclear capacity, alternative non-fossil or low-fossil forms of power generation and Carbon Capture and Storage will be required, over and above what is already needed to achieve current planned levels of emissions reduction. Scotland clearly has the potential to become an international leader in developing these technologies, which might make a significant contribution both to economic growth and reducing emissions.

20. The Council believes in general that the pursuit of environmental objectives entails costs, but the experience of other European countries suggests that economic growth and prosperity facilitate the achievement of such environmental objectives. The Council has asked for further work, specifically on energy options, to clarify the trade-offs involved.

21. The Council recommends that the Scottish Government:

- **Recommendation 6:** commissions an independent assessment of the full economic costs and abatement potential of the various energy options open to Scotland;
- **Recommendation 7:** explains how it will ensure that environmental and economic goals are given due weight, and that environmental goals are considered in parallel with goals for economic growth; and
- **Recommendation 8:** identifies the most cost-effective options for reducing energy demand. This should include exploring ways of delivering transformational levels of home insulation.

## Addressing Economic Inactivity in Scotland

22. The failure of some areas of Scotland to participate fully in Scotland's economic progress is a matter of serious concern to the Council.

23. The Council recognises that several factors have a major effect on Scotland's overall employment performance:

- factors affecting the ability and willingness of individuals to get sustainable employment;
- specific challenges faced by some groups in the labour market;
- factors affecting the employer demand for labour; and
- factors affecting the value and effectiveness of training by the further and higher education sector and the voluntary sector.

24. To address these factors and deliver the Purpose targets on participation and cohesion, the Council recommends that the Scottish Government:

- **Recommendation 9:** explores options for resolving tensions between Scottish and UK policy responsibilities, including devolving Jobcentre Plus;
- **Recommendation 10:** further refines, strengthens and broadens the local and partnership-based approach to service delivery – including its funding basis; and
- **Recommendation 11:** significantly improves the data-sharing practices of public bodies tasked with delivering on employability issues.

## Planning

25. The Council believes that the inefficiency of the planning system is an obstacle to economic growth in Scotland; it is currently a barrier to be overcome rather than a service that enables high quality development in the right places and which contributes to Scotland's comparative advantage.

26. The Council is aware that the foundations of the new planning system, as set out in the 2006 Planning Act, provide for improvement in the efficiency of the planning system. These include: a statutory National Planning Framework; a revitalised Development Planning system; and a fit-for-purpose Development Management System.

27. The Council has identified planning as an area where real practical progress can be made and recommends that the Scottish Government:

- **Recommendation 12:** financially incentivises local authorities to promote and facilitate sustainable development projects;
- **Recommendation 13:** changes the culture of planning and reforms the planning system so that planners see themselves as facilitators – enabling high quality developments in the right places and making a positive contribution to sustainable economic growth – rather than regulators; and
- **Recommendation 14:** develops a clear understanding that a central purpose of the planning system is to facilitate good quality outcomes – well designed places and buildings that enhance their setting.

## Education and Skills in Scotland

28. The Council believes that Scotland's education policy is central to the Government Economic Strategy. To date, the Council has focused on higher education; it will consider other elements of the education and skills agenda in due course.

29. Given the scale of the costs involved in funding a higher education policy that is 'fit for purpose' in the 21<sup>st</sup> century, and the other demands on limited budgetary resources, the Council asks the Scottish Government to consider whether it would be appropriate for Scotland to focus on developing world class universities or world class university departments, and what would be the cost implications of pursuing either of these options. At future meetings, the Council is willing to explore further the associated financial and system implications, should the Scottish Government find this helpful. The Council also believes that the Government should explore the strategic challenges in relation to participation, level (graduate or postgraduate) and quality in the higher education system. Improvements in all three are essential if Scotland is to prosper in an increasingly globalised world.

30. Meanwhile, the Council recommends that the Scottish Government:

- **Recommendation 15:** reaches agreement with Universities Scotland on the future scale of the Scottish university system and the balance between various activities to ensure clarity in the strategic direction of universities as a system and the role of inter-institutional collaboration in that process;
- **Recommendation 16:** considers three quite radical actions to develop the higher education system as a real competitive strength for Scotland:
  - a two-tier approach to standard four year honours courses, with the first two years resulting in a broad stand-alone qualification and the second two an additional specialised qualification;
  - developing local institutions so that they can build on existing diversity to promote locally-available courses and provide an entry route into higher education;

- developing secondary and tertiary education as part of the high-skilled services that Scotland already provides to the global economy; and
- **Recommendation 17:** examines how the significant additional costs might be funded through increased contributions from all stakeholders including government, business, students (foreign and local), industry, broad-based philanthropy (including alumni), patents and competitive research contracts.

## Infrastructure

31. The Council has begun a review of the economic role, current condition and means of provision of infrastructure in Scotland.

32. The Council is concerned by the long-term under-investment in Scottish infrastructure. The Council recognises that the provision of infrastructure takes place within an overall framework for the control of capital and current expenditure and that the decisions of the Scottish Government need to be made within the constraints applicable to the UK as a whole. While the Council approves of the attempt by the UK Government to develop measures which encourage the public sector to find a more appropriate balance between current and capital expenditure, it believes that from the perspective of the efficient management of UK public spending, the results have been disappointing. The erratic management of the overall fiscal position has led to both feasts and famines in the availability of funds to the Scottish Government.

33. More generally, the current fiscal framework within which the Scottish Government operates is modelled on the framework for English Government departments and has not changed since devolution. The Council believes that whatever view is taken of the overall constitutional settlement, the efficient and effective management of finances should be reviewed in the light of experience since devolution.

34. The Council recommends that the Scottish Government:

- **Recommendation 18:** raises the overall level of infrastructure spending within Scotland and reviews the state of Scotland's infrastructure within a single comprehensive framework;
- **Recommendation 19:** pursues, with the UK Government, revisions to the current fiscal arrangements which would enable it to plan efficiently the appropriate balance between current and capital expenditure, and to meet Scotland's overall infrastructure needs; and
- **Recommendation 20:** explores the possibility of new means of borrowing, outside the Private Finance Initiative, to help finance public sector infrastructure.

## Scottish Economic Statistics

35. Most Scottish economic statistics are obtained as a result of a regional breakdown of aggregate UK numbers. The quality of the data therefore falls short of the level that would be expected if national accounts and other economic information were collected for Scotland on a stand-alone basis.

36. The Scottish Government's economic growth targets are expressed in terms of Gross Domestic Product (GDP). GDP is so widely accepted internationally as a measure that it

would be wrong not to use it. However, there are problems in using this sole measure – or indeed any other single indicator – in evaluating Scottish economic performance. The treatment of the financial services sector and the oil and gas sector, in the measurement of GDP, give particular cause for concern.

37. The Council recommends that the Scottish Government:

- **Recommendation 21:** improves the quality of Scottish economic statistics in several specific areas so that they meet the needs of government; and
- **Recommendation 22:** uses other measures of performance in addition to GDP to measure the performance of the Scottish economy.

## Future Work Programme

38. Looking forward, the Council will focus its attention on the longer-term Purpose targets (growth and emissions, productivity, population and solidarity) and the performance of the key sectors in Scotland: Creative Industries; Energy; Financial and Business Services; Food and Drink; Life Sciences; Tourism; Universities; and other Education and Healthcare. The Council will also continue to advise on planning, developing better sources of capital and Scottish economic statistics.

# A

## OVERVIEW OF SCOTLAND'S ECONOMIC PROGRESS

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# Chapter 1

## Overview of Scotland's Economic Progress

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### Introduction

1.1 When the Council first met in September 2007, drastic changes in global economic conditions were starting to emerge. Over the past year, conditions in the global economy have deteriorated significantly due to a combination of the international financial crisis, or credit crunch, and the rise in commodity prices such as oil and food. Together, these external shocks have led to weaker demand in the global economy.

1.2 This chapter examines the performance of the Scottish economy over the past year in the face of challenging global economic conditions and considers what progress has been made towards meeting the two economic growth targets set out in the Government Economic Strategy.

### Recent Economic Developments

1.3 Excessive lending linked to the US sub-prime market was the trigger for the credit crunch, which began in August 2007. This resulted in substantial losses across the banking sector (including the collapse of Northern Rock) and led to the reduction in the availability of liquidity in the wholesale money market. Although initially limited to the financial sector, the wider impacts of the credit crunch have been felt across a number of different sectors through the reduction in the availability of credit.

1.4 The intensification of the credit crunch towards the end of September 2008 prompted an international response which included not only injecting further liquidity into the money markets, but also the recapitalisation of banks and a coordinated interest rate cut involving the Bank of England, the US Federal Reserve and the European Central Bank.

1.5 At the same time, increased commodity prices, such as oil and food, in the first half of 2008 contributed to a significant increase in inflationary pressures across the global economy. This acted as a squeeze on the disposable income of both businesses and consumers, and contributed to the weakening in global demand. The reduction in commodity prices in the second half of 2008 and weaker activity in the global economy, are expected to lead to a sharp reduction in inflation in the coming months, with attention now turning to the potential threat of deflation in 2009.

1.6 The slowdown began in the US, with output contracting in the final quarter of 2007. Throughout 2008 the economic slowdown quickly spread to other advanced economies in what the International Monetary Fund (IMF)<sup>4</sup> describes as "the most dangerous financial shock in mature financial markets since the 1930s". Both Japan and the Euro Area have already fallen into recession and the UK is expected to follow suit by the end of 2008. However, the slowdown has not been confined to advanced economies, with many emerging economies experiencing weaker growth in the second half of 2008.

1.7 Over the past year, conditions in the Scottish economy have weakened as the impact of the credit crunch began to impact upon the real economy. Although the Scottish economy has continued to grow (with GDP growth of 0.1% in the second quarter of 2008 over the previous quarter), the rate of growth has slowed since the end of 2007.

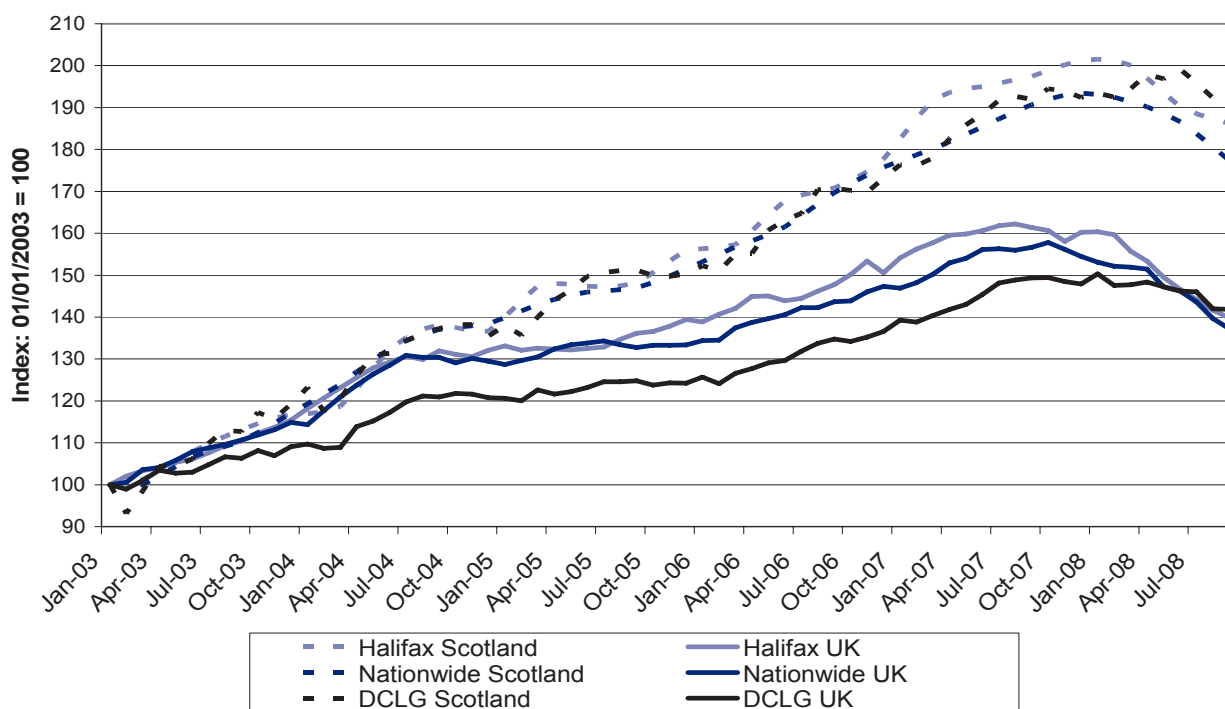
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<sup>4</sup> World Economic Outlook, IMF, October 2008.

1.8 The overall position of the Scottish labour market has remained strong over the past year despite the recent decline in the number of people in employment in the third quarter of 2008 compared to the previous quarter, and a modest rise in unemployment over the same period. The employment rate remains close to its historic high and the unemployment rate (4.7%<sup>5</sup>) is still significantly below the UK (5.8%) and other advanced economies.

1.9 The housing sector has experienced a significant drop in the level of activity, with the number of new mortgages falling by 34% over the second quarter of 2008 compared to the year earlier, due to the reduction in the availability of mortgages<sup>6</sup>. This slowing in the Scottish housing sector has had a knock-on impact on Scottish house builders, with a number of construction companies announcing plans to reduce their workforce.

**Chart 1.1 Scottish and UK House Price Indices**



Source: Reuters EcoWin

1.10 Although Scottish house prices have been more resilient than the UK average, recent data indicate that house prices in Scotland have fallen over the past year, particularly over the third quarter of 2008.

1.11 The international financial crisis has already had a direct impact on the Scottish financial services sector, with output contracting in the first half of 2008. At this stage it is too early to predict the full scale of the impact on the Scottish financial services sector, although there is likely to be restructuring in the sector in the coming years.

1.12 The latest business surveys indicate that Scottish businesses have experienced a decline in confidence due to uncertainty over the current global economic slowdown and the impact of the international financial crisis. With new orders also declining, this suggests that growth could continue to slow in the final quarter of 2008 and into 2009.

<sup>5</sup> As measured by the ILO (International Labour Organisation).

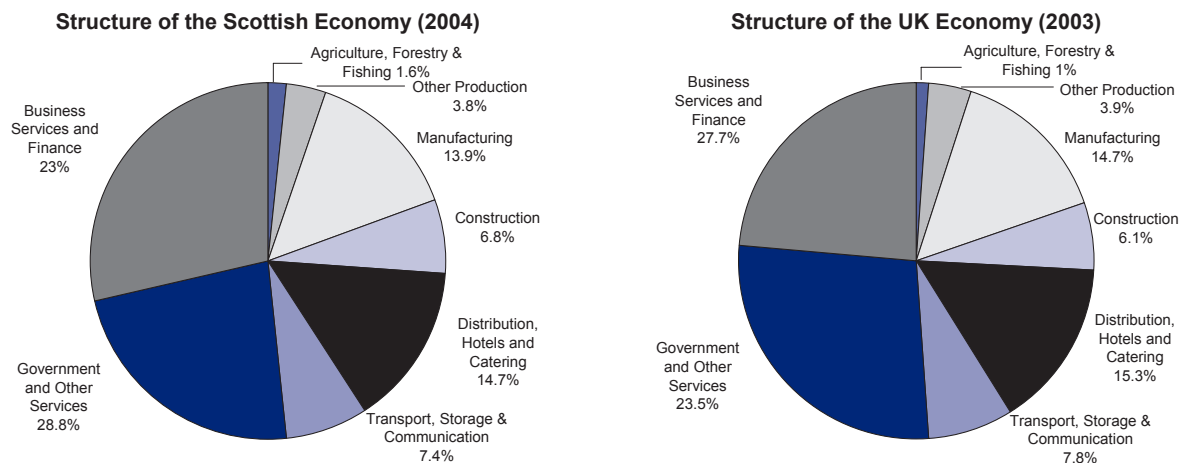
<sup>6</sup> Source: Scottish Council for Mortgage Lenders.

## Structure of the Scottish Economy

1.13 How an economy responds to an economic downturn will, in part, be determined by its economic structure. For example, economies which are particularly reliant on key sectors or commodities may be more vulnerable to an economic slowdown impacting on those sectors than a more diversified economy. The split between the level of activity within an economy accounted for by the public and private sector can also have an influence, with a relatively large public sector often seen to provide stability in a slowdown, but a potential drag on growth in an upturn.

1.14 The economic structure of the Scottish economy is broadly similar to the UK, with the service sector accounting for around 74% and the production sector around 18% of economic activity<sup>7</sup>. However, there are differences in the economic structures within the service sector. In Scotland, a greater proportion of economic activity takes place in the Government and Other Services sector compared to the UK (28.8% compared to 23.5%)<sup>8</sup>. At the same time, Business Services and Finance account for a greater share of economic output in the UK economy compared to Scotland (27.7% compared to 23%).

**Chart 1.2 Structures of the Scottish and UK Economies in Terms of Contribution to GDP**



Note: excludes North Sea activity

Source: Scottish Government (excludes North Sea Activity), and ONS

1.15 In addition to the concentration of sectors within the economy, differences in the characteristics of certain sectors will determine how they will be affected during downturns in economic activity. For example, the greater affordability of Scottish housing means that the Scottish housing market has been less affected compared to the UK.

## Progress Towards the Growth Targets

1.16 The Scottish economy's average annual growth rate over the past 30 years (1977-2007) has been around 0.5 percentage points below the UK equivalent figure (1.9% vs. 2.4%). This gap in relative economic performance reflects higher productivity and population growth in the UK relative to Scotland, though Scotland has generally outperformed the UK in terms of growth in employment rates.

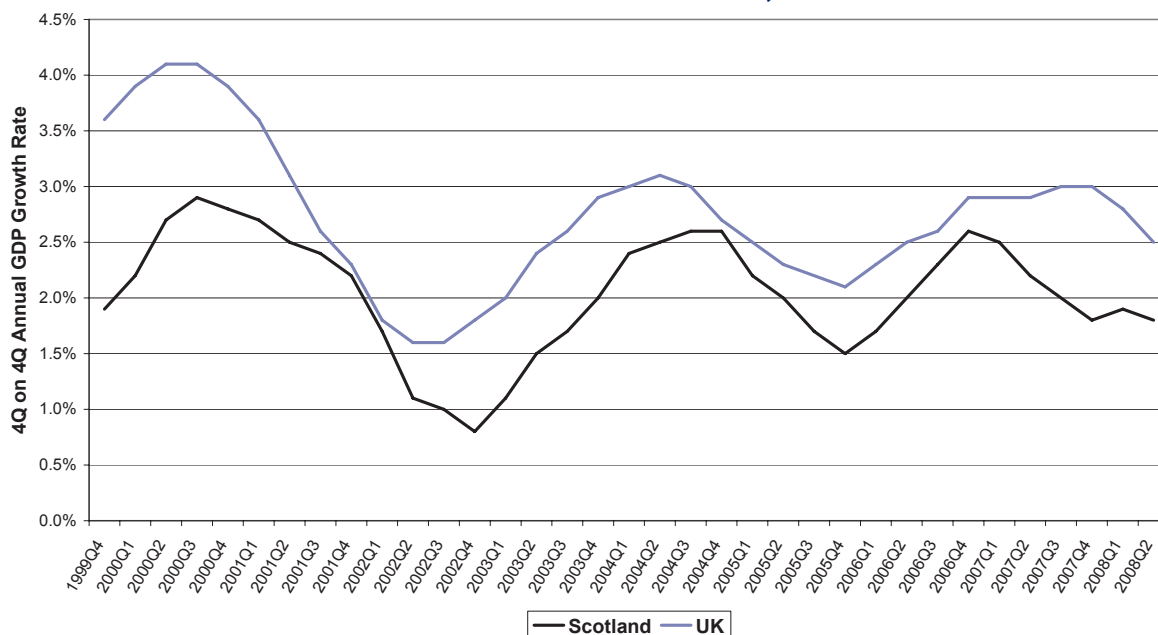
1.17 In order to meet the Government's 2011 growth target, and so begin to erode the long term structural growth gap, Scotland's economic growth needs to accelerate. The

<sup>7</sup> Based on the 2004 Scottish Input Output Tables and the 2003 UK Input Output Tables.

<sup>8</sup> Based on Scottish GVA which excludes off-shore North Sea activity.

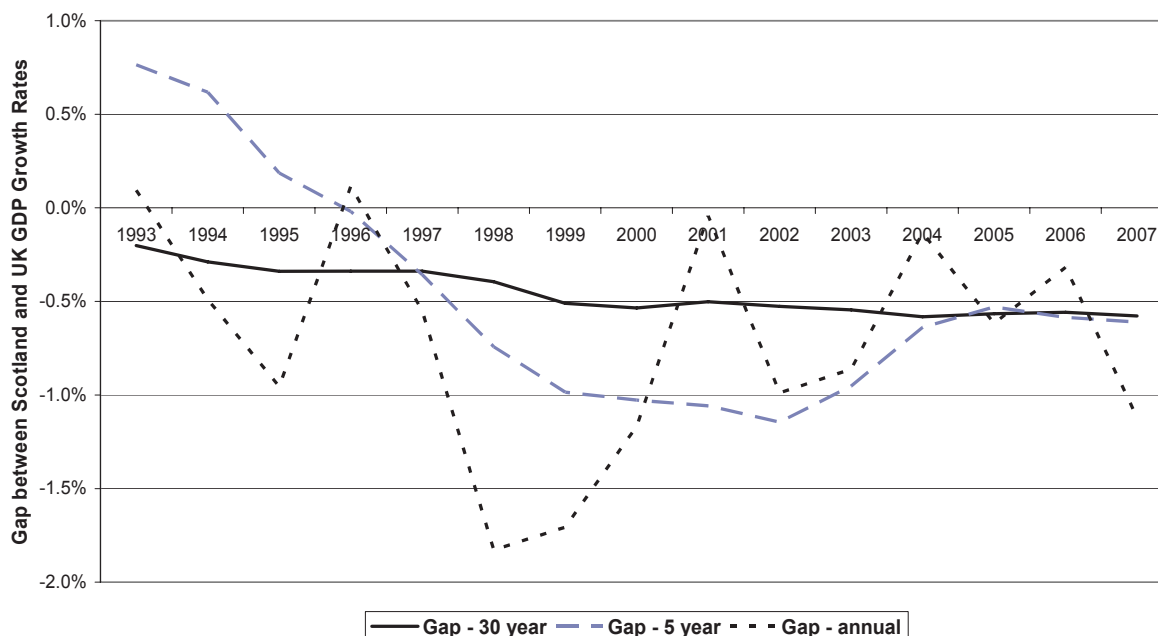
Council notes that the short-term growth differential between the Scottish and UK economies widened in the second half of 2007, reaching 1.1 percentage points in the fourth quarter of 2007 (see Chart 1.3). This differential has since narrowed as the UK economy has decelerated more sharply than the Scottish economy, but the UK-Scotland growth gap remains close to its long-term average (0.7 percentage points in the second quarter of 2008).

**Chart 1.3 Scotland and UK Annual GDP Growth Rates, 1999 Q4 to 2008 Q2**



Source: Scottish Government, Office for National Statistics

**Chart 1.4 Performance Against Structural Gap (30-Year) with the UK Using Annual and 5 Year Growth Rates**

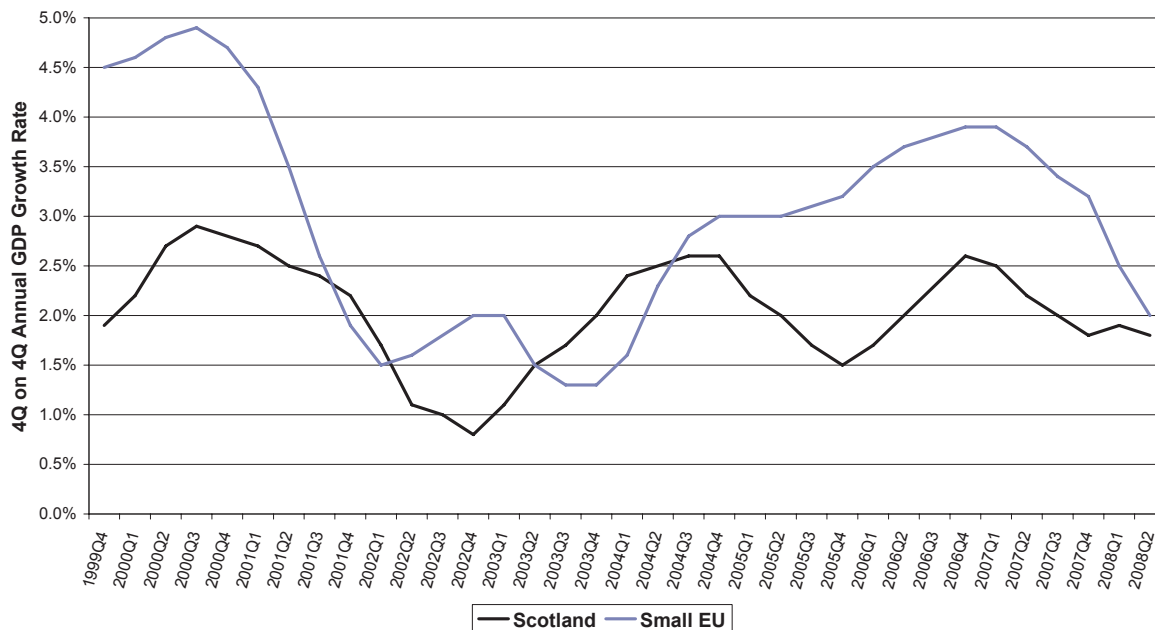


Source: Scottish Government, Office for National Statistics

1.18 In order for Scotland to narrow the structural performance gap, there needs to be a sustained decrease in the short-term growth differential that is not due to cyclical or other

transitory factors. Chart 1.4 shows the 5-year and 30-year annual average growth differential between the Scottish and UK economies. This shows that since 1993 the structural gap (30-year average) between Scottish and UK GDP growth has widened.

**Chart 1.5 Scotland and Small EU Countries Annual GDP Growth Rates, 1999 Q4 to 2008 Q2**



Source: Scottish Government, Organisation for Economic Co-operation and Development

1.19 The Government Economic Strategy also includes a longer-term target to match the GDP growth rate of the small independent EU countries by 2017<sup>9</sup>. As with Scotland's performance against the UK, there has been a narrowing of the growth gap between Scotland and the small EU countries in the most recent quarters as the Scottish economy has been less affected by the slowdown in the global economy (see Chart 1.5). For example, Denmark was in a technical recession, defined as two consecutive quarters of negative growth, at the end of the first quarter of 2008.

## Medium Term Prospects for the Scottish Economy

1.20 The Council acknowledges that there is continued uncertainty over the length and depth of the slowdown in the global economy, with many commentators expecting the recovery to take place towards the end of 2009. This uncertainty has fed through into the forecasts for the Scottish economy, with the balance of risks remaining on the downside. Independent forecasts for the Scottish economy have been revised down significantly since the middle of 2008 as conditions in the global economy have deteriorated. The latest forecasts<sup>10</sup> predict that the Scottish economy will contract by between -0.4% and -1.9% in 2009, before recovering in 2010.

1.21 The Council also notes that the tight financial settlement for the Scottish Government over the period to 2011-12 means there will be little scope for Scottish Government expenditure to support the economy throughout this economic slowdown. For the three financial years from 2008-09, the Scottish budget will increase by an average of 1.4% per annum in real terms, which is the lowest increase since devolution. The spending growth

<sup>9</sup> Austria, Denmark, Finland, Ireland, Luxembourg, Portugal and Sweden.

<sup>10</sup> Experian, Fraser of Allander Institute, Ernst & Young Scottish ITEM Club.

figures announced in the 2008 Pre-Budget Report for the period 2011-12 to 2013-14 are even tighter. This will limit the scope for the Scottish Government to support the economy during the current downturn.

# **B** ACHIEVING THE PURPOSE TARGETS

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# Chapter 2

## Improving the Productivity of the Scottish Economy

### Background

2.1 The level of productivity, and its rate of growth, will play an essential role in the strategic plan of any economy that has increasing its rate of growth, and improving the quality of jobs, skills employed and value added generated, among its goals.

2.2 The Scottish Government's Economic Strategy is no exception: it puts great emphasis on the importance of these factors and has explicit Purpose targets for growth and productivity (see Box 2.1 below)<sup>11</sup>. GDP growth dominates, of course, but the others are an essential part of improved growth performance and define the way in which that growth should be achieved. All follow from, and imply, increases in the general level of productivity in the economy. Increased productivity is, therefore, seen as a condition which is essential to ensuring higher growth will be achieved and sustained.

#### Box 2.1: Purpose Targets

<b>Economic Growth (GDP)</b>	<ul style="list-style-type: none"> <li>To raise the GDP growth rate to the UK level by 2011</li> <li>To match the growth rate of small independent EU countries by 2017</li> </ul>
<b>Productivity</b>	<ul style="list-style-type: none"> <li>To rank in the top quartile for productivity amongst our key trading partners in the OECD by 2017</li> </ul>
<b>Participation</b>	<ul style="list-style-type: none"> <li>To maintain our position on labour market participation as the top performing country in the UK and to close the gap with the top five OECD economies by 2017</li> </ul>
<b>Population</b>	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Solidarity</b>	<ul style="list-style-type: none"> <li>To increase overall income and the proportion of income earned by the three lowest income deciles as a group by 2017</li> </ul>
<b>Cohesion</b>	<ul style="list-style-type: none"> <li>To narrow the gap in participation between Scotland's best and worst performing regions by 2017</li> </ul>
<b>Sustainability</b>	<ul style="list-style-type: none"> <li>To reduce emissions over the period to 2011</li> <li>To reduce emissions by 80% by 2050</li> </ul>

### Evidence Base

2.3 The Council has reviewed how productivity gains underpin the Government Economic Strategy, and the policies necessary to achieve productivity increases. As part of this review, the Council has considered: how what we know about productivity growth can serve the Scottish Government's Purpose targets; the sources of the increase in productivity growth in the US and Europe in the 1990s; and whether such an analysis could be done on Scottish data.

2.4 In Scotland's case, productivity is the critical factor for achieving higher growth because:

2.4.1 Standard economic analysis shows that, even taking human capital into account, higher rates of economic growth can be sustained only if the working

<sup>11</sup> Scottish Government (2007), *The Government Economic Strategy*

population grows, productivity increases, or both. Short-term increases in the rate of growth are possible if savings and investment (either domestic or foreign) increase; but sustained increases require higher population or productivity growth. Current projections for population growth in Scotland over the next 30 years show a tiny increase, while the working population is actually expected to shrink because of the ageing effect. Reducing inactivity rates in the current population would help counteract this problem. But with a one-off increase in the working population of 4% at best (see Chapter 5), the effect on growth would be small. Consequently, a sustained increase in the rate of economic growth in Scotland will critically depend on securing increases in the rate of productivity growth.

2.4.2 Higher productivity will also improve the quality of economic growth, in the sense of creating more high paid jobs, more skilled jobs and higher value added. It is therefore likely to contribute to the Scottish Government's Strategic Objectives<sup>12</sup> of a wealthier and fairer, greener and (possibly) healthier Scotland.

2.4.3 Higher productivity will (other things being equal) mean lower per unit costs of production and lower output costs in general. Improved productivity will, therefore, increase the competitiveness of Scottish industry and, crucially, contribute to a higher rate of growth through better price and output performance.

2.4.4 Higher productivity and lower costs will attract new firms or expand existing ones, providing more varied career paths to employ and retain skilled workers. This would help reduce the brain drain and reduce the branch office problem that seems to hold Scotland back<sup>13</sup>.

2.5 Two less conventional arguments for productivity growth are particularly important for any small economy, and Scotland in particular:

2.5.1 higher productivity will clearly enhance Scotland's natural comparative advantages but the sources of comparative advantage and trade also come from internal and external economies of scale. In a small economy, while it is more difficult to extend comparative advantage through internal economies of scale (e.g. large firms, large plants), forming clusters of similar high tech/high productivity firms is a realistic strategy. This suggests that a strategy of promoting key sectors should be part of any policy designed to increase productivity growth. This is a strategy to foster certain industries in general, rather than any particular firm; and

2.5.2 recent economic work has shown that international trade creates higher productivity, and that higher productivity generates trade. Any strategy designed to increase economic growth through higher productivity should, therefore, contain measures to expand external trade. Part of that will come through (productivity driven) lower unit costs, which imply a lower real exchange rate both outside the UK and within the UK monetary union. But the remaining part must come from assistance, networking or other incentives that change company structures to make parts of the production process cheaper; or that increase the scale of operations, the use of specialised services, or help with guarantees and specialised information.

2.6 These arguments suggest a strategy of increasing the average level of productivity in the economy through training and skills; but, more particularly, one of increasing the share of high productivity firms/industries in the economy (where the least productivity disadvantage

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<sup>12</sup> As set out in the Government Economic Strategy

<sup>13</sup> A branch office problem exists where the high productivity/high value production work is done at headquarters and the lower productivity work in Scotland.

internationally would be the criterion for inclusion). The Scottish Government's own internal research confirms that Scotland has specialised in low productivity sectors relative to the UK, with more industries being less productive and fewer being more productive. Nevertheless, Scottish productivity has improved in the last decade, and the largest gains have come from changes in the industrial mix: three times more than from the other sources of improvement. That suggests the Scottish Government needs to concentrate on policies that increase the general level of productivity across the board through education and skills, better business practices and infrastructure investment. But it also points to following a strategy of shifting the industrial mix towards high productivity industries, with specialised services, skills, and external economies of scale. In addition, Scotland appears to have been less successful in allocating labour and capital to where they can be used most productively. This suggests that increasing flexibility in labour market practices would be a useful adjunct to such a strategy, enabling comparative advantages to be exploited more effectively.

2.7 The Council also considered whether it would be feasible to measure productivity growth using existing Scottish data. Traditionally there are three forms of productivity growth to be measured: labour; capital; and total factor (or residual) productivity. The latter is important because it covers the productivity gains implied by organisational changes, better work practices, the use of information technologies and other specialised services. On the basis of work carried out by the Scottish Government, we concluded that robust estimates could be made for labour productivity, but not for capital productivity because of the lack of reliable investment or capital stock data for Scotland. That means we can make inferences about the level and growth of capital or total factor productivity, but not measure them directly. This is a pity since the evidence from the US is that the big productivity gains in the 1990s and early 2000s were made from learning to exploit information technology effectively (part of capital productivity) and in the associated organisational changes (total factor productivity), both of which supported the high US growth rate of that time. The same gains were not seen in Europe which may go some way to explain the euro area's slower growth in that period.

2.8 What do we know about productivity in Scotland itself and its contribution to growth? The key point is that concentrating on labour productivity alone may not produce any tangible benefits if capital productivity is lower than elsewhere. That must be the case here. Although we have no direct figures for capital productivity in Scotland, we do know that labour productivity is 3% lower than in the rest of the UK while wages are 4% lower on average. That means unit labour costs are 1% lower than in the rest of the UK. Hence, other things being equal, output should have been growing faster in Scotland, but it has not: output has grown between 0.5 and 1 percentage points slower on average since 1976. So all other things are not equal; and the most plausible explanation is that capital productivity is rather lower in Scotland (if we take capital and total factor productivity to include the contributions of transport, infrastructure, R&D and organisational methods). It would, therefore, be better to adopt policies that increase all types of productivity; raising capital and total factor productivity to reduce the branch office problem, alongside labour productivity.

2.9 What lessons could Scotland learn from the experience of other countries? In a series of studies of the US in the 1990s, Dale Jorgenson and his colleagues emphasise three crucial drivers of productivity growth, and hence economic growth<sup>14</sup>:

2.9.1 improvements in labour quality (education, training and skills) – this has provided a small but steady contribution to labour productivity;

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<sup>14</sup> Jorgensen, D., Ho, M.S., and Stiroh, K.J. (2008), "A Retrospective Look at the US Productivity Resurgence", *Journal of Economic Perspectives*, 22, 3-24.

2.9.2 enhancing labour productivity by raising the productivity of the capital they work with. This comes from increasing the productivity of IT equipment and its production; and, more importantly, from learning how to use it effectively; and

2.9.3 the largest improvements have come from the rises in total factor productivity resulting from innovations and investment in how to (re)organise production and/or management.

2.10 These three factors are consistent with a strategy that tries to increase labour productivity across the board, and increase the share of high productivity industries in national output. They also emphasise that concentrating on labour productivity alone is not enough. Most productivity gains are likely to come from raising capital productivity and from making businesses organise production, and run their affairs, more effectively. That is to stress the need to solve the branch office problem, even if firms do not wish to transfer head offices.

2.11 The same point is reinforced by the results obtained for the European countries (as set out by van Ark, and others<sup>15</sup>). In this case, similar IT investments have been made but seem to have made much smaller contributions to productivity growth – even in domestic firms in industries where foreign multinationals (whose productivity has increased) are present. Much of this development has taken the form of substituting capital for labour, and more recently, low skilled labour for capital, while skilled labour has continued to be employed as before. As a result, being unable to exploit the potential of new capital or any complementary innovations in re-organisation, total factor productivity growth has collapsed in Europe, most notably in business services. The contrast with the US underlines the point. The same is true in Scotland, both in absolute terms and relative to the UK.

2.12 New work on the source of these differences with the US suggests that other factors, not industry or factor specific, are also important<sup>16</sup>:

2.12.1 firm size and organisation (indicating an ability and incentive to exploit productivity gains);

2.12.2 ownership (capital mobility and competition; entry/exit vs. continuing firms); and

2.12.3 the share of tradable production in output (exposure to foreign trade competition; market entry/exit vs. continuing firms).

### Policy Considerations

2.13 Higher productivity and extending comparative advantage in the Scottish economy are important for achieving the Scottish Government's growth targets, as well as in their own right. The cost reductions and increased competitiveness would benefit the whole economy.

2.14 It would be useful to develop policies that increase the general level of productivity in the workforce, and increase the share of high productivity firms/industries in national output. A policy to do that is to encourage the development of certain key sectors and to promote

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<sup>15</sup> Van Ark, B., O'Mahony, M. and Timmer, M.P. (2008), "The Productivity Gap Between Europe and the United States: Trends and Causes", *Journal of Economic Perspectives*, 22, 25-44.

<sup>16</sup> Bloom, N., Sadun, R. and van Reenen, J. (2007), "Americans Do I.T. Better: US Multinationals and the Productivity Miracle" Discussion Paper 13085, NBER, Cambridge MA; and Discussion Paper 6291, Centre for Economic Policy Research, London. Roberts, F. (2005), "Ownership of Firms in Scotland" Scottish Economic Statistics, Scottish Government.

clusters of industries so as to exploit their external economies of scale and specialised services. This is one of the key strategic approaches set out in the Government's Economic Strategy. Creative Industries, Energy, Financial and Business Services, Food and Drink, Life Sciences, Tourism, Universities, other Education and Healthcare – and the technologies that contribute to the development of these key sectors<sup>17</sup> – have all been identified as key sectors which have high growth potential and the capacity to boost productivity. The Council endorses this approach and intends to advise on practical measures that could be taken to further support each of these key sectors at future meetings (see Recommendation 2 below and Recommendation 4 in Chapter 3).

2.15 More generally, it is important to focus on improving capital productivity and total factor productivity, alongside traditional labour productivity. Here policies to encourage smaller firms, non-traditional firms, firms with a higher proportion of their activities in Scotland, as well as those that help extend external trade and foreign investment in Scottish firms, or increase flexibility in labour market practices, would be appropriate.

### The Council's Recommendations for the Scottish Government

2.16 The Council recommends that the Scottish Government:

**Recommendation 1:** increases the general level of productivity in the workforce, especially through skills and training, and the share of high productivity firms and industries in national output;

**Recommendation 2:** further encourages the development of key industries and sectors, and facilitates the formation of clusters with external economies of scale, critical mass for skills and specialised industries (links with Recommendation 4); and

**Recommendation 3:** improves capital productivity and total factor productivity, alongside labour productivity.

### The Council's Considerations for the Scottish Government

2.17 The Council asks the Scottish Government to consider:

**Consideration:** increasing productivity growth through generalised measures, for example by encouraging small or non-traditional firms, and by providing incentives for firms to extend their share of external trade or to increase the participation of foreign investment;

**Consideration:** improving capital productivity, including finding ways to reduce the branch office problem, and providing incentives for firms to reorganise their production methods, improve management techniques and skills utilisation, and to introduce technical and managerial innovations in their plants in Scotland – not just on average across the UK; and

**Consideration:** using productivity as a means of lowering unit costs in production, and *hence* as a vehicle to induce firms to set up or extend their activities in Scotland. It should explore: lower business taxes and rates; improved planning procedures; better infrastructure and communications; specialised services; and ways of increasing flexibility in labour market practices, as the means to do this.

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<sup>17</sup> In response to the New Horizons report, produced by the Joint Future Thinking Taskforce on Universities in November 2008, the Government has recognised universities as an additional key sector:  
[www.scotland.gsi.gov.uk/Resource/Doc/82254/0069165.pdf](http://www.scotland.gsi.gov.uk/Resource/Doc/82254/0069165.pdf)

2.18 The Council is undertaking further work on productivity and will provide advice to the Scottish Government on specific measures that could be taken to achieve Scotland's 2017 productivity target in due course.

## Chapter 3

# Achieving Scotland's 2011 Growth Target

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### Background

3.1 The Council's discussions of Scotland's economic growth prospects have taken place within the framework of the Scottish Government's Purpose targets for sustainable economic growth:

3.1.1 to raise the growth rate of Gross Domestic Product (GDP) to the UK level by 2011; and

3.1.2 to match the GDP growth rate of a defined<sup>18</sup> group of small independent EU countries by 2017.

3.2 The Council believes that these are appropriate targets and recognises the need to focus economic discussion on the dynamic issue of growth and not merely on the static issue of how the budget is spent. Although the Council recognises that achieving these targets will be challenging – particularly as the Scottish Government does not currently have many macro-economic levers at its disposal that affect growth (e.g. most tax powers, authority over immigration, ability to borrow for infrastructure) – it also recognises that the Scottish Government has the vast majority of micro-economic levers which, if used appropriately, can encourage economic growth.

### Evidence Base

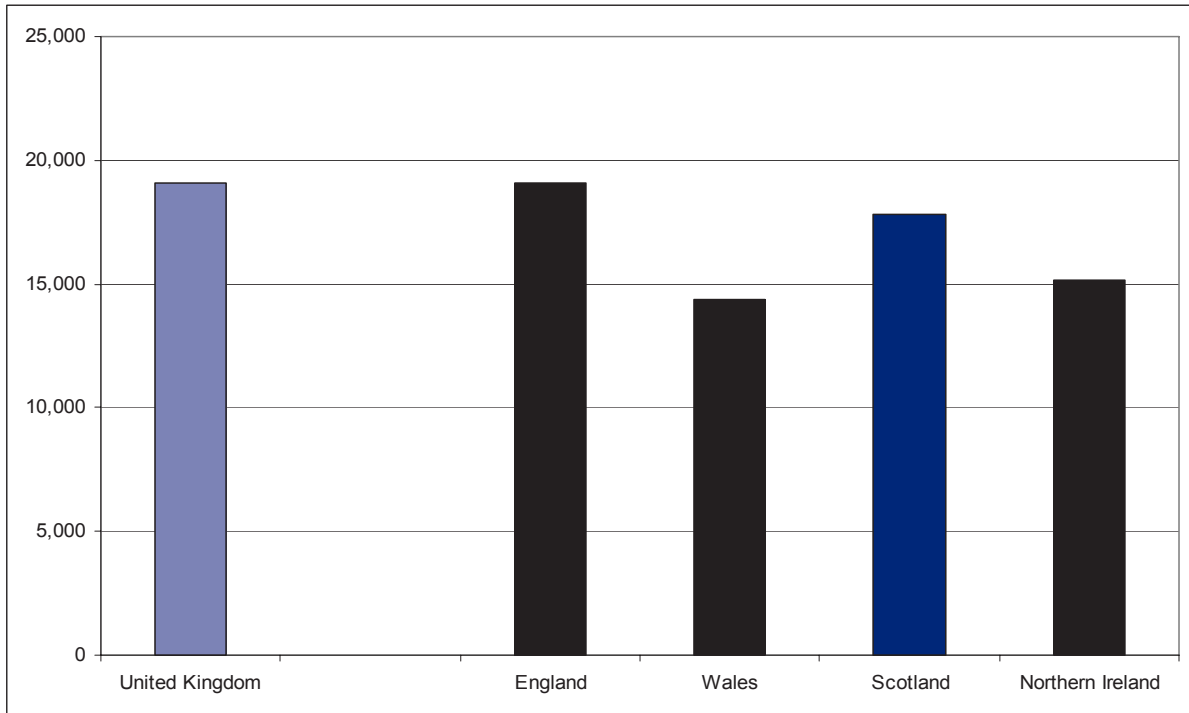
3.3 Over the last 30 years, Scotland's annual average growth rate has consistently lagged that of the UK by an average of around 0.5 percentage points (see Chart 1.3 in Chapter 1). However, this lower growth rate roughly matched the difference in population growth. Consequently, trends in GDP per head in Scotland have not been very different from those in the UK (Scotland being around 3% lower), although Scotland was particularly affected by the closure of some manufacturing plants after the New Economy bubble burst in 2000. In this respect, the Scottish position is markedly different from that of Northern Ireland and Wales, for which GDP per head is substantially less than that of the UK as a whole.

3.4 A comparison with the small independent countries of the EU shows a much less favourable picture. Scotland's growth rate has been lower, and per capita GDP is lower (except compared to Portugal). For example, over the last ten years, growth in Ireland has been three times as rapid. For much of the past decade, these comparison countries have also outperformed the UK and have been the most successful economies in Europe.

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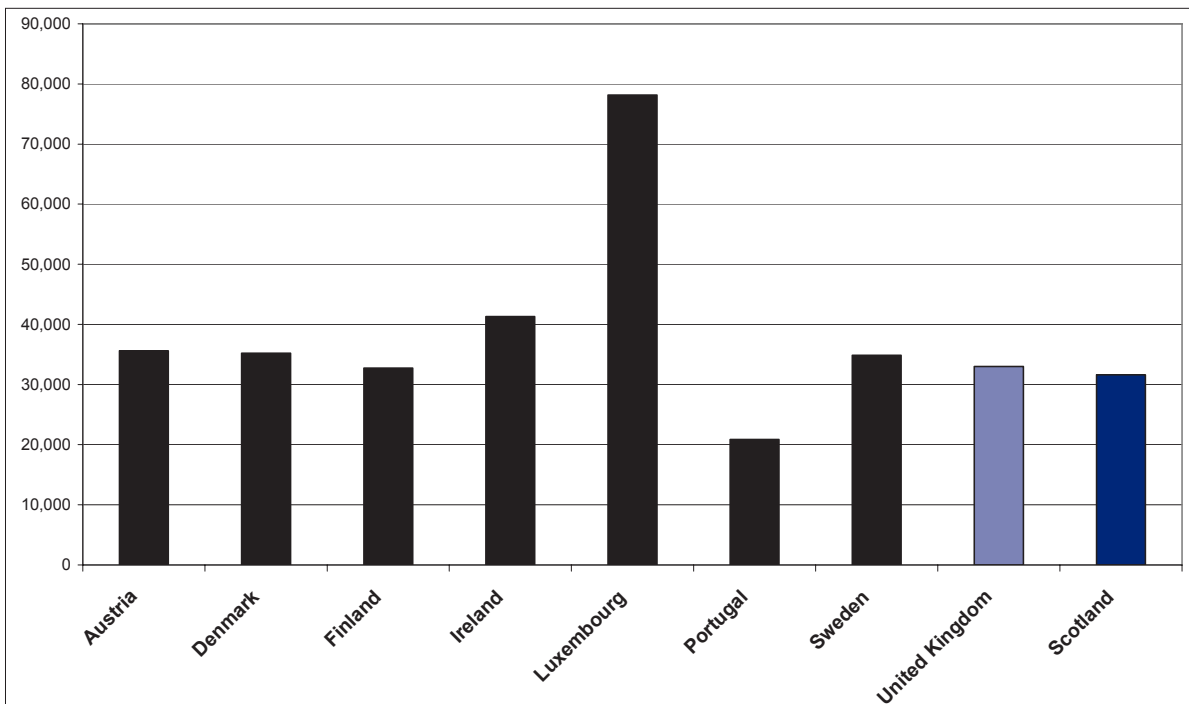
<sup>18</sup> These countries are identified as Austria, Denmark, Finland, Ireland, Luxembourg, Portugal and Sweden.

**Chart 3.1 UK GVA Per Head (£) by Country, 2006**



Source: Scottish Government, Regional Accounts

**Chart 3.2 GDP Per Capita at Current PPPs (in USD), 2006**



Source: Scottish Government, OECD

3.5 As a matter of arithmetic, GDP can be analysed as the product of the following factors: population, labour force, participation, and output per worker (productivity). Current official estimates of Scottish GDP do not include North Sea oil and gas activity as the values

of this are treated as 'extra-regional' and not allocated to any of the four nations within the UK<sup>19</sup>.

3.6 Scotland's population today stands at just over 5 million and population growth in Scotland has been very slow. Despite significant immigration from Central and Eastern Europe, the Scottish population has risen by only 1.2% over the last decade in comparison to growth of 4.7% in the EU15, and 4.6% in the UK<sup>20</sup>. Although recent population estimates show a slightly more favourable position, 1.8% growth in Scotland over the past five years compared to 2.9% in the EU15 and 2.8% in the UK, the basic demographic structure continues to look unfavourable<sup>21</sup>.

3.7 Scotland's labour market looks strong, particularly compared to its historic position. Unemployment is low and participation is in line with the UK average. However, some areas of Scotland show performance very much worse than the UK national picture (see Chapter 5).

3.8 A critical element in growth performance is productivity, which depends principally on the competitiveness of Scotland's businesses (see Chapter 2).

### Policy Considerations

3.9 The Council has noted that Scotland's economic growth performance is more acceptable if the measure used is GDP per head rather than GDP, provided this relates to a stable or growing population. The former is a better guide to living standards, and greater output is not an end in itself. But the Council does not consider that sustainable economic prosperity would be consistent with a static or declining population, and especially if that static or declining population was the result of a low birth rate and substantial emigration. A vibrant economy (and society) is likely to have a growing population. Ireland's strong economic performance over the last decade has made working in Ireland a much more attractive option for talented young Irish men and women, and has attracted members of the Irish Diaspora back to Ireland. A similar virtuous circle could have great benefits for Scotland.

3.10 The Council has noted that the Scottish Government has adopted demanding targets for the reduction of carbon emissions: to reduce emissions by 2011; and reduce them by 80% by 2050. Since the growth targets will not be easy to achieve, there is tension between competing objectives and policy demands. Some measures may be available which would reduce carbon emissions at little or no cost. However, the Council believes that, in general, the pursuit of environmental objectives entails costs, though the experience of other European countries suggests that economic growth and prosperity can facilitate the achievement of such environmental objectives. We have asked for further work, specifically on energy options, to clarify the trade-offs involved (see Recommendation 6 in Chapter 4).

3.11 The Council has also noted the Scottish Government's commitment to sharing the benefits of sustainable economic growth. The failures of some areas of Scotland to participate fully in Scotland's economic progress is a matter of serious concern to the Council and is discussed further in Chapter 5. There are no easy methods for resolving the problems, and any that exist, are likely to involve costs in the short-term. In the long-term, however, successful attempts to resolve this problem will contribute to the achievement of the Scottish Government's overall growth targets. Thus, the Council sees no conflict

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<sup>19</sup> See Chapter 9 for more detail on this issue.

<sup>20</sup> Source: GROS, Eurostat, ONS.

<sup>21</sup> *Ibid.*

between equity and other components of the Scottish Government's economic agenda. Rather the opposite: effective measures to address pockets of deprivation to achieve greater fairness will secure growth.

3.12 The Council takes the view that Scotland's economic growth in the short-term – to 2011 – will mainly be determined by global macroeconomic factors over which the Scottish Government has little influence, and that the policies which will have most effect on the short-term performance are mainly macroeconomic measures – monetary and fiscal policies – over which the Scottish Government has little or no control. Scotland's long-term growth performance, however, will also be determined by microeconomic factors – the productivity of the private and public sectors.

3.13 The Council's assessment of the challenges involved in meeting the 2011 growth target, therefore, requires:

3.13.1 identifying policy issues directly relevant to short-term growth which do lie within the competence of the Scottish Government;

3.13.2 reviewing and prioritising those long-term policy initiatives that might be expected to have material short-term impact; and

3.13.3 continuing to make Scotland's voice heard with policy-makers that control economic levers at UK and European levels.

3.14 This is a continuing process which will require a continuing dialogue with the First Minister and his colleagues.

## The Council's Recommendations for the Scottish Government

3.15 The Council's recommendations for the Scottish Government are as follows:

**Recommendation 4:** the Council believes that the most important determinant of Scotland's long-term economic growth performance is the strengthening of the competitive advantages of Scotland's businesses. It agrees strongly with the emphasis in the Government Economic Strategy on identifying key sectors in which Scottish businesses enjoy, or might reasonably expect to enjoy, clear and sustainable competitive advantages in international markets. The sectors which have been identified in this way are: Creative Industries; Energy; Financial and Business Services; Food and Drink; Life Sciences; Tourism; Universities; and, other Education and Healthcare. These sectors have been chosen based on their productive potential, which was discussed in Chapter 2. The Council has asked for reports on each key sector to be prepared and intends to discuss one report at each of its future meetings. The Council will highlight potential problems and identify how government policies can be more supportive; and

**Recommendation 5:** the Council believes that greater efficiency in the provision of government and infrastructure services can make a significant contribution to the longer term growth objective. It welcomes the steps the Scottish Government has taken to devolve more responsibility to local authorities and believes that the general principle should be applied to public services generally. At the same time, it applauds and would want to accelerate the move to measure public sector activity by output rather than input. The Council is concerned by the long-term deterioration of Scottish infrastructure and believes that increased expenditure on infrastructure is required. The Council also believes that such expenditure will not be productive without a proper review of the methods of funding and managing public sector capital projects (Chapter 8).

## The Council's Considerations for the Scottish Government

3.16 The Council asks the Scottish Government to consider the following:

**Consideration:** the Council believes that one of the most important contributions the Scottish Government can make to short-term economic performance is to promote a supportable narrative of economic success based on the strong fundamentals of the Scottish economy and the advances currently happening in key economic sectors. Such an account of achievement and potential is relevant to the promotion of investment in Scotland by private companies, the development of Scottish operations by UK businesses and the retention and attraction of able workers;

**Consideration:** given that immigration is positive for the Scottish economy, policies need to be developed with a focused Diaspora strategy, and through a better understanding and use of migrants' skills. There may be scope for enhancing Scottish flexibilities within the points based system for managed migration;

**Consideration:** an effective means of increasing labour participation, demonstrated by the experiences of other European countries, is to provide high quality childcare. The Council therefore urges the Scottish Government to see this as a high priority; and

**Consideration:** these policies need to be supported by measures which facilitate investment by taking forward the recommendations put forward by the Council on removing barriers created by the planning system and incentivising local economic development (see Chapter 6, paragraph 6.7).

3.17 The Council's discussion of these issues has raised a number of questions about the nature and quality of Scottish economic statistics and their adequacy in support of the Scottish Government's objectives and the Council's deliberations. Some of these issues are considered further in Chapter 9.

# Chapter 4

## Achieving Scotland's 2011 Emissions Target

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### Background

4.1 The Scottish Government's Purpose is increasing *sustainable* economic growth. This indicates the weight the Scottish Government attaches to environmental as well as economic considerations. The concept of sustainability is especially important in the context of greenhouse gas emissions, where the Scottish Government has demanding goals in both the short and the long term.

4.2 The Government Economic Strategy sets out two Purpose targets for emissions:

4.2.1 to reduce emissions over the period to 2011<sup>22</sup>; and

4.2.2 to reduce emissions by 80% by 2050.

4.3 In addition, the UK Climate Change Bill sets a target for a reduction of at least 26% of CO<sub>2</sub> emissions by 2020, and the Scottish Government's National Performance Framework includes a target to generate 31% of electricity from renewable sources by 2011 and 50% by 2020.

4.4 The Council has given particular consideration to the target for 2011, both in its own right and in the context of the broader economy. The Scottish Government has made clear that the trajectory needs not merely to be downwards, but to set a course likely to deliver the 80% target by mid-century. The Council's concern has been to ask: whether that is likely; how it relates to the target for economic growth; and what points the Scottish Government needs to consider in drawing up a Strategic Overview of how Scotland can meet the 2050 Purpose target.

### Evidence Base

#### *Greenhouse Gas Emissions*

4.5 By far the largest source of emissions is the energy supply sector. There has been a significant downward trend this century in both the absolute amount of net CO<sub>2</sub> emissions from this sector and its share of the total (from nearly 48% in 2000 to 44.5% in 2005). This downward trend was interrupted by the large outages at nuclear plants in 2006 which resulted in a major increase in the amount of coal-fired generation and thus an increase in emissions.

4.6 Measuring the trend in emissions is complicated. The pattern is subject to large swings from year to year, driven by the mix of sources of power generation. Thus, in 2005, nuclear energy accounted for 38% of power generation but only 26.4% in 2006, whereas coal's share was 25% in 2005 and nearly 33% in 2006. A severe winter or a large outage at a nuclear plant tends to raise the proportion of coal and gas in the mix, and thus net greenhouse gas emissions; but a rise in the international price of fossil fuels may have the opposite effect.

4.7 The picture is further complicated by the flow of electricity between Scotland and the rest of the UK. A rise in demand in England may lead to a rise in the proportion of electricity

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<sup>22</sup> The period of measurement is from 2005 to 2011

generated in Scotland from coal and gas. An increase in Scotland's renewables capacity (see paragraphs 4.9 and 4.10 below) may not result in a corresponding decrease in electricity generated from coal, if the displaced coal-based electricity is exported.

**Table 4.1 Electricity Generated in Scotland by Different Power Sources**

	2005 GWh	% of total generated	2006 GWh	% of total generated	% change 2005 to 2006
Nuclear	18,681	38	14,141	26	-24
Coal	12,186	25	17,547	33	+44
Gas	9,371	19	11,634	22	+24
Oil	1,902	4	2,141	4	+13
Pumped storage hydro	643	1	1,184	2	+84
Renewables	6,464	13	6,962	13	+8
Total non- nuclear	30,566	62	39,468	74	+29

Source: BERR Energy Trends, December 2007

**Table 4.2 Total Electricity Generated and Consumed in Scotland**

	2005 GWh	2006 GWh	% change 2005 to 2006
Total generated	49,246	53,609	+9
Total consumed <sup>1</sup>	35,753	35,675	-0.2
Total exported	7,315	10,941	+50
Gross Consumption <sup>2</sup>	41,931	42,668	+1.8

<sup>1</sup> Total consumption figure is calculated on total generation less own use, transfers and losses.

<sup>2</sup> Gross consumption is total consumption including own use and losses (or generation less transfers).

Source: BERR Energy Trends, December 2007

4.8 However, the broad pattern has been a decline in net greenhouse gas emissions in Scotland between 1990 and 2005. Within this total, there has been a decline in emissions from energy supply, businesses and waste management, and a rise in those from transport and changing patterns of land use. While emissions may have crept up in 2006 and 2007, the UK Government's projections for Scotland, published in February 2008, indicate that emissions in 2010 are highly likely to be below the 2005 level, even when population and economic growth are both factored into energy demand.

### Renewables

4.9 One measure that Scotland can take to achieve the 2011 emissions target is to generate a higher proportion of electricity from renewable sources. In 2006, renewables, largely in the form of hydro, accounted for 16.3% of Scotland's electricity consumption. This figure has risen since 2000, mainly thanks to the rapid expansion of generation from wind power, although the output of hydro power is subject to large variations from year to year depending on levels of rainfall.

4.10 The Council understands that the Scottish Government sees the associated 2011 target for renewables<sup>23</sup> as achievable, largely through the expansion of onshore wind capacity. In the longer term the Scottish Government expects that emerging technologies, including wave, tidal and offshore wind, will make a significant contribution to Scotland's

<sup>23</sup> 31% of the demand for Scottish electricity is to be supplied by renewable sources by 2011.

energy mix. Currently, Scotland has around 3GW of installed capacity to generate electricity from renewable sources. To meet the 2011 target for renewables, a further 2GW of generating capacity is needed. The government currently estimates that a further 2.5GW of renewables capacity has consent or is under construction in Scotland. We are told that most of these projects are likely to be completed in time for the 2011 deadline, giving a total renewables generating capacity of about 5.5GW.

### *Emissions and economic growth*

4.11 Between 1998 and 2005, greenhouse gas emissions fell by 13.9%, or less than 3% at an annual rate, whereas economic growth rose by 14.7%. Until now, emissions declines have tracked the shift in economic activity in Scotland away from energy-intensive activities such as manufacturing and mining. The Council has welcomed the Scottish Government's willingness to consider the economic growth targets in the light of the emissions targets and to discuss the two in parallel.

## **Policy Considerations**

4.12 The Council recognises that it will be much more difficult for Scotland to meet the 2050 emissions target than that for 2011. To reduce emissions by 80% will require an annual rate of reduction averaging more than 3%. The reduction likely to be achieved by 2011 is not sufficient to put Scotland on that downward trajectory. Moreover, without the prospect of further major shifts in the structure of the Scottish economy, even this pace of change will be harder to achieve in future.

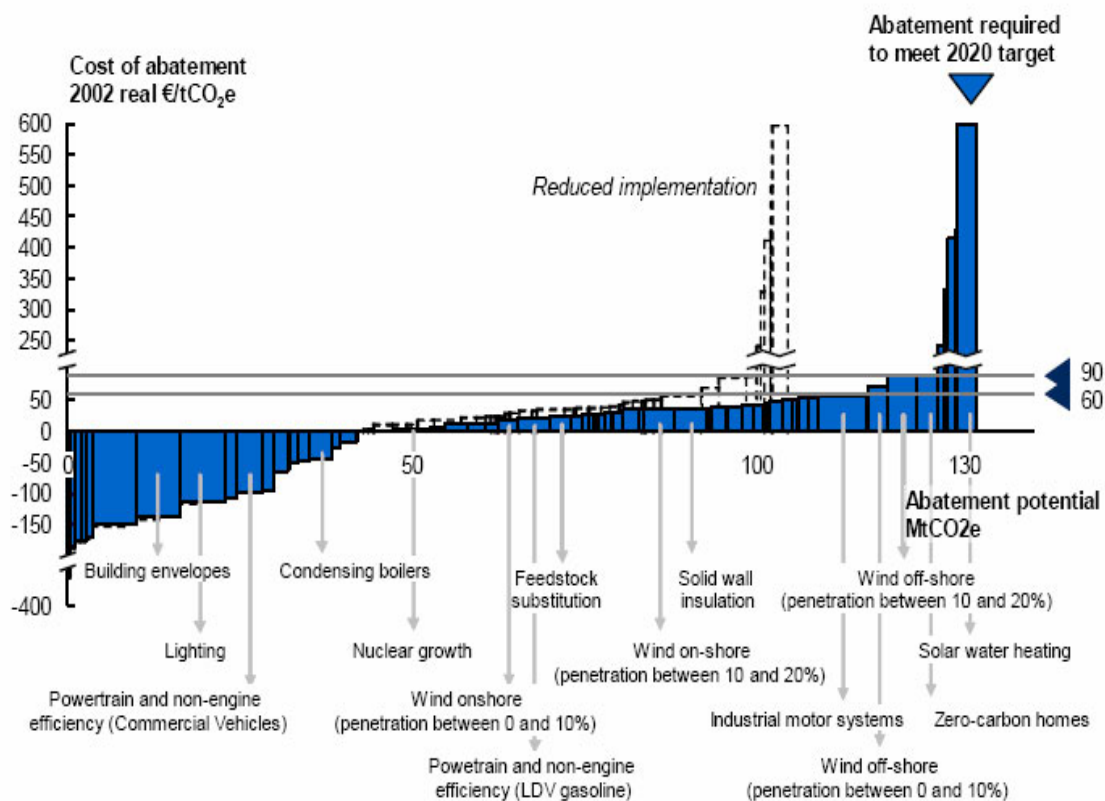
4.13 In addition, Scotland's two nuclear plants, at Hunterston and Torness, are both reaching the end of their design lives. Some extension may be possible: Hunterston has already been granted an extension until 2016, while Torness is currently able to run until 2023, and both could then have further life extensions. But, as the plants age, outages may become more frequent, and on present trends, that will result in the burning of more fossil fuel for replacement power generation. Whatever happens, both plants are likely to be shut down well before 2050. If Scotland builds no further nuclear capacity, alternative non-fossil or low-fossil forms of power generation or Carbon Capture and Storage (CCS) will be required, over and above what is already needed to achieve current planned levels of emissions reduction. We note that there have already been proposals for CCS plants in Scotland and recognise the geology and infrastructure in the North Sea makes Scotland well placed for this technology.

4.14 The main options for the Scottish Government are to reduce energy demand or to alter the mix of energy used to generate electricity. In seeking to reduce demand, the Scottish Government has limited powers to use fiscal instruments. Environmental taxation is a reserved issue, and so the key taxes lie outside Scottish control, though the Scottish Government can still support renewables to get a similar result. The sharp rises in energy prices earlier this year – if sustained – would undoubtedly have had an impact on the pattern of energy demand. Although energy prices have fallen in response to the economic downturn, this should not be considered permanent; higher energy prices are likely to return as economies recover. The Council believes that the Scottish Government should use this interim period of lower energy prices to forge ahead with measures to help Scotland cope and profit from higher energy prices when they return.

4.15 In altering the balance of supply, Scotland will need to work on developing non-fossil forms of energy or low-fossil options such as CCS. The Council understands that Scotland has an estimated 25% of Europe's potential marine resource potential, in the form of offshore wind, tidal and wave power. Scotland clearly has an opportunity to become an

international leader in developing these technologies, which might make a significant contribution both to economic growth and reducing emissions. In this context it is noteworthy that the current regulatory arrangements for incentivising the development of renewable energy and CCS projects, to a large extent, lie outside direct Scottish control.

Chart 4.1 UK Cost Curve for Measures to Reduce Greenhouse Gas Emissions



Source: McKinsey UK cost curve from the CBI Climate Change Task Force publication 'Climate Change : Everyone's Business' published in November 2007, see <http://www.avtclient.co.uk/climate-report/>.

4.16 The Council is also conscious that, in international terms, many emissions reduction measures that have a negative cost are still not being taken up, and some that are being pursued are likely to be extremely costly. It noted with interest the cost curve<sup>24</sup> for emissions reductions for the UK produced by McKinsey (see chart 4.1) which shows the cost of abatement for individual abatement options in terms of Euros per ton of carbon dioxide equivalents<sup>25</sup> in 2002 prices. This illustrates what the Council would like to see constructed for Scotland. The UK curve suggests that meeting their 2020 target<sup>26</sup> is going to be very challenging and will only be possible if all additional abatement initiatives are adopted. The Council recognises that some non-carbon technologies are likely to be much more cost-effective than others in reducing Scotland's emissions. The pattern of energy costs may differ in Scotland from international indicators: for example, Scotland's potential to exploit solar power may be limited, whereas the potential for on-shore wind or biofuels may be more promising.

<sup>24</sup> A number of initiatives that could reduce emissions on top of the baseline (projection of emissions if no additional initiatives are taken beyond what is currently expected) are analysed in this chart. The cost of each initiative is plotted on the vertical axis, whilst the abatement potential is shown on the horizontal axis. Measures are arranged in order of cost, with the cheapest on the left, and the most expensive on the right.

<sup>25</sup> A measure reflecting the radiative potential of each gas in terms of the radiative potential of carbon dioxide.

<sup>26</sup> The UK target refers to a cut of 26% in carbon dioxide emission (32% cut of all greenhouse gases) by 2020 (from 1990 levels) based on the original 60% reduction target by 2050.

## The Council's Recommendations for the Scottish Government

4.17 The Council recommends that the Scottish Government:

**Recommendation 6:** commissions an independent assessment of the full economic costs and abatement potential of the various energy options open to Scotland. The Council hopes for a wide-ranging public debate on the range of technological options. Investment decisions taken in the next few years will make a very substantial difference to Scotland's ability to deliver its emissions target for 2050 without a significant cost to economic growth;

**Recommendation 7:** explains how it will ensure that environmental and economic considerations are given due weight, and that environmental goals are considered in parallel with goals for economic growth; and

**Recommendation 8:** identifies the most cost-effective options for reducing energy demand. High on this list is the better insulation of Scotland's existing housing stock. The Council urges the Scottish Government to explore ways to defray the up-front capital costs of energy efficiency measures, perhaps by finding ways for consumers to pay back the capital costs over a number of years, for example, through their energy bills. We would encourage Scotland's banks and energy companies to work with the Scottish Government to explore ways of delivering transformational levels of home insulation.

# Chapter 5

## Addressing Economic Inactivity in Scotland

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### Background

5.1 Economic inactivity is at the heart of two of the Scottish Government's Purpose targets set for assessing its Government Economic Strategy:

5.1.1 Participation: to maintain Scotland's position on labour market participation as the top performing country in the UK and close the gap with the top five OECD economies by 2017; and

5.1.2 Cohesion: to narrow the gap in participation between Scotland's best and worst performing regions by 2017.

5.2 The Council believes that both of these targets are necessary to the Scottish Government's goal of achieving sustainable economic growth while providing opportunities for all. Participation is a central driver of economic growth, not just because a larger workforce increases the productive capacity of the economy, but because it raises consumption and reduces the social and economic costs of worklessness. Cohesion is important as well, not just in terms of sharing the benefits of growth across the country, but in limiting the potential drag effects of under performing regions and freeing up public sector resources to invest in the growing parts of the economy.

5.3 Scotland's recent record in employment is relatively strong, but the targets set for participation and cohesion are challenging and will need to be met by additional action by the Scottish Government. This chapter sets out the Council's views on where the Scottish Government can have the most impact in achieving its goals.

### Evidence Base

#### *Participation Targets*

5.4 Scotland performs well on labour market participation compared with other countries of the UK. While Scotland has not always been the top performing country, since early 2006 the employment rate in Scotland has largely been above the rest of the UK, though the gap between Scotland and England has narrowed more recently. However, with respect to the OECD, Scotland faces a difficult challenge to be in the top five OECD countries by 2017. It ranked tenth in 2007 with an employment rate of 72.4% (Sweden, in fifth place, had a rate of 75.7%). Scotland would need a major improvement in its performance to join the top five: for example, to match Sweden's employment rate, Scotland would need an additional 112,000 people in employment (an increase of 4% of the number of 15-64 year olds already in employment).

#### *Cohesion Target*

5.5 Scotland's performance on the cohesion target has been strong in recent years. The difference between the three best and three worst performing local authority areas has reduced over the last ten years, mainly as a result of improvements in the bottom tier. While the worst performing local authorities tend to change each year, some areas are consistently in the bottom tier: Glasgow City; Inverclyde; Clackmannanshire; Dundee City; and North Ayrshire. Over this period Glasgow has been the worst performing local authority area, though it has also seen the most improvement.

## Policy Considerations

5.6 The Council recognises that several factors have a major effect on Scotland's overall employment performance.

5.7 First, there are factors affecting the ability and willingness of individuals to get sustainable employment:

5.7.1 Benefits – for many years, the system of benefits for those not in work has been a major barrier to employment through the so-called 'benefits trap'. This arises where the income from working is not sufficiently attractive to outweigh the advantages of remaining on benefits;

5.7.2 Pension regime – the participation of older age groups is increasingly becoming an important driver of overall employment rates, so the pensions regime is critical, particularly with respect to the pension age and provision. Attitudes to older workers are important as well, particularly when they lead to 'ageism' on the part of employers;

5.7.3 Skills – an individual's level of skills is fundamental to their ability to get a job, both in terms of the specific, job-related skills needed to perform particular jobs as well as the more basic skills required to enter the labour market (such as work experience, literacy and numeracy);

5.7.4 Childcare – the Council sees childcare as an important enabler for many people, especially women wishing to participate in the labour market or training and notes that there remains a significant minority of parents who find it difficult to obtain or afford childcare; and

5.7.5 Health issues – the Council recognises the links between poor health, poorly managed health conditions and worklessness, particularly for those with drug and alcohol dependency and mental health problems.

5.8 Secondly, there are specific challenges faced by some groups, including: lone parents; in-care children; the 'More Choices, More Chances' group<sup>27</sup>; (that is, those 16-19 year olds who are not in employment, education or training); individuals with drug or alcohol problems; and individuals with disabilities and long-term health problems. These issues are particularly acute where individuals experience multiple disadvantages.

5.9 Thirdly, there are issues relating to employer demand for labour. This is largely driven by overall economic growth, the impact of growth on different parts of the economy and new firm formation rates.

5.10 Lastly, there are the factors affecting the value and effectiveness of training and education organisations. Among colleges and universities, there are the perennial issues about whether their courses and training are responsive enough to changing demand for different skills by employers, as well as how funding is provided to further and higher education. But there are increasingly important issues for the third sector as well, as they are often the main deliverer of services to the hardest-to-reach individuals outside the workforce. These issues include: how client focused the sector is on delivering the right services; its capacity to compete for training contracts; and the longer term viability of organisations in the third sector.

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<sup>27</sup> Scottish Executive (2006) *More Choices, More Chances*

5.11 The responsibilities for addressing these factors are divided between different levels of government. The Scottish Government and Scottish partners influence some of the key factors affecting an individual's employability, including skills, healthcare and aspects of childcare, as well as the capacity of further and higher education and the third sector to deliver the right kind of training effectively. However, other factors affecting employability, such as benefits and pensions policy, are reserved to the UK Government. The Council acknowledges the steps taken in recent years to improve coordination of these different sets of responsibilities, particularly through the more local and partnership-based approach to service delivery. However, the Council believes more needs to be done to resolve the tensions between Scottish and UK policy responsibility and implementation if the Scottish Government's aspirations for reducing economic inactivity are to be achieved.

### The Council's Recommendations for the Scottish Government

5.12 The Council's recommendations for the Scottish Government are as follows:

**Recommendation 9:** the Council concludes that the split of responsibilities between the Scottish and UK Governments for employment and skills issues hinders full achievement of the participation and cohesion targets. A key overlap remains between Jobcentre Plus and Skills Development Scotland. Closer alignment and coordination of Jobcentre Plus, Careers Services and Skills Development Scotland would result in a more effective, streamlined approach to improving labour market participation in Scotland. Consequently, the Council recommends that options to devolve Jobcentre Plus employability services to the Scottish Government be explored and further consideration is given to the gains and costs of bringing benefits and skills policy together within Scotland;

**Recommendation 10:** key to reducing economic inactivity in Scotland is the further refinement of the flexible local delivery approach outlined above. The Department for Work and Pensions (DWP) currently has 15 'City Strategy' pilots across the UK, three of which are in Scotland: in Glasgow, Edinburgh and Dundee. These local consortia are made up of representatives from the DWP, Jobcentre Plus, local government, NHS, Employers Federation, Skills Development Scotland, Chambers of Commerce and other key interested parties. This local partnership model is the most efficient way to design and manage the delivery of services to move benefit recipients into work. The Council recommends that the current partnership arrangements should be strengthened through a radical change in the use of funding to drive better outcomes. The civic consortium model already operating in Glasgow, Edinburgh and Dundee should be broadened out to cover other areas of Scotland where economic inactivity is a problem. It also needs to be reinforced to ensure that the various partners work together and analyse, at the local level, what needs to be done; and

**Recommendation 11:** public bodies tasked with delivering on employability issues must improve their data-sharing practices. Currently, DWP pay service providers to identify those individuals who are economically inactive and in need of support to help them into work. These organisations come up with innovative ways to identify and engage with potential clients. This whole process is a complete waste of money. The local Jobcentre knows who these individuals are and where they stay but are not allowed to share this information with the organisations that are charged with identifying them and helping them into work. The Council recommends that, with the Scottish Government, public bodies tasked with delivering on employability issues agree a way to significantly improve their data sharing practices.

## The Council's Considerations for the Scottish Government

5.13 The Council asks the Scottish Government to consider the following:

**Consideration:** the Council believes that older workers can make a major contribution to the Scottish economy. While recognising participation in this group is bound to increase – not least with the coming changes in the pension age – more could be done to support extended or renewed employment for older individuals. The Council asks the Scottish Government to consider the promotion of job flexibility by employers, refocusing benefits towards what older individuals can, rather than cannot, do in jobs and better support to older workers changing jobs;

**Consideration:** individual attitudes to employment are seen by the Council as key to increasing participation, so it is important that young people form positive views of working. Training and educational institutions must design programmes that explicitly lead to employment outcomes. To give these bodies the right incentives to do this, the Council suggests an outcome-based approach to part of their funding, potentially by linking funding to the number of participants who move on to sustainable employment or higher qualifications. The Council's recommendations relating to higher and further education in Chapter 7 are relevant here as well;

**Consideration:** a better understanding of the costs to individuals of moving from benefits to employment must be reflected in policy design. Recently, the DWP published its Green Paper on reforming welfare across the UK. While it is difficult to assess these reforms in the absence of more detail on how they will work, the Council believes that they represent a useful step forward. However, these reforms should be developed through greater attention to the transition to work, for example, by continuing payment of benefits for a short period to ensure individuals entering employment do not suffer cash-flow difficulties;

**Consideration:** the Council believes more can be done to ensure that the demand side of the labour market can absorb any increases in the number of individuals coming off benefits or remaining in work to an older age. The Council recommends that the public sector engages more systematically with major employers and key sectors such as retail, hotels, tourism and food and drink to improve routes to sustainable employment for those harder-to-reach groups. It will also follow with interest current Scottish Government plans to pilot better skills utilisation among employers;

**Consideration:** the ability to address the skills needs of many groups currently outside of the labour market often depends on the third sector. Its capacity to carry out these services should be supported, though only to the extent of making them more competitive. The Council feels that funding arrangements with the third sector should be increasingly based on contracts for service provision rather than grants. The Scottish Government should also continue to support improvements in the business infrastructure and skills of social enterprises, encourage greater contact between the third and private sectors and provide incentives for partnership-based approaches to service delivery; and

**Consideration:** the link between cohesion and participation is close, particularly in the case of Glasgow, where a major increase in employment would support both sets of targets. The Council believes that further consideration is needed of whether there is an appropriate weighting of resources to, and within, Glasgow allocated to employment issues.

# **C ADDRESSING DRIVERS**

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# Chapter 6

## Planning

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### Background

6.1 The business community regards the inefficiency of the planning system as an obstacle to economic growth. The Council shares these concerns but believes the issues around planning go beyond efficiency. They also extend to the quality of outcomes – there are too many new developments of mediocre quality.

### Evidence Base

6.2 There is considerable evidence that the planning system is inefficient:

6.2.1 60% of planning applications are decided in two months against the target of 80%;

6.2.2 fewer than 50% of major applications are decided in less than four months against the target of 80%;

6.2.3 60% of local plans were adopted more than five years ago with about 20% adopted over 15 years ago; and

6.2.4 on average Scottish Ministers take 49 weeks to take decisions on structure plans against a target of 40 weeks.

6.3 The positive features are that the percentage of planning applications granted has consistently been above 90%, suggesting that planning authorities seek to negotiate improvements to developments rather than refuse planning permission, leading to potentially time consuming and costly appeals. In addition, Scottish Ministers have consistently met their targets on notified and called-in cases. The same is also true of appeals and a project is underway to further reduce processing times in Edinburgh, Glasgow and other authorities in the Central Belt to demonstrate the capacity for improvement through administrative measures.

6.4 The endemic delays in planning have not, however, generally resulted in value added in terms of consistently high quality development.

### Policy Considerations

6.5 The previous administration sought to reform the planning system to make it more efficient and inclusive. Despite the significant opportunities for individual and community engagement, much of the debate during the passage of the 2006 Planning Act focused on the need to address the lack of public trust and confidence in planning policies and decisions. As a result, there are now significant additional legislative measures in place, or about to be introduced, supported by guidance and advice, which will provide further opportunities to involve communities more broadly and earlier in the planning process.

6.6 The foundations of the new system, as set out in the 2006 Act, also provide for improvements in the efficiency of the planning system. These include:

6.6.1 **A statutory National Planning Framework (NPF)** – to allow the Scottish Government to set out its priorities for Scotland’s spatial development, and to ensure a more effective approach to the planning of infrastructure to support that development, including the designation of projects of national significance;

6.6.2 **A revitalised Development Planning System** – with fewer development plans, required to be updated every five years, and prepared in a way that maximises participation and deals with potential controversies ‘up-front’, allowing for clearer and quicker decisions; and

6.6.3 **A fit-for-purpose Development Management System** – with a hierarchy of applications to ensure a proportionate approach. Major projects will be dealt with through “processing agreements” to increase efficiency and certainty. The hierarchy includes stripping out small-scale applications from planning altogether, to release resources to deal with more complex applications. This also includes a radical overhaul of appeals, to make the process proportionate to the examination of the issues involved and thus more efficient.

### The Council’s Recommendations for the Scottish Government

6.7 The Council recommends that the Scottish Government:

**Recommendation 12:** demonstrates its commitment to reforming the planning system through political leadership, policy direction and its own actions and decisions. This should involve financially incentivising local authorities to promote and facilitate sustainable development projects. Reducing barriers and creating incentives for business will give Scotland the competitive advantage to attract local, national and international investment;

**Recommendation 13:** changes the culture of planning and reforms the planning system so that it makes a positive contribution to the Scottish Government’s Purpose – increasing the rate of sustainable economic growth. This must start with planners seeing themselves as facilitators rather than regulators. Planning is currently seen as an inhibitor of growth, a barrier to be overcome rather than a service that promotes and enables high quality development in the right places and which contributes to Scotland’s competitive advantage; and

**Recommendation 14:** develops a clear understanding that a central purpose of the planning system is to facilitate good quality outcomes – well designed places and buildings that enhance their setting. Too much development in Scotland is a missed opportunity and of mediocre or indifferent quality. There are a few examples of new or regenerated places which are well thought out, some fine new buildings and smaller projects that are to be welcomed but they are the exception rather than the rule. The ultimate test of an effective planning system is the maintenance and creation of places where people want to be. We need to rise to that challenge.

# Chapter 7

## Education and Skills in Scotland

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### Background

7.1 The Government Economic Strategy identifies Learning and Skills (along with Well-being) as one of five Strategic Priorities<sup>28</sup> that are internationally recognised as being critical to economic growth. The Strategy also notes that Scotland's education and skills are not translating into higher productivity or enhanced economic performance. The Council has been interested in understanding why this is the case and in considering actions that will enhance the contribution of education to the Scottish economy.

7.2 Until recently, education policy in Scotland, as elsewhere in Europe, has focused on extending participation in secondary, further and higher education. In essence, the driver of policy was social – to enhance equality of opportunity by giving access to the widest numbers in society. In this context, life-long learning was perceived as giving a second chance to those who had missed out, in effect allowing them to catch up with the rest.

7.3 In the past decade, education and skills have been increasingly recognised as crucial to Scotland's economic prosperity, based on a perceived link between education, skills, productivity, innovation, competitiveness and growth. In this context, it is logical that education and skills policies should be adequately resourced and Scotland's education system and training policies aligned to Scotland's needs. Such alignment does *not* mean the heavy targeting of education and training to current market needs/vacancies – rather, it means having high quality education and training systems. It also means having life-long learning policies that cover continuous education and training throughout life – beyond secondary school and higher education. For all this to work, a public discourse is needed about the value of all aspects of education and training, especially those outside the traditional academic areas.

7.4 The Council is of the view that Scotland's education policy is central to the Government Economic Strategy. It recognises that Scotland has a long-established system that has developed over hundreds of years and reflects many important and powerful influences. It does not attempt a critique of the system – this would be inappropriate given the Council's wide mandate and its short life so far – but rather it wishes to set out some of the challenges which the Government of Scotland faces in attempting to develop an education system that is genuinely fit for purpose in line with what all governments and economies across the world are trying to achieve.

7.5 Notwithstanding the view of the Council that the education and training system is best viewed in its entirety, it has focused initially on higher education and its potential contribution to increasing sustainable economic growth. In addressing higher education in this Report, the Council is aware that virtually every country in Europe is currently addressing this issue and is of the view that Scotland cannot ignore it.

7.6 The Council intends at future meetings to consider training systems outside higher education and also the primary and secondary levels of education.

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<sup>28</sup> The five Strategic Priorities are: Learning, Skills and Well-being; Supportive Business Environment; Infrastructure Development and Place; Effective Government; and Equity.

## Evidence Base

Table 7.1 Comparative Education and Skill Profile for Scotland, 2006/7

Indicator	Scotland	Average of the OECD Upper Quartile Average	Scotland Rank/ Number of OECD Countries	Reference Country Average <sup>1</sup>	Scotland Rank <sup>2</sup>
% of Population Aged 25-64 whose Highest Qualification is Degree or Equivalent	20.7%	23.3%	13/31	24.4%	4
% of Working-Age Population with Intermediate Qualifications	50.4%	53.3%	10/31	38.4%	1
% of Working-Age Population with Low/ No Qualifications	15.3%	23.3%	8/30	24.4%	1
Graduation Rates, 2005	46.1%	51.0%	5/25	45.7%	3
PISA <sup>3</sup> 2006 Score in Science	515	531	9/30	509	2
PISA 2006 Score in Maths	506	531	12/30	512	3
PISA 2006 Score in Reading	499	525	12/29	505	3

<sup>1</sup> Iceland, Ireland, Norway, Denmark and Finland.

<sup>2</sup> Out of the five countries in the Reference Group of Countries and Scotland.

<sup>3</sup> Programme for International Student Assessment, a cross country measure of secondary level educational quality.

Source: OECD (2007) *Education at a Glance*, OECD (2006/07) PISA, UK Labour Force Survey.

7.7 Table 7.1 presents some performance measures to illustrate where Scotland stands internationally in terms of its education and skill levels, using the best available metrics. The first three rows taken together provide some indicators for the relative levels of education in the population.<sup>29</sup> In terms of the share of the population that has higher education, Scotland comes thirteenth out of the 31 countries covered by the OECD<sup>30</sup> and fourth in terms of selected reference countries (Iceland, Ireland, Norway, Denmark, Finland). For the working-age population with intermediate education levels (final school level qualifications), Scotland does somewhat better – coming tenth out of the 31 in the OECD. While the figures are not directly comparable, the fact that Scotland comes first in this category in the reference country group reflects both the much larger share of the population with higher education in three of those five other countries, and the much lower share of the working age population with low-level qualifications in Scotland. The target for any OECD country in a global environment is to reduce the share of its population with just primary-level education. To the

<sup>29</sup> Please note that the top three rows for Scotland do not add up to 100% as one indicator is for the total population and the other two indicators are for the working-age population.

<sup>30</sup> The figures for Scotland are not published by the OECD, which just publishes data at the UK level.

extent that over 15% of the working-age population in Scotland has not currently completed second level education, there is a real challenge for the Scottish Government.

7.8 In terms of higher education, there is somewhat better news when one looks at the percentage of the cohort obtaining higher degrees in 2005 – here Scotland ranks fifth out of the 25 OECD countries and is third in terms of the reference countries. Whether, and how quickly, this will translate into higher skill levels in the Scottish population depends crucially on whether these graduates stay in Scotland. Furthermore, since all OECD countries are now trying to improve their participation rates in higher education, Scotland will have to be proactive if it wishes to improve its relative position, and to have a strategy to fund the additional cost.

7.9 These four metrics measure access/participation and not quality. The Programme for International Student Assessment (PISA) metric, which is the key cross-country measure of secondary-level educational quality, shows Scotland in the second quartile of 30 OECD countries, and second or third place in the reference countries. This suggests that the quality of education at the secondary level needs attention also, if Scotland wishes to make it into the top quartile of the OECD countries in terms of participation, let alone meet its aspiration to be known for its high quality educational system.

## Policy Considerations

7.10 In terms of government policy, higher education is a high-cost area and requires a long-term perspective. Undoubtedly, there are large benefits to Scotland from having a more educated population and there are particular benefits to those who receive that education. However, given the scale of the cost and the other demands on limited budgetary resources, the Council would wish to ask the Scottish Government how it plans to address the challenge of funding a higher education policy that is ‘fit for purpose’ in the 21<sup>st</sup> century. This is not just a Scottish challenge – the scale of funding is so large across the OECD that virtually every government is grappling with it, especially in Europe as countries seek to meet the Lisbon targets. Ultimately, the Scottish Government needs to decide whether it plans to focus on developing world class universities or world class university departments, and if it can afford to follow either of these options. The Council, at its future meetings, is willing to explore further the associated financial and system implications of these options, should the Scottish Government find this helpful.

7.11 Apart from funding, the Council would also wish to ask the Scottish Government how it plans to deal strategically with challenges in relation to participation, level (graduate or postgraduate) and quality. ‘Participation’ approximates to the share of school leavers and others that are to be offered places in higher education. ‘Level’ is the ratio of those taking higher degrees relative to those taking basic degrees/diplomas. ‘Quality’ is just that – how good does the Scottish Government want Scotland’s graduates to be, relative to those in other relevant countries? Improvements in all three are essential if Scotland is to prosper economically in an increasingly globalised world, but with a fixed education budget, more of one means less of another. All institutions can contribute to increased participation and increased levels of attainment, but only some departments in some universities can succeed in being world class. As countries elsewhere are finding, squaring the budgetary circle of higher participation, higher levels and higher quality is very challenging. It calls for a greater diversity of institutions, and managing this process is also extremely difficult.

7.12 There is already a big difference in provision between the older universities and the newer ones, with vocational courses being very dominant among the latter. They are employability-orientated with much less emphasis on academic research compared to the older universities.

7.13 The Council has identified three quite radical actions that the Scottish Government might wish to consider in order to develop the higher education system as a real competitive strength for Scotland. These are centred on creating a system that would continue providing a greater breadth of education, provide better pathways through education and continue creating a direct source of economic growth for Scotland:

7.13.1 build on the strengths of the standard four-year honours courses offered in Scotland by considering a two-tier approach, similar to that in the US, with the first two years resulting in a broad, stand-alone qualification and the second two years providing an additional, specialised qualification;

7.13.2 develop local institutions so that they can build on existing diversity to promote locally-available courses and provide an entry route into higher education to students who require more teaching support than is found in the traditional university environment. Examples might be the successful multi-institution college and university campus at Crichton in Dumfries and the partnership of colleges, learning and research centres which comprise the UHI Millennium Institute in the Highlands and Islands; and

7.13.3 develop Scotland's secondary and tertiary education as part of the high-skilled services that Scotland already provides to the global economy. The Council approves of the policies of Scottish universities in recruiting large numbers of overseas students and earnings.

7.14 The Council takes the view that it is important to have strong objective measures in place to analyse the impact of further investments in higher education and especially the quality of the outcomes. This would involve establishing meaningful targets for institutions in terms of completed education (undergraduate and postgraduate) as well as methods for guaranteeing quality. Furthermore, it is of the opinion that higher education in Scotland would benefit from an open discussion on how to improve future performance and further enhance the contribution of education to our comparative advantage. The Council favours the development of a national vision for the higher education system (as set out in *New Horizons 2008*, the final report of the Joint Future Thinking Taskforce on Universities<sup>31</sup>), taking account of developments internationally and elsewhere in the UK, such as the scale and heterogeneity of Scottish institutions and the need for education pathways.

7.15 The Council feels that the potential benefits to the Scottish economy from the commercialisation of university research are very substantial. Currently this does take place, but the Council feels that the potential benefits are not being fully realised. The commercialisation of basic research may not be a priority for academics, and they may not be rewarded in their academic careers by attempting to do so. Further, the skills required for successful commercialisation may not reside in a university environment. More needs to be done to encourage commercialisation of research not only by the universities themselves but by other stakeholders such as potential customers.

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<sup>31</sup> *New Horizons: responding to the challenges of the 21<sup>st</sup> century*. The report of the Joint Future Thinking Taskforce on Universities.

## The Council's Recommendations for the Scottish Government

7.16 The Council recommends that the Scottish Government:

**Recommendation 15:** reaches agreement with Universities Scotland on the future scale of the Scottish university system and the balance between various activities, e.g. undergraduate teaching, postgraduate teaching, postgraduate research students, research, share of foreign (EU and non-EU) students, balance of disciplines etc. to ensure clarity in the strategic direction of the universities as a system and the role of inter-institutional collaboration in that process<sup>32</sup>;

**Recommendation 16:** considers the three actions identified at paragraph 7.13 to develop the higher education system as a real competitive strength for Scotland; and

**Recommendation 17:** examines how the significant additional costs of higher education in Scotland might be funded through increased contributions from all stakeholders including government, business, students (foreign and local), industry, broad-based philanthropy (including alumni), patents and competitive research contracts.

## The Council's Considerations for the Scottish Government

7.17 The Council asks the Scottish Government to consider the following:

**Consideration:** ensure that the proposed government funding mechanisms for higher education generate appropriate incentives for all stakeholders and minimise risks of perverse incentives, especially those that undermine quality;

**Consideration:** ensure the presence of appropriately-chosen business representatives in the oversight of expenditure and policy on higher education, given its new role in the future development of Scotland and the scale of government commitment involved;

**Consideration:** explore how to encourage higher education students to develop positive attitudes towards investing in their own education, building on the principle that the greater the level of personal investment they make, the more focused and effective the educational outcomes will be; and

**Consideration:** examine mechanisms which would further promote the successful commercialisation of university research.

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<sup>32</sup> Review of the disciplinary balance should take on board the implications in skill demands of changes in Scotland's demographics over the next thirty years.

# Chapter 8

## Infrastructure

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### Background

8.1 The Council has begun a review of the economic role, current condition and means of provision of infrastructure in Scotland. This is particularly relevant in the current economic climate as there is a need to accelerate investment to stimulate demand in the economy. Public infrastructure falls into two broad categories. Firstly, the buildings – schools, hospitals, universities, prisons, government offices – in which public services are delivered. Secondly, the network assets through which services required by most households and businesses, such as utilities and transport, are provided.

8.2 Our review of infrastructure will consider not just the assets owned and operated by the Scottish Government and other public bodies within Scotland but also those infrastructure assets owned and operated within Scotland by private or ostensibly private companies. These include the gas, electricity and rail networks and other areas of service provision where revenues are derived from regulated access charges rather than competitive market prices.

8.3 Our review is also concerned with assets maintained for public purposes under the Private Finance Initiative (PFI) and similar contracts. PFI has been particularly controversial in both Scotland and England, partly as a result of some markedly unsuccessful PFI contracts. As a result, there is particular interest in alternative methods of financing.

### Evidence base

8.4 We have noted that spending on infrastructure in the UK, as a share of national income, declined steadily and substantially from 1970 to 2000, with a modest increase thereafter. Because of privatisation and other changes in classification no directly comparable data for Scotland are available, and the Scottish position is more uncertain still, but we believe that in most areas Scottish experience broadly parallels that of the UK. Pressures on public expenditure have been unduly focused on capital rather than current expenditure and many areas of infrastructure show evident signs of long term neglect.

8.5 The fall in expenditure has affected most areas of Scotland's infrastructure. There are, however, some areas where expenditure as a share of national income has not fallen or has increased. These include airports and telecommunications, where private financing has taken spending to higher levels which are outside direct UK Government control. Although water remains in public ownership in Scotland, Scottish Water is subject to a regulator and its activities are in turn governed by EU mandated requirements for quality standards. Expenditure on railways has also increased.

8.6 The most marked fall in spending has been on social housing, where local authority construction has fallen to negligible levels. In Scotland, private house building was exceptionally low in the 1950s and 1960s, and some of the gap created by the decline in public housing expenditure has been filled by the private sector – in contrast to the UK position where the numbers of private houses built has changed little. There has been a modest increase in new building by registered social landlords. Private house building in Scotland now accounts for broadly Scotland's population share of UK house building. However in Scotland as in the UK, new house completions were, even in the boom of 2006-7, barely half the levels achieved in the 1960s.

8.7 We will return in our deliberations to the following questions: whether overall house building is adequate for Scotland's needs; whether house building is in the appropriate price bracket to meet the variety of needs of a growing population; and what measures can be taken to address these issues within the context of a tighter framework for both public and private expenditure.

### Policy considerations

8.8 We believe that the differences in experience among different categories of infrastructure reflect accidents of politics and organisation rather than a considered view of national priorities. The fragmented nature of regulatory and political oversight of infrastructure spending makes this almost inevitable. We welcome the initial steps the Scottish Government has taken to review some elements of infrastructure spending under its direct control within a more comprehensive framework. The Council hopes to see this approach extended.

8.9 We recognise that public management of major infrastructure projects has often fallen short of acceptable standards. It is a major embarrassment to Scotland that the outturn cost for the Parliament building exceeded estimates by so much.

8.10 Lord Fraser's report<sup>33</sup> on the Parliament building project draws attention to a number of factors which are commonly encountered, not just in this project, but in major projects more generally, in Scotland and in other countries, in private sector projects as well as public. In particular, cost escalation is commonly the result of:

8.10.1 strategic misrepresentation of project costs and benefits by project sponsors;

8.10.2 disagreements between project contractors;

8.10.3 attempts to reconcile too many conflicting interests;

8.10.4 lack of transparency and accountability in project progress; and

8.10.5 unrealistic ambitions in project specification.

8.11 In the Council's view, the development of project management skills within the public sector is critical to the effective provision and operation of Scotland's infrastructure.

8.12 Successful project management, in contrast, is often characterised by:

8.12.1 engineering based project management at arm's length from both political control and the interests of contractors; and

8.12.2 repeated experience of similar projects.

8.13 The provision of infrastructure takes place within an overall framework for the control of capital and current expenditure. The decisions of the Scottish Government need to be made within the constraints applicable to the UK as a whole and under specific provisions applicable to Scotland under the existing constitutional settlement.

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<sup>33</sup> A report by the Rt Hon Lord Fraser of Carmyllie QC on his inquiry into the About Holyrood Project: <http://www.scottish.parliament.uk/vii/holyrood/inquiry/sp205-00.htm>

8.14 The Council approves the attempt by the UK Government to develop measures which encourage the public sector to find a more appropriate balance between current and capital expenditure. It also believes that the main elements of the UK Government's overall fiscal framework – generally described as 'the golden rule' and 'the sustainable investment rule' represent a useful basis for the control of overall fiscal policy.

8.15 However, from the perspective of the efficient management of UK public spending the results have been disappointing in practice. The rules for capital and current spending have demanded complex calculations by spending departments but have had little effect on behaviour. The erratic management of the overall fiscal position has led to both feasts and famines in the availability of funds to the Scottish Government. At the beginning of the current fiscal year, the UK public finances were in a weak position to absorb the effects of the current slowdown in economic growth and the need for recapitalisation of the UK – including the Scottish – banking system. There has been too much emphasis on mechanical adherence to the rules and too little on achievement of the objectives which are the rationale of the rules. In any event, the consequence for public finances of the recent financial crisis have rendered the existing rules unsustainable. Major revision by the UK Government has been required.

8.16 The Council believes that the critical question for the Scottish Government is the degree to which current commitments imply future increases in expenditure above the levels implied by current funding. It takes the view that independent monitoring of a revised fiscal framework is essential. The Scottish Government should pursue such an arrangement in respect of its own fiscal policies whatever new plans are adopted for the UK as a whole.

8.17 More generally, the Council has observed that the current fiscal framework within which the Scottish Government operates is modelled on the framework for English Government departments. In essence, the broad elements of that framework were not changed by devolution. In matters such as provision for capital spending and the impact of VAT, the defining principles are similar to those that apply to departments of government, and are materially different from those applied to – for example – local authorities, or other devolved governments. While accounting principles in Scottish public finances are – as they must be – matters for Scottish Ministers, Scotland has so far closely followed Treasury guidance. The Council considers that, whatever view is taken of the overall constitutional settlement, the efficient and effective management of finances within Scotland requires that these matters should be reviewed in the light of experience since devolution.

8.18 The Scottish Government has made considerable use of PFI to fund infrastructure and the overall scale of these commitments will significantly constrain its future spending. While the Council supports the attempt to find better mechanisms for the management of public sector projects, it is concerned by both the individual and aggregate cost of these schemes and by the extent to which the costs constrain future expenditure and the loss of control of public assets constrains policy decisions by the Scottish Government and other public bodies within Scotland.

8.19 The Council recognises that, as a matter of fact, PFI has made funds for projects available to the Scottish Government which would not otherwise have been available. However, this availability is a product of the anomalous situation by which Scottish Ministers may not engage in on-balance sheet borrowing but have been permitted, even encouraged, to engage in off-balance sheet borrowing. This process represents a cost, not a benefit, to the Scottish and UK taxpayer. The Council welcomes the proposal, through the Scottish Futures Trust, to explore a wider range of funding options. The Council believes that any revisions to the financial arrangements between the UK and Scottish Governments should give Scottish Ministers more flexibility.

8.20 The level of real and nominal interest rates for long term borrowing has, in recent years, fallen to levels which are, by historical standards, exceptionally low. The recent financial crisis has widened substantially the spread between the costs of government borrowing and the costs of other borrowing – to such an extent, in fact, that any borrowing without implicit or explicit government guarantee has become difficult. Although these conditions create many problems, they also create a favourable environment for funding the renewal of Scotland’s infrastructure. The Council will return to this issue as current problems resolve themselves.

## The Council’s Recommendations for the Scottish Government

8.21 The Council recommendations for the Scottish Government are as follows:

**Recommendation 18:** the Council believes there is a need to raise the overall level of infrastructure spending within Scotland and to review the state of Scotland’s infrastructure (including those elements of it which are owned or operated by private companies) within a single comprehensive framework;

**Recommendation 19:** the Scottish Government should pursue, with the UK Government, revisions to the current fiscal arrangements which would enable it to plan efficiently the appropriate balance between current and capital expenditure, and to meet Scotland’s overall infrastructure needs; and

**Recommendation 20:** the Council would like the Scottish Government to explore the possibility of new means of borrowing, outside PFI, to help finance public sector infrastructure.

## The Council’s Considerations for the Scottish Government

8.22 The Council asks the Scottish Government to consider the following:

**Consideration:** the Council believes that government borrowing of a conventional kind is cheaper and more transparent than other methods of financing. The Scottish Government should, wherever possible, avoid off-balance sheet transactions and should make clear the implications of current decisions for future spending;

**Consideration:** the Scottish Government should secure independent monitoring of this reporting and of its overall fiscal stance; and

**Consideration:** the Scottish Government should seek to develop its expertise in the management of infrastructure projects. The development of such expertise should be accompanied by better project assessment and value for money auditing.

# **D** SCOTTISH ECONOMIC STATISTICS

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# Chapter 9

## Scottish Economic Statistics

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### Background

9.1 Most economic statistics for Scotland are collected as a by-product of the collection of economic statistics for the UK. Many of the figures which are used are obtained as a result of a regional breakdown of aggregate UK numbers. In consequence, and despite considerable efforts by statisticians in both UK and Scottish Governments, the quality of data falls short, and in some cases substantially short, of the level that would be expected if national accounts and other economic information were collected for Scotland on a stand alone basis. The Council has already devoted considerable time to discussion of the issues this raises and the most appropriate indicators available to the Council and the Scottish Government.

9.2 In the course of these discussions, issues have arisen about whether, even if a full set of national accounts information were available for Scotland, the existing United Nations conventions for the system of national accounts are appropriate for the purposes of interpreting some key facts about the Scottish economy. In particular, the treatment of the financial services sector and the oil and gas sector, both of which are vital elements of the Scottish economy, give cause for concern.

### Evidence Base and Policy Considerations

#### *The Role and Measures of Gross Domestic Product*

9.3 The Scottish Government's growth targets are expressed in terms of the relationship of Scottish Gross Domestic Product (GDP) and GDP growth to the GDP levels and growth of the UK and of small independent European states. GDP is used internationally as a measure of economic performance and the Council takes the view that this emphasis on GDP is inevitable.

9.4 Nevertheless, it should be clearly understood that GDP is not a fact in the way in which physical measures such as temperature or weight, or some economic measures such as tax receipts, are a fact. The problems fall into two broad categories:

9.4.1 the difficulties of devising operational measures which correspond to underlying economic concepts; and

9.4.2 the practical problems which arise in the implementation of these measures.

9.5 In its discussions, the Council has found it useful to talk of 'hard data', which is relatively objective, and 'soft data', which demands subjective judgement and is prone to measurement errors. Scotland's GDP statistics are, in this sense, 'soft' statistics.

9.6 We are not drawing attention here to the point which is often, and justifiably, made that there are many important aspects of human welfare that GDP measurement leaves out. GDP does not take account of unpaid work, and does not calculate environmental degradation. GDP does include expenditure on locksmiths, on policing and prisons. We do not believe it would help our deliberations, or the formulation of government policy, to replace well established, intentionally comparable, indicators by a measure of welfare which could only reflect the opinions of some individuals or committees about what constitutes happiness. GDP is a measure of material output, and to observe that this material output is

not the only, or necessarily the most important, element in human welfare is not to say that it is not important at all or that it is inappropriate to measure it. We further observe that material output is a means of pursuing many non-material goals. There is more to life than economics, but our brief is to deal with those aspects of Scottish life that are to do with economics. Our concerns are, therefore, narrower: with the extent to which GDP does correctly reflect Scottish economic performance in terms of the evolution of the material output of Scotland and the material standard of living of people in Scotland.

9.7 GDP is measured gross. No account is taken of depreciation of assets, whether these are the capital equipment and buildings of private businesses or the public infrastructure. No allowance is made for oil and gas depletion or for environmental effects, positive or negative, on stocks of natural resources.

### *Treatment of the Financial Services Sector*

9.8 The measurement of financial services output poses more extensive problems than the measurement of output in any other sector. Normal practice in national income accounting is to look at operating profits and to disregard interest received and paid by corporations in the calculation of value added; but investment income in large part pays for the wages and salaries of employees and provides the profits of the financial services sector. This means that major adjustments are needed to secure consistency between the figures found in corporate accounts and those identified in national accounts.

9.9 This problem is compounded by the general difficulty of correctly attributing activity to Scotland. The scale of the problem can be seen by noting that the reported profits of Scotland's two largest financial institutions in 2007 were equivalent to almost 15% of estimated Scottish GDP. Most of the activities of both these businesses take place outside Scotland. Even as a matter of principle, the question of what part of that profit should be attributed to Scotland has no easy answer.

9.10 National accounts conventions emphasise GDP – a measure of national output. But gross national income (GNI) – a measure of national income – may be more important as an indicator of living standards. GDP is the aggregate of the value of all economic activity within Scotland. GNI is the aggregate of the incomes received by residents of Scotland. The difference between the two is illustrated by the treatment of financial services business profits. For GDP, the relevant question is “what share of these profits accrued in Scotland?”. For GNI, the relevant question is “what share of these profits can be attributed to residents of Scotland?”. The remarkable growth of the Irish economy over the last decade has been less remarkable if the measure used is GNI rather than GDP, because of the scale of profits earned in Ireland by non-Irish companies. At present we do not even have estimates of Scottish GNI and very considerable efforts would be required to prepare them. For most countries, however, the overall difference between GDP and GNI is not large and we believe the same would be true for Scotland.

9.11 While the contribution of the profits of Scottish financial services businesses to GDP in 2007 was potentially very substantial, the 2008 position is likely to be very different. This change in the fortunes of the financial services sector has direct consequences for the proper measurement of GDP, and may have substantial direct and indirect effects on employment and the incomes of other related businesses. The Council has noted that the long-term success and current troubles of the financial services sector have a major impact on the Scottish economy. It has sought further work, both in improving our understanding of the sector and its competitive position, and in assessing the impact which these developments have and should have in economic statistics.

### *Oil and Gas*

9.12 Under current practice, the output of the oil and gas sectors is treated as 'extra-regional' and not allocated to any of the four nations within the UK (although it is included in the GDP of the UK as a whole). Therefore, no element of North Sea oil and gas activity is included in current official estimates of GDP. Scottish economic statistics (including GDP statistics) do capture the value added in the supply chain, such as support services for offshore activity.

9.13 We accept that under independence, oil and gas reserves would be allocated, as with all other countries around the world, according to international law governing territorial waters. Professor Alex Kemp's recent analysis showed that Scotland would have approximately 81% of current production. The inclusion of such a figure would increase reported Scottish GDP and change its reported growth rate. Since 1999 North Sea output and the effect on growth will generally have been negative although absolute GDP would have been much higher. For the current challenge of raising Scotland's growth rate however, we believe it is appropriate to consider non-oil GDP growth just as Norway, in common with many other oil producing countries, presents separate calculations for non-oil GDP growth.

9.14 The Council's view is that, in some cases it is appropriate to show oil and gas output (and oil and gas revenues) to the Scottish economy separately and at other times it makes sense to take the whole economy perspective.

### *Terms of Trade Effects*

9.15 The discussion above highlights the surprising fact that, although GDP statistics which included oil and gas would be affected by declining oil volume, they would not be affected by increasing oil prices. If Scotland were an independent country, receiving oil and gas revenues from a Scottish element of the North Sea, it would have received considerable benefits, which would vary according to changes in the international oil price and exchange rates. However, these changes would have little impact on reported growth because of the practice of measuring growth in volume, rather than value, terms.

9.16 These issues reinforce the case for treating oil and non-oil activities separately. They do, however, raise a broader question. Reported GDP growth figures do not recognise higher export prices (of oil, services or manufactured goods) as a contributor of growth. We believe the economic performance of small countries rests in large part on the development and enhancement of competitive advantages in specialist industries which can be exploited globally. Success in such a strategy will be measured, in large part, by the ability to achieve higher prices in world markets, and such success would enhance the profits of Scottish companies and the living standards of the Scottish population. But it would not be recorded as economic growth. In consequence, the growth rate of the small independent European states we use as a benchmark may be understated and so the effect of measures to enhance output and living standards would not be registered.

### *Public Sector Output*

9.17 The public sector contributes an estimated 23% of Scotland's GDP and the same percentage of Scottish employment. Both the figures are around three percentage points higher than the equivalent for the UK.

9.18 The Council has given some preliminary discussion to the measurement of the output of this sector and the efficiency with which public services can be delivered. There are major methodological changes in prospect for the methods used to measure value-added in the public sector. The historical practice has been to value public sector output at what it costs. Following the recommendations of the Atkinson Review for the UK, the objective is to replace input measures by output measures, and to begin to assess the quality of output and trends in efficiency<sup>34</sup>. The Council welcomes these changes and will consider them and the substantive issues they raise at future meetings.

### The Council's Recommendations for the Scottish Government

9.19 The Council recommendations for the Scottish Government are as follows:

**Recommendation 21:** the quality of economic statistics in Scotland does not yet meet the needs of a government. We welcome the many steps which are being taken to improve the situation and have drawn special attention in this chapter to some of the areas which we believe should receive priority in these developments:

- the financial services sector;
- the oil and gas sector;
- depreciation and environmental statistics;
- output prices, particularly in the export sector;
- the public sector; and

**Recommendation 22:** we have listed many reasons why it would be inappropriate to focus solely on reported Scottish GDP data – or any other single indicator – in evaluating Scottish economic performance. GDP is so widely accepted internationally as a measure that it would be wrong not to use it, or to seek to alter the estimates of it that are available using the conventions which have been defined by the United Nations and which have achieved international recognition. But we will wish to use many other measures of performance in the course of our work and urge Ministers to do the same.

### The Council's Considerations for the Scottish Government

9.20 The Council asks the Scottish Government to consider the following:

**Consideration:** we believe that equal attention should be given to earnings and that an analysis of the differentials in earnings, both the overall distribution and regional and sectoral breakdowns, may provide 'hard' statistics which will be relevant to our analysis and evaluation of policy; and

**Consideration:** a focus on measuring GDP fails to recognise depreciation of all kinds. We consider that a framework for Scottish economic statistics should give greater emphasis to the measurement of capital assets, both material and environmental.

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<sup>34</sup> The Atkinson review was a year long review of the measurement of UK government output and productivity:  
[http://www.statistics.gov.uk/about/data/methodology/specific/PublicSector/atkinson/final\\_report.asp](http://www.statistics.gov.uk/about/data/methodology/specific/PublicSector/atkinson/final_report.asp)

# Annex A

## Future Work Programme

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### Introduction

1. This Annex sets out the Council's future work programme. As with the work programme for 2007/08, the future work programme is structured around the four key work-streams which the Council identified for itself at its first meeting:

- promoting Sustainable Economic Growth;
- developing Scotland's Comparative Advantage;
- addressing the Inhibitors of Scotland's Economic Growth; and
- enhancing Scotland's Economic Statistics.

### Summary of Topics Discussed in 2007/08 and Future Work Programme

#### *Promoting Sustainable Economic Growth*

2. The Council has already advised the Scottish Government on how best to achieve Scotland's 2011 growth and emissions targets (Chapters 3 and 4), and Scotland's participation and cohesion targets (Chapter 5). In future meetings, the Council will turn its attention to the achievement of Scotland's targets for longer term growth and emissions and its targets for productivity, population and solidarity (see Box 2.1).

3. One of the key recommendations which the Council made following its discussion of the 2011 growth and emissions targets, was for the Scottish Government to commission an independent assessment of the full economic costs and abatement potential of the various energy options open to Scotland (Recommendation 6). The results of this work will be considered by the Council at a future meeting.

4. The Council has conducted some initial work on productivity (Chapter 2). Further work is planned to allow the Council to give more specific advice to the Scottish Government on how to achieve its 2017 productivity target. The Council will give particular consideration to the role of innovation in enhancing Scotland's productivity.

#### *Developing Scotland's Comparative Advantage*

5. The Council has already discussed the role of planning (Chapter 6) and higher education and skills in developing Scotland's comparative advantage (Chapter 7) and had an initial discussion on infrastructure (Chapter 8). The Council will continue to advise on specific aspects of these areas of discussion.

6. The Council will build on this work by reviewing the performance of each key sector in Scotland as set out in the Government Economic Strategy: Creative Industries; Energy; Financial and Business Services; Food and Drink; Life Sciences; Tourism; Universities and other Education and Healthcare. The Council has asked for reports on each key sector to be prepared and intends to discuss one report at each of its future meetings. The Council will highlight potential problems and identify how government policies can be more supportive.

### *Addressing the Inhibitors of Scotland's Economic Growth*

7. The Council has already conducted a significant amount of work and identified a number of key issues for the Scottish Government to consider to address the high levels of economic inactivity that exist in various areas of Scotland (Chapter 5).

8. The Council will return to this issue in due course to review the progress that has been made.

### *Enhancing Scotland's Economic Statistics*

9. The Council has reviewed the quality of Scottish Economic Statistics and identified a number of areas that require special attention (Chapter 9). This will continue to be a key area of focus for the Council as it goes forward.

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