

ADDRESSING THE PRODUCTIVITY CHALLENGE FACING SCOTLAND

by Dr Roger Cook



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About the Scotland Institute

The Scotland Institute is a progressive and independent think tank set up to deal with the changing face of Scotland. It aims to investigate the implications of devolution while finding innovative solutions to the old problems of social exclusion, and to encourage Scotland's competitiveness in the global market. Through high-quality comprehensive research and policy making it hopes to put Scotland on a path towards a more competitive, progressive, and optimistic future.

‘We look to Scotland for all
our ideas of civilisation.’

Voltaire

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Chairman's Statement



We live in a globalised and increasingly globalising world. We know this, and we have been working quite consciously and deliberately to build the world in this way. And whether it is through Scotland's banks that have for a long time been amongst the largest in the world, or Scotland's oil industry which has made Aberdeen a global hub of research and innovation in the energy field, or just Scotland's world-famous whiskey distilleries, we have gained much wealth from our openness to world commerce.

But in many ways, we are falling behind. While China and the East are rising in the new global economy, we in Europe are barely stumbling along, in what Henry Kissinger is calling the 'shifting of centre of gravity from Atlantic to Pacific'. In the EU we see severe, long-term structural problems, sclerotic financial systems, poor business investment, high unemployment especially amongst the young, and the makings of our very own, Japanese-style lost generation.

Scotland's challenges are in many ways less grave than those of other countries in the EU, but we are certainly not resting on a bed of roses. In fact, we see many of the same kinds of problems in the way we work, and the way we produce things. And in the likes of Greece, Portugal, Spain and Italy, we can see where we are heading unless we take action.

That action must be intelligent and decisive. Regardless of the outcome of the coming referendum, our nation is small and geographically remote. If we are not at the cutting-edge of economic development, we can easily become a remote backwater somewhere off Europe. And we have not been heading in the right direction for a while now. In fact, along with the rest of the UK, we have been doing terribly badly since the 2008/9 Financial Crisis in one particularly important economic indicator: productivity. Unlike any other G7 developed country, we have barely increased productivity during the period, and have seen spells when it was actually falling for a number of months at a time. If this continues, we are looking at a future of sustained economic decline.

Over the past decade, successive SNP and Labour-Liberal governments in Scotland have identified this concern, and have made a priority of it. Indeed, in the recent report *Scotland's Economy: the case for independence*, the SNP assumes a declared aim to increase productivity by 0.03% per annum up to 2029 (i.e. a total growth of 5.2%). It is a modest goal, but even so, we believe that both the current

and the past governments have failed to understand the challenge and have been using simplistic solutions to address the productivity problem. Specifically, they focused narrowly on more further education and more internships.

In this report we find that the troubling developments for productivity are not correlated to developments in the area of education. Indeed, educational standards in Scotland seem to have been improving over the period, and employers are generally happy with the education and skills of young new employees. Though there is always room to improve, education is not actually where our problem lies.

Instead, we find that the problem has complex roots, with the most obvious underlying causes being the structure of the labour market and the lack of a clear-headed industrial strategy. In terms of the labour market, we have high unemployment and we have yet to recover from the Crash, we are not employing our young people to the full extent of their abilities, and we relegate more and more of our people to insecure part time, fixed term or zero-hours jobs. In so far as we create jobs, we create low value, low security jobs, with depressed economic rewards and poor prospects for further development for our workers. That actively destroys the economic potential of our country for the future.

And in terms of Industrial Policy, the ideology which condemned any such thing as undesirable “government intervention in the market” has dominated our Westminster and Holyrood governments so that for over three decades we have been systematically dismantling our industrial base for the benefit of the Finance sector. But it is exactly a high-skilled, high-value industrial base that we need to develop actively in order to secure our future economic wellbeing, especially in those sectors in which we have international strengths.

In this report we explore at length these issues, and based on the best available economic data and expert opinion we offer analysis and policy recommendations for the future. The imperative for action is there irrespective of the outcome of the September referendum. And the outcome of that referendum will only have a small impact on our specific policy recommendations.

Dr Azeem Ibrahim

Executive Chairman

1. Summary

1.1 Context

This report follows on from two previous studies by the Scotland Institute that looked at the economic costs of social exclusion and the growth of precarious work contracts for young people entering the labour market¹. Since then, the Scottish Government has produced two substantial reports² setting out the reasons why it believes that the Scottish economy will prosper with independence, but also why the stated goal of higher public expenditure and lower taxation is feasible. Their argument rests on two main claims. First, that Scotland is, on average, a net contributor to the UK so retaining more of that surplus in Scotland will ensure an immediate improvement for public finance (allied to having a lower debt:GDP ratio than the rest of the UK). The second claim is that with independence comes the ability to address several fundamental weaknesses in the Scottish economy. Two ways in which to achieve this in particular were formulated in the recent *Scotland's Economy: the case for independence*:

1. Increasing the number of people in work by a combination of addressing the reasons for under-employment and unemployment and encouraging more immigration. This will also, it is claimed, offset the problem of how to pay for pensions as the proportion of retired people will otherwise be higher in an independent Scotland than in the rest of the UK;
2. Increasing productivity by 0.03% per annum up to 2029 (ie a total growth of 5.2%). If achieved, the additional economic activity will be worth around £2.4bn (at current prices) in terms of public revenues.

In effect, the SNP's argument is that Scotland's economy can grow by both increasing the numbers in work and increasing the productivity of that work. This paper concentrates on the second issue, not least as achieving this seemingly modest goal will require a major shift in public policy towards work and education.

1 Cook, R. 2013. The Changing Face of Youth Unemployment and Employment in Scotland 1992-2012. Glasgow: The Scotland Institute, Cook, R. 2012a. The Personal, Social and Economic costs of Social Exclusion in Scotland. Glasgow: Scotland Institute.

2 Scottish Government 2014f. Scotland's Economy: the case for independence. Edinburgh: Scottish Government, Scottish Government 2013c. Scotland's Future: Your Guide to an Independent Scotland. Edinburgh: Scottish Government.

1.2 Current Measures of Productivity

The one measure of productivity which we will be using is the Gross Value Added (GVA). This tries to measure the net contribution of activity across a nation, in a particular geographical area or in a given industrial sector³. As such it is a useful means to understand the variations in productivity in Scotland at the moment and to explore the type of changes needed to meet the 5.2% net growth target. For the UK as a whole, GVA is currently estimated to be just over £21,000 per capita, while Scotland has a GVA of just over £20,000⁴ per capita. The UK's position is heavily influenced by the impact of London, and the SNP often argues that if London was to be ignored, Scotland's GVA would be equivalent to the UK average. To meet the 5% target Scotland will need to raise its GVA to around £21,000.

GVA is useful as a basic measure, but there are problems with how it captures economic activity and the narrow definition of productivity it uses. It excludes some sectors such as agriculture and financial services, as well as work done in the public and voluntary sectors or by those who are not paid (such as carers). Thus it ignores crucial economic activity that underpins the entire economy and social system. However, accepting these limitations, it still offers useful insights into the productivity challenge facing Scotland:

1. Scotland's GVA is heavily influenced by the Oil and Gas sector⁵. The GVA per head in this sector is almost £2.5m, some 36 times the average for Scotland. If the oil and gas sector was removed, Scotland's average GVA would drop to £18,600;
2. The only other sector with a GVA significantly above the Scottish average is Food and Drink (excluding agriculture) which employs just over 46,000 people.

In effect, the two areas, where the current GVA is significantly above the average value of £20,000, employ around 54,000 people between them. Scotland's working age population is just over 3 million. Neither, realistically, offers the possibility for large scale expansion of employment.

3 Bretton, M. 2006. Methodology Notes: Links between Gross Domestic Product (GDP) and Gross Value Added (GVA). *Economic Trends*. London: ONS.

4 ONS 2013a. Regional Gross Value Added (Income Approach), December 2013. London: ONS, ONS 2014d. International Comparisons of Productivity - Final Estimates, 2012. *Statistical Bulletin*. London: ONS.

5 Scottish Government. 2014a. *Annual Population Survey, results for year to 31 March 2014* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/Resource/0045/00453501.pdf> [Accessed 22 June 2014].

In consequence, it is useful to distinguish between a group of sectors that currently have a GVA close to the Scottish average and those that are significantly below this average:

3. Manufacturing, Construction, Financial and Business Services, and ICT employ around 480,000 people and all have a GVA at, or just below, the Scottish average;
4. Tourism and Retail employ around 407,000 people and have a GVA of around 25% of the Scottish average.
5. Other smaller sectors include Life Sciences and Creative Industries, employing about 72,000 people and have a GVA of about 75% of the Scottish average.

This starts to indicate the nature of the challenge. Those areas with a GVA well above the average are unlikely to be able to absorb significantly more labour over the relevant period. On that basis we are left with 2 clusters of industries. For manufacturing etc, especially as productivity and employment has dropped since 2008, it should be feasible to raise GVA back to 2008 levels and use those industries as the core of a future Scottish economy. In Tourism and Retail, there is a clear need to address low pay and low productivity, but neither are likely to increase substantially so as to meet the Scottish average (and both have seen GVA increasing, albeit slowly, since 2008).

1.3 Reasons for low productivity

In effect, meeting the target of 5.2% increase in productivity is a matter of public policy, but it needs to be set in the context of UK productivity lagging behind its competitors since the 1970s and that since 2008 there have been periods not just of slower comparative growth, but of absolute drops in productivity. There are two potential kinds of reasons for this drop:

- A failure of the education system to produce suitably skilled entrants for the labour market;
- A failure of our model of work to make the best use of the skilled working population.

On balance, this report identifies the second issue as dominant. There is no evidence that the competence of Scottish school leavers or graduates has dropped since 2008. Indeed, overall, the proportion of the workforce with no qualifications has continued to drop and the proportion with Highers or a Degree has increased.

The Scottish Qualifications Authority (SQA) operates as a guarantor of the quality of the secondary school examination system and confirms there is no reason to believe that standards have dropped⁶. Equally, the recent Wood report⁷ has indicating that the new *Curriculum for Excellence* is improving the overall quality of primary and secondary education.

For people who are in-work and looking for training, Modern Apprenticeships offer a useful means to gain specific skills and to link such learning to the acquisition of qualifications such as Higher National Diplomas or a Degree. This too has been recently reviewed, by Audit Scotland⁸, and again the quality and effectiveness of the provision has been confirmed.

This is not to say that everything in Scotland's secondary or tertiary education systems is as good as it should be. The Scotland Institute has already published data showing a systemic failing of some young people on the basis of class, geography and ethnicity⁹ with this exclusion starting even before they enter formal schooling¹⁰. However, there is no substantial evidence that most of those entering the labour market are not well prepared for the demands of employment¹¹, even if there remains a core of school leavers lacking basic skills and the aptitude for work.

On this basis, the reasons for the drop in productivity lie not mainly with the individuals who make up the workforce but with the use that is made of their skills. Several issues are relevant here. The first is the substantive fall in business investment since 2008¹², which is in part due to firms hoarding cash, and in part due to the failure of the UK banking system, and has led to many SMEs no longer even looking to borrow funds to underpin future expansion¹³. The second element is that work has become increasingly characterised by precarious contracts leading to under-employment, short term contracts and zero hours contracts. Those employed on this basis rarely have access to in-work training and development or to longer term career development.

6 SQA 2013. Monitoring Standards over time: National Qualifications and Higher National Units in 2012 compared with previous years. Edinburgh: SQA.

7 Scottish Government 2014b. Education Working for All. Edinburgh: Scottish Government.

8 Audit Scotland 2014. Modern Apprenticeships. Edinburgh: Audit Scotland.

9 Cook, R. 2012b. Social Exclusion in Scotland. Glasgow: Scotland Institute.

10 Ibrahim, A. 2014. Early Start 4 Scotland. Glasgow: The Scotland Institute.

11 Davies, B., Gore, K., Shury, J., Vivian, D. & Winterbotham, M. 2012. UK Commission's Employer Skills Survey 2011: UK Results. London: IFF Research.

12 Audit Scotland 2014. Modern Apprenticeships. Edinburgh: Audit Scotland, Education Scotland 2013. Curriculum for Excellence. Edinburgh: Scottish Government.

13 Lee, N. 2013. Credit and the crisis: Access to finance for innovative small firms since the recession. Lancaster: Lancaster University.

1.4 Policy Proposals

On this basis, if Scotland is serious about addressing the productivity problem there is a need first for an industrial strategy. This needs to take account of the differing productivity rates set out above (and explored in more detail in the main report). In effect, growing employment in say Tourism will not contribute effectively to raising Scotland's overall GVA. Instead, those sectors that employ substantial numbers of people and have GVA at about the average level should be the focus both for expansion of employment and for raising productivity. Productivity increases will only come from a combination of investment and ensuring that employees are treated fairly.

Unfortunately, at the moment, the Scottish Government persists with the standard UK policy approach since the late 1980s of seeing the reason for a drop in productivity as being caused by formal education not preparing students for work and the need to increase the take up of education across the population. There is a need for this focus, but the evidence is that this is not the reason for the recent decline in productivity. If this policy focus is not adjusted, then Scotland, either independent or part of the UK, will not be able to address its productivity problem. Equally, this approach tends to see policy focussed on the under-24s and those entering the labour market, but 90% of the workforce for the mid-2020s is already at work¹⁴. Equally, forcing people into low skill, low paid work with poor job progression prospects is leading to a massive waste of human capital. Some 43% of those in-work report they are not currently using the skills they possess in their job.

14 Schiffers, J. 2014. Human Capitals. London: City Growth Commission.

2. Introduction

The SNP's case for the economic success of an independent Scotland rests on three main assumptions:

1. That, on average over a number of years, Scotland has been a net contributor to the UK and thus will improve its financial position simply by retaining its own income and making its own investment choices¹⁵;
2. That it will be possible to grow the Scottish labour force by a combination of inward migration and addressing structural issues that have led people to leave in search of work in the rest of the UK¹⁶; and,
3. That it is possible to improve the productivity of the entire Scottish labour force¹⁷.

This paper focuses on the productivity aspect of this argument. The argument is that a well trained workforce, taking part in appropriately paid employment, and, working in key growth sectors, will underpin Scotland's long term economic prospects. However, improving productivity will be a major challenge, not least as this will mean reversing a negative trend (both in absolute terms and in comparison to other EU countries) that has affected the UK for some time. This is not just of importance in the independence debate, but will need to be addressed regardless of the vote in September 2014. In that sense, the question is whether or not remaining in the UK or becoming independent will grant the best opportunity to create the type of policies required to meet this challenge.

The SNP's policy proposals mostly identify education as the solution, and, in reality, are focussed on the under-25 age group. This approach is largely shared with the pre-2007 Labour-Liberal Democrat Coalition at Holyrood and has led to the introduction of the *Curriculum for Excellence*¹⁸. Even so, one gap in the SNP's approach is a relative under-estimation of the potential importance of Scotland's FE Sector in particular in helping those who leave secondary school with limited qualifications or who at any age seek qualifications that lie between Highers and

15 Scottish Government 2014c. Government Expenditure and Revenue Scotland 2012-13. Edinburgh: Scottish Government.

16 Scottish Government 2014f. Scotland's Economy: the case for independence. Edinburgh: Scottish Government.

17 Ibid.

18 Education Scotland 2013. Curriculum for Excellence. Edinburgh: Scottish Government.

a Degree¹⁹. This stands in contrast to the emphasis earlier in the century. In 2003 the Labour/Liberal Democrat coalition published a Lifelong Learning Strategy which sought to place further education, whether for school leavers or older learners, on an equally valued footing to higher education. The development of that strategy had in turn been strongly influenced by a cross-party parliamentary enquiry chaired by the SNP's Alex Neil MSP²⁰.

However, the wider argument in this paper is that a focus purely on educational outcomes, and the need for schools, colleges and universities to work more closely with industry²¹, runs the risk of missing the importance of an industrial strategy and of rethinking the nature of work, if Scotland²² is to meet the productivity challenge. The SNP's *Scotland's Economy: the case for independence*²³ makes limited reference to these themes, and they are largely missing from the UK Government's response²⁴.

The evidence presented in section three of this report stresses key variations in productivity by sector and across the different regions of Scotland. Since these variations in productivity are not matched by variations in educational attainment, we are, again, left with the conclusion that the reason for the productivity problem lies in the nature of work, not in the preparation for entry to work. This emphasises the need to think in terms of policies tailored to specific needs rather than a unitary approach. For example, some growth sectors in terms of employment (tourism and retail) are marked by low wages and low productivity²⁵. They may provide work, but there is a problem in terms of the level of wages and their contribution to Scotland's overall productivity. On the other hand, Scotland's average productivity is heavily reliant on the oil and gas sector. At best, this sector can be expected to maintain current employment levels. It certainly does not offer the means to create more, highly productive, jobs.

19 Hermannsson, K., Keep, E., Lecca, P., Peat, J., Sutton, L. & Swales, J. K. 2012. Further Education, the Scottish Labour Market and the Wider Economy. Edinburgh: David Hume Institute.

20 Wallace, J. 2005. *Further and Higher Education (Scotland) Bill* [Online]. Edinburgh: Scottish Parliament. Available: <http://www.theyworkforyou.com/sp/?id=2005-04-20.16193.0> [Accessed 1 July 2014].

21 Scottish Government 2014b. Education Working for All. Edinburgh: Scottish Government.

22 Duffy, J., Gall, G. & Mather, J. 2013. Working Together: A vision for industrial democracy in a Common Weal economy. Glasgow: The Jimmy Reid Foundation.

23 Scottish Government 2014f. *Scotland's Economy: the case for independence*. Edinburgh: Scottish Government.

24 HM Treasury 2014. *Scotland Analysis: Fiscal policy and sustainability*. London: HM Government.

25 Devins, D., Bickerstaffe, T., Mitchell, B. & Halliday, S. 2014. Improving Progression in low-paid, low-skilled retail, catering and care jobs. York: Joseph Rowntree Foundation.

In between these two extremes, there are a number of sectors such as manufacturing, construction and ICT which offer the possibility to create more jobs, but indicate a need to improve productivity (which has declined in all three areas since 2008). The loss of manufacturing jobs, even since 1992, has been a major feature of the Scottish employment market, yet manufacturing offers the ideal combination of the capacity to create a substantial number of jobs, and to create jobs that are highly skilled. There is a complex balance here, as most improvements in productivity are a result of seeking to do ‘more with less’ while the real challenge is to raise output and productivity and break the current orthodoxy that productivity is only achievable by reducing employment. This means, identifying and creating industrial clusters where Scotland can aim to be a major global producer, in a manner similar to the development of an integrated automotive industry in Southern Germany.

Equally, there is a geographical element to Scotland’s productivity problem. Some of this reflects the concentration of the oil and gas industry in the North East and the Shetland Islands. Other elements are the extent to which major cities such as Glasgow and Edinburgh dominate their local regions in terms of travel to work. This, in turn, masks problems of a lack of productive work undertaken in many smaller towns (as many people commute to the larger city for work) and of unemployment in the poorer districts of both cities.

Section three reviews the current situation, first in terms of the challenge of improving productivity and second in terms of reasons why productivity has dipped since 2008. Section four reviews the various strands of policy in this area, in particular in terms of aligning the secondary school curriculum to the perceived needs of employers, of the major problems with the approach to those out of work and the lack of attention to the training needs of those in work. Section five sketches out a policy framework based on this evidence and also considers the implications of either independence, or remaining in the UK after September 2014.

3. Current Situation

The Office for National Statistics (ONS) has recently issued a stark warning as to the growing productivity problem across the UK²⁶. First the gap between the UK and the rest of the G7 has widened from 21 percentage points (measured as output per hour) in 2011 to 25 percentage points in 2012. The continuing decline in both output per hour and output per worker is in contrast to the trend in the rest of the G7 and other major EU economies. Finally, productivity is 3 percentage points below what it was in 2007 and 16 percentage points what it should have been in 2012 but for the recession.

This matters profoundly, as a major part of the SNP's economic case for an independent Scotland rests on the capacity to improve productivity. In particular it was claimed that a 0.03% improvement in productivity (per year) would yield an additional £2.4bn in tax receipts by 2029-30²⁷. The recent document *Scotland's Economy*²⁸ indicates a number of measures to address this productivity gap. These can be roughly grouped into pre-work education policy, options if someone is out of work, and in-work education policy as:

- “investment in early years” ... “equipping our young people for the 21st century through the Curriculum for Excellence (CFE)”²⁹;
- ensuring all post-16 learning is structured with a system-wide focus on jobs and growth which is more aligned with the demands of business ... delivering record numbers of modern apprenticeships and training places, while making an explicit commitment to Opportunities for All: offering a place in training or education for every 16 to 19 year old in Scotland who is not in work”³⁰.
- “innovative ways to support improvements in the productivity and well-being of the workforce” ... “offer carefully designed tax reliefs to employers who invested in accredited training, to increase the effectiveness of a wider package of workforce and skills measures”³¹;

26 ONS 2014d. International Comparisons of Productivity - Final Estimates, 2012. *Statistical Bulletin*. London: ONS.

27 Gray, M. 2014. *Opportunities of independence can generate £5 billion boost for Scotland's economy* [Online]. Glasgow: Business for Scotland. Available: <http://www.businessforscotland.co.uk/opportunities-of-independence-can-generate-5-billion-boost-for-scotlands-economy/> [Accessed 11 June 2014].

28 Scottish Government 2014f. *Scotland's Economy: the case for independence*. Edinburgh: Scottish Government.

29 Ibid., p. 14

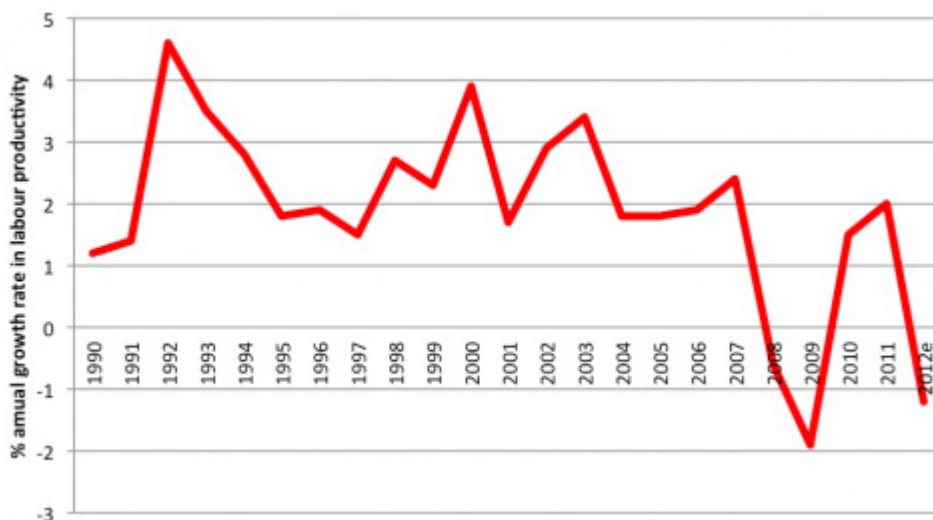
30 Ibid., p. 15

31 Ibid., p. 41

3.1 The Productivity Problem

Productivity has been a long standing problem in British industrial policy, mainly linked to a lack of sustained investment in manufacture and the preference of successive UK administrations to focus on the needs of the financial sector. However, even by historical standards, performance since 2008 is worrying, with not just a slowing in the rate of improvement, but periods where productivity growth was actually negative:

Figure 3-1: UK Wide Labour Productivity Growth³²



3.1.1 Overall Position

One key, and repeated³³, claim by the SNP is that if London is set to one side, Scotland's economy outperforms the rest of the UK even with the current devolution settlement. One useful measure for estimating productivity is Gross Value Added (GVA), in effect a measure of the output in a given industry or geographical area less any consumption in the productive process. There are problems with GVA, not least in failing to show the contribution of public services and assets, excluding unpaid work and important sectors such as agriculture and financial services. Nonetheless it provides a generally accepted means to estimate relative productivity on both a geographical basis and in terms of differences between industrial sectors.

32 OECD. 2014. *Growth in GDP per capita, productivity and ULC* [Online]. Geneva: OECD. Available: http://stats.oecd.org/Index.aspx?DataSetCode=PDB_GR [Accessed 11 June 2014].

33 Scottish Government 2014f. *Scotland's Economy: the case for independence*. Edinburgh: Scottish Government., p. 14

GVA can be estimated by English region, Scotland, Wales and Northern Ireland. The ONS³⁴ calculates the average GVA in England is £21.937 per head compared to £20,013 in Scotland and that labour productivity in England is 101.5 compared to 97.4 in Scotland (the UK as a whole has a value of 100). To place the SNP's goal of a 0.03% increase in productivity per annum up to 2029/30 into context, that would mean Scotland's GVA will need to reach £21,058 (at current prices), a net increase of 5.2% across the period. This may sound modest but represents a major challenge, especially as the bulk of employment in Scotland is in sectors where GVA is well below this desired total, and Scotland's GVA shows considerable variation both by industrial sector and geographical region.

This is shown in table 3:1:

Table 3-1: GVA by UK Region³⁵

NUTS1 regions	GVA per head (£) ²	GVA per head growth on 2011 (%)	GVA per head index (UK=100)	Total GVA (£m) ²	Total GVA growth on 2011 (%)	Share of UK total GVA (%)
United Kingdom ⁴	21,295	1.0	100.0	1,383,082	1.6	100.0
North East	16,091	1.4	75.6	41,874	1.7	3.0
North West	18,438	1.7	86.6	130,618	2.2	9.4
Yorkshire & The Humber	17,556	0.4	82.4	93,339	1.0	6.7
East Midlands	17,448	-0.7	81.9	79,698	0.0	5.8
West Midlands	17,429	0.7	81.8	98,346	1.3	7.1
East of England	19,658	0.9	92.3	116,125	1.6	8.4
London	37,232	0.7	174.8	309,339	2.0	22.4
South East	23,221	2.5	109.0	202,597	3.3	14.6
South West	19,023	0.4	89.3	101,576	1.2	7.3
England	21,937	1.1	103.0	1,173,512	1.8	84.8
Wales	15,401	1.6	72.3	47,344	1.9	3.4
Scotland	20,013	0.1	94.0	106,342	0.4	7.7
Northern Ireland	16,127	0.7	75.7	29,410	1.2	2.1

The Scottish figure can be broken down, using the Scottish Annual Business Statistics³⁶, to show variations by industrial sector and local authority.

34 ONS. 2014e. *Main Comparisons: Economy* [Online]. London: ONS. Available: <http://www.ons.gov.uk/ons/guide-method/compendiums/compendium-of-uk-statistics/economy/index.html> [Accessed 11 June 2014].

35 ONS 2013a. *Regional Gross Value Added (Income Approach)*, December 2013. London: ONS.

36 Scottish Government. 2014g. *Scottish Annual Business Statistics* [Online]. Edinburgh: Scottish www.scotlandinstitute.com

■ 3.1.2 Productivity by Industrial Sector

Table 3-2 shows shifts in employment, turnover, total GVA, GVA per head (i.e. productivity) and labour costs per head in what can be broadly called manufacturing (as opposed to service industries). Specifically Life Sciences, Energy and ICT have been identified by the Scottish Government as ‘growth sectors’.

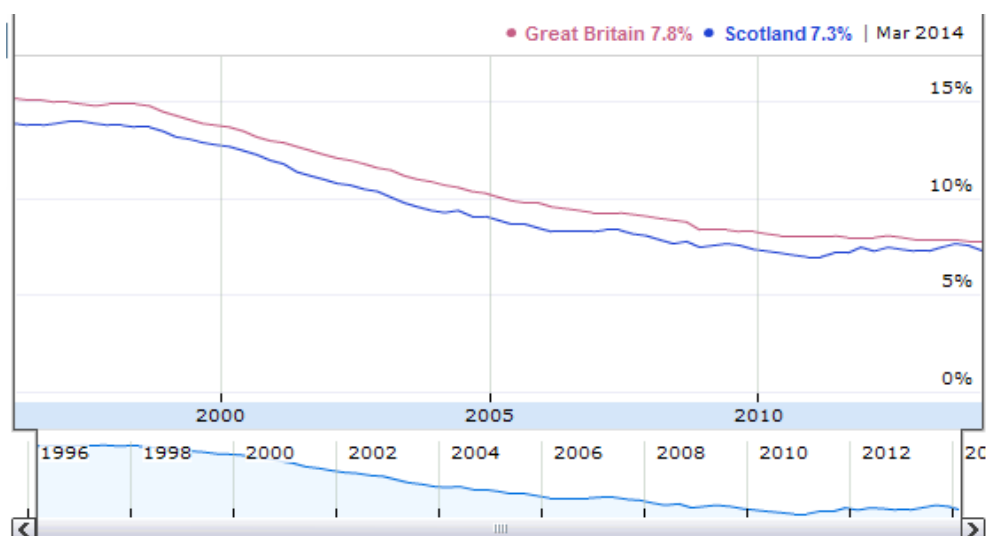
Table 3-2: Employment and GVA in Manufacturing Industries

Sector	Year	Employees (,000)	Turnover (£m)	GVA Basic Price (£m)	GVA per head (£)	Labour Costs per Head (£)
Manufacturing	2008	198.0	40,386.9	13,053.6	64,122	30,707
	2009	189.6	34,574.1	12,675.5	65,153	31,350
	2010	175.7	35,280.3	12,500.0	70,461	32,253
	2011	180.3	38,944.7	12,730.1	69,258	32,812
Construction	2008	139.1	18,094.9	7,909.0	52,129	25,722
	2009	122.0	15,322.6	5,979.4	44,166	27,818
	2010	115.4	15,923.1	6,153.7	49,536	28,958
	2011	115.4	15,008.9	6,111.4	48,107	26,998
Life Sciences	2008	13.8	1,869.3	917.7	65,177	48,725
	2009	13.9	1,558.0	710.7	50,583	44,461
	2010	14.0	1,672.8	880.7	62,826	47,821
	2011	17.0	1,950.4	959.5	55,944	46,323
Energy (including Renewables)	2008	57.4	64,689.6	28,746.6	491,624	59,521
	2009	62.0	52,515.0	22,510.1	357,856	56,571
	2010	65.1	58,150.6	24,546.2	374,811	60,406
	2011	66.1	66,207.9	27,401.2	414,674	63,343
ICT	2008	51.7	8,846.8	4,122.8	76,077	33,754
	2009	50.4	8,161.6	3,933.4	74,314	28,952
	2010	55.3	9,356.1	3,185.1	56,603	32,169
	2011	51.0	9,208.9	3,300.4	63,741	34,822

What is noticeable is the substantial drop in both employment and turnover in manufacture and construction between 2008 and 2011. For manufacture, GVA per head was higher in 2011 than it had been in 2008 but all the others have seen a drop in productivity. The three ‘growth areas’ (Life Sciences, Energy, ICT) have seen limited growth in employment (not enough to offset the decline in manufacture or construction) and a drop in GVA. Even so, the energy sector dominates in terms of the value of turnover and especially in terms of GVA per head (in part due to relatively low levels of employment) and is one of the few sectors that has seen steady growth since 2008.

The loss of manufacturing jobs has been a significant feature of the Scottish economy over recent years. This has been a sustained consequence of the assumption that the UK economy could be based essentially on financial services and even returning to the 1996 position would see 150,000 extra jobs created in this key sector:

Figure 3-2: Manufacturing Employment in Scotland³⁷



In terms of the service sector, again there has been a loss of employment since 2008 but turnover has remained essentially static. In consequence, productivity has increased and labour costs have remained constant.

Table 3-3: Employment and GVA in the Service Sector

Sector	Year	Employees (,000)	Turnover (£m)	GVA Basic Price (£m)	GVA per head (£)	Labour Costs per Head (£)
Retail	2008	247.3	23,054.1	6,165.9	23,689	11,088
	2009	232.8	24,218.3	6,519.9	26,352	12,325
	2010	235.6	24,884.8	5,939.5	24,354	12,366
	2011	235.4	25,923.5	6,609.0	26,641	12,378
Food and Drink (excludes Agriculture)	2008	47.4	9,114.9	3,945.1	80,100	25,917
	2009	47.0	9,524.9	4,067.1	81,678	28,433
	2010	49.7	9,958.3	3,909.6	76,914	26,182
	2011	47.4	10,331.5	4,589.3	93,576	27,408
Financial and Business Services (excludes financial and insurance activities)	2008	118.5	*	6,082.8	46,469	30,103
	2009	120.9	9,448.2	5,672.0	42,146	28,711
	2010	109.0	9,280.6	6,037.9	52,076	33,608
	2011	109.3	10,108.0	6,298.4	54,025	33,834
Sustainable Tourism (Tourism related Industries)	2008	175.8	5,763.4	2,594.3	13,974	9,750
	2009	172.6	6,031.1	2,767.5	15,244	10,339
	2010	165.8	6,270.6	2,904.1	16,681	11,335
	2011	171.5	6,220.5	3,090.7	17,165	10,852
Creative Industries	2008	62.1	5,295.2	3,030.5	48,798	25,387
	2009	63.0	4,843.8	2,747.8	43,591	22,888
	2010	63.2	4,788.7	2,708.8	42,851	22,379
	2011	54.6	4,998.6	2,827.3	51,748	24,771

Although the GVA data shown in tables 3.2 to 3.3 seem to be well above the current £20,013 and the desired £21,058, that is because anyone who works in

37 NOMIS. 2014b. *Manufacturing Employment in Scotland* [Online]. London: NOMIS. Available: http://www.nomisweb.co.uk/reports/lmp/gor/2013265931/subreports/gor_wfjsa_time_series/report.aspx? [Accessed 26 June 2014].

the public sector, charitable sector, financial services or is unemployed and looking for work has been excluded (in the narrow terms of national income accounting none of these generate GVA in their own right, nor do those who are outside the labour market as defined by the ILO³⁸). At the moment, the sectors in tables 3.2 to 3.3 account for roughly 1 million out of a working age population 3.42 million (the latest data suggests that some 545,200³⁹ are employed in the public sector) and a total population of 5.25 million⁴⁰.

While it can be rightly argued that this reflects a very narrow view of the wealth creation process in a complex economy, nonetheless it indicates that for practical purposes the GVA per employee data in tables 3.2 and 3.3 should be reduced to around 29% to reflect their contribution to national GVA target needed. This starts to provide a basis for estimating a feasible basis for the need for employment that, in terms of GVA, is directly seen as productive and the work that is needed to ensure our society functions as we need it to. If this is done then the extent of the challenge becomes clear.

The first table uses the GVA just for 2011 and instead of showing the industry value as GVA/employee it shows it as GVA/population in the labour market (i.e. as equivalent to table 3.1). This recalculation shows:

Table 3-4: GVA on adjusted population basis

	Employees (,000)	% of employees	GVA per head (£)	GVA per head (on a population basis) (£)
Manufacturing	180.3	17.2%	69,258	20,251
Construction	115.4	11.0%	48,107	14,066
Life Sciences	17.0	1.6%	55,944	16,358
Energy	66.1	6.3%	414,674	121,250
ICT	51.0	4.9%	63,741	18,638
Retail	235.4	22.5%	26,641	7,790
Food and Drink	47.4	4.5%	93,576	27,361
Financial and Business	109.3	10.4%	54,025	15,797
Tourism	171.5	16.4%	17,165	5,019
Creative Industries	54.6	5.2%	51,748	15,131

38 International Labour Organisation. 2013. *Employment and unemployment statistics* [Online]. Geneva: ILO. Available: <http://www.ilo.org/global/statistics-and-databases/statistics-overview-and-topics/employment-and-unemployment/lang--en/index.htm> [Accessed 13 February 2013].

39 Scottish Government. 2014e. *Public Sector Employment* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Labour-Market/TrendPublicSectorEmp> [Accessed 22 June 2014].

40 General Register Office for Scotland. 2012. *HomePage* [Online]. Edinburgh. Available: <http://www.gro-scotland.gov.uk/> [Accessed 1 June 2012].

In effect only manufacturing, energy and food and drink generate a GVA per head that is at, or above, the current Scottish average and these constitute some 28% of those employed in the identified industries (or roughly 10% of the entire Scottish workforce). Sectors that employ substantial numbers, such as retail and tourism, have low GVA when set on a population basis. Even in the energy sector, it is important to distinguish between oil and gas extraction and other fields as:

Table 3-5: GVA per head (energy sector)

Energy:	Employees (,000)	% of employees	GVA per head (£)	GVA per head (on a population basis) (£)
Mining of coal and lignite	1.3	0.12%	84,329	24,658
Extraction of crude petroleum and natural gas	7.8	0.74%	2,473,644	723,288
Mining support service activities	18.2	1.74%	140,581	41,106
Manufacture of coke and refined petroleum products	0.1	0.01%	99,958	29,227
Environmental consulting activities	0.4	0.04%	66,678	19,496

In effect, notional productivity in the energy sector is heavily reliant on the relatively small oil and gas extraction sector.

This analysis starts to indicate a number of problems with achieving the growth in productivity identified in *Scotland's Economy*⁴¹:

1. GVA is a useful but flawed measure. Not least, it fails to capture the key role of the public sector in creating the infrastructure within which the rest of the economy can function;
2. Some sectors that employ substantial numbers (retail and tourism) and might well be seen as natural growth areas in terms of employment (especially tourism) have very low GVA;
3. While ensuring that as many of the current residents in Scotland have a job will help (by moving them from the total population to the active population category), at the moment 71.5% of the potential working population are in-work at the moment⁴². This is not unusual in a modern

41 Scottish Government 2014f. *Scotland's Economy: the case for independence*. Edinburgh: Scottish Government.

42 Scottish Government. 2014a. *Annual Population Survey, results for year to 31 March 2014* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/Resource/0045/00453501.pdf> [Accessed 22 June 2014].

economy as it reflects those in education, those who are not part of the workforce as well as those who are economically inactive as they cannot find a job. Clearly, the net effect will depend on the sectors they move into;

4. While the ideal solution is to grow employment in those sectors with high GVA, this is probably hard to achieve as the current numbers may well indicate the overall demand for labour in these sectors (especially in oil and gas production);
5. Manufacturing is clearly a critical area. Even though employment has shrunk since 2008, it remains a major employer (17.2% of the workforce included in the GVA calculations, 7.3% of the total potential workforce) and the GVA is almost exactly at the average value for Scotland. In effect, it is a sector that could both yield additional employment and see productivity gains. And it is worth noting that in 1992 18% of those aged 16-24 in Scotland worked in this sector compared to just under 8% in 2012⁴³;
6. In terms of overall industrial strategy, there is a need to consider not just how to raise overall productivity but to look at each sector. ICT and Construction are areas where the possibility of improving GVA exists, but the question of how to improve GVA in sectors such as Tourism and Retail that employ large numbers is critical.

■ 3.1.3 Productivity by Local Authority

It is also useful to look at variations of GVA not just in terms of industrial sector but also by geographical distribution in local authority areas. Again, the data below is drawn mostly from the *Annual Population Survey*, and the most recent population estimates are taken from the General Register for Scotland data sets⁴⁴.

However, there are several issues that need to be mentioned. First, the GVA values for Edinburgh and Stirling are not calculated due to the high level of financial services and public sector jobs in those authorities. Second, the GVA per relevant employee has been adjusted by taking account of the total employment in

43 NOMIS. 2013. *Official Labour Market Statistics* [Online]. London: ONS. Available: <https://www.nomisweb.co.uk/Default.asp> [Accessed 1 February 2013].

44 General Register Office for Scotland. 2014. *Mid-2011 and Mid-2012 Population Estimates Scotland* [Online]. Edinburgh: GROS. Available: <http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/mid-year/2012/index.html> [Accessed 22 June 2014].

each authority. This will give a misleading picture in authorities where substantial numbers of people work and live in different areas.

Table 3-6: GVA calculations by Local Authority

	GVA (standard calculation, £)	Population used for GVA	Working Age Population (16-64)	Employment Rate	Proportion of Scotland's working age population	GVA (revised calculation, £)
Aberdeen	200,587	143,100	160,872	77.3%	4.55%	230,944
Aberdeenshire	81,429	78,500	167,977	78.6%	4.75%	48,407
Angus	38,731	26,100	73,458	74.0%	2.08%	18,584
Argyll and Bute	32,242	26,500	53,730	75.1%	1.52%	21,168
Clackmannanshire	49,083	10,200	34,009	66.1%	0.96%	22,267
Dumfries and Galloway	34,150	42,300	93,591	70.1%	2.65%	22,016
Dundee	31,762	48,500	100,520	61.4%	2.84%	24,975
East Ayrshire	34,029	26,100	80,404	68.1%	2.27%	16,211
East Dumbartonshire	35,331	17,700	67,251	77.1%	1.90%	12,064
East Lothian	37,663	20,100	64,773	76.2%	1.83%	15,342
East Renfrewshire	26,790	13,800	57,539	74.2%	1.63%	8,664
Edinburgh	*	207,600	342,674	71.7%	9.69%	0
Eilean Sar	21,860	6,600	17,148	72.4%	0.49%	11,622
Falkirk	37,982	42,600	103,748	73.5%	2.94%	21,227
Fife	37,477	90,400	238,936	69.3%	6.76%	20,456
Glasgow	37,664	277,100	422,088	63.3%	11.94%	39,062
Highland	32,764	76,500	149,748	73.9%	4.24%	22,647
Inverclyde	35,505	20,500	53,053	69.5%	1.50%	19,729
Midlothian	35,001	19,500	54,644	72.2%	1.55%	17,294
Moray	60,828	25,600	59,550	78.8%	1.68%	33,178
North Ayrshire	42,364	28,300	88,094	60.1%	2.49%	22,626
North Lanarkshire	46,098	86,000	225,467	70.2%	6.38%	25,064
Orkney Islands	20,218	6,000	13,787	81.0%	0.39%	10,867
Perth & Kinross	48,526	48,300	93,679	75.3%	2.65%	33,216
Renfrewshire	44,471	61,300	115,497	71.7%	3.27%	32,912
Scottish Borders	31,392	30,300	70,987	74.9%	2.01%	17,881
Shetland Islands	30,159	8,300	15,114	83.2%	0.43%	19,914
South Ayrshire	37,399	34,100	70,715	71.7%	2.00%	25,139
South Lanarkshire	35,916	86,300	207,731	71.5%	5.88%	20,882
Stirling	*	33,500	60,050	71.2%	1.70%	0
West Dumbartonshire	42,405	17,800	60,198	65.2%	1.70%	19,219
West Lothian	38,387	57,100	117,808	73.0%	3.33%	25,492

Given the concentration of the oil and gas industries, it is not surprising to note that Aberdeen and the surrounding areas are clearly different to the rest of Scotland. The West Coast, however, shows the impact of travel to work patterns. Glasgow has a high GVA despite also having the lowest employment rate in Scotland, mainly as a substantial number of people from the wider area travel to work in the city. In turn, this makes the calculated GVA for the surrounding authorities appear to be lower (this can be seen for example in North Ayrshire where the recalculated GVA is much lower than the conventional estimate). This strongly indicates that there is a need to take account of the substantial variations across Scotland in devising an effective industrial strategy.

In effect, the geographical element to variations in GVA adds to the argument in section 3.1.2 that raising productivity is not a simple process of matching a single set of policies to all instances. In some parts of Scotland, exclusion from the labour market is critical, while in others the nature of employment is important. This can be seen in the differences between the Shetland Islands (where oil and gas contribute) compared to Eilean Sar and the Orkney Islands.

3.2 Barriers

This section considers various reasons that could explain some of the drop in productivity since 2008. Basically these can be seen as a drop in the level of education or skills in the workforce; the changing nature of work; or a consequence of a lack of investment.

■ 3.2.1 A drop in the level of education, training or skills?

As noted in the introduction, one consistent policy area for the Scottish Government (regardless of political party) has been to improve education-industry links. Both *Education for All* and the *Curriculum for Excellence* stress the importance of improving education levels. However, there is no evidence that the drop in productivity since 2008 is related to a less skilled workforce.

First, if anything, the period since 2008 has seen a drop in the number of people (aged 16-64) who only have qualifications to the level of SCQF 4 (i.e. roughly standard grade) from 19.1% in 2004 to 12.6% in 2013. Second, renewed analysis⁴⁵ of the Labour Force Survey between 2007 and 2012 indicates that the proportion in the workforce with Highers or Degree level qualifications has increased. However, that dataset does indicate a 10-12% fall in the numbers reporting attendance at in-work training. The most recent data from the Scottish Labour Market Profile confirms these trends:

Table 3-7: Changing levels of adult education in Scotland 2004-2013^{46,47}

	% with SCQF 7+ aged 16-64	% with SCQF 6+ aged 16-64 (le Highers)	% with SCQF 5+ aged 16-64	% with SCQF 4+ aged 16-64	% with no qualifications - aged 16-64
Jan 2004-Dec 2004	30.2	53.5	66.1	77.2	15.8
Jan 2005-Dec 2005	30.7	54.0	67.6	78.3	14.9
Jan 2006-Dec 2006	32.2	54.8	68.6	79.1	13.9
Jan 2007-Dec 2007	33.1	54.5	68.6	78.9	13.7
Jan 2008-Dec 2008	33.1	54.8	68.8	78.7	13.9
Jan 2009-Dec 2009	33.9	54.8	69.3	79.1	13.3
Jan 2010-Dec 2010	35.0	55.9	70.2	80.1	12.3
Jan 2011-Dec 2011	37.2	57.6	72.4	82.3	11.6
Jan 2012-Dec 2012	38.5	58.5	73.1	83.2	10.7
Jan 2013-Dec 2013	39.4	59.3	73.7	83.4	10.3

45 ESDS. 2012. *Economic and Social Data Service* [Online]. Manchester: ESDS. Available: <https://www.esds.ac.uk/about/about.asp> [Accessed 20 December 2012]. The data was extracted under licence 67255

46 NOMIS. 2014a. *Labour Market Profile: Scotland* [Online]. London: NOMIS. Available: <http://www.nomisweb.co.uk/reports/lmp/por/2013265931/report.aspx#tabempocc> [Accessed 26 June 2014].

47 Since NOMIS is provided by the Office for National Statistics, the original data referred to the English qualifications structure (NVQ) and some care needs to be taken in mapping those levels onto the SCQF framework.

These rows add to more than 100, as individuals can have more than one level of qualification and most people with SCQF7 or higher will also have lower level qualifications. However, this strongly suggests that the recent drop in productivity is not the consequence of a less well trained or educated workforce. In effect, as suggested in the recent Wood report (*Education: Working for All*)⁴⁸, there is strong evidence that the links between education and work have been improved in recent years. Nonetheless, we also have clear evidence that productivity has declined.

In addition, key parts of the Scottish educational framework, such as the Scottish Qualifications Framework (SCQF) both link formal secondary and tertiary education, and allow short periods of learning with very specific focus to be linked to the wider framework, and potentially be later combined into an overall award. The Scottish Qualifications Authority (SQA) has used this flexibility to develop a series of industry focussed awards, sometimes linked to Modern Apprenticeships (discussed in more detail later in this report).

In addition it is important to stress that neither the 2011 nor the 2013 Employer Skills Surveys indicate there is any substantial problem being reported by employers about the work skills or knowledge of new recruits (whether from school, college or university)⁴⁹.

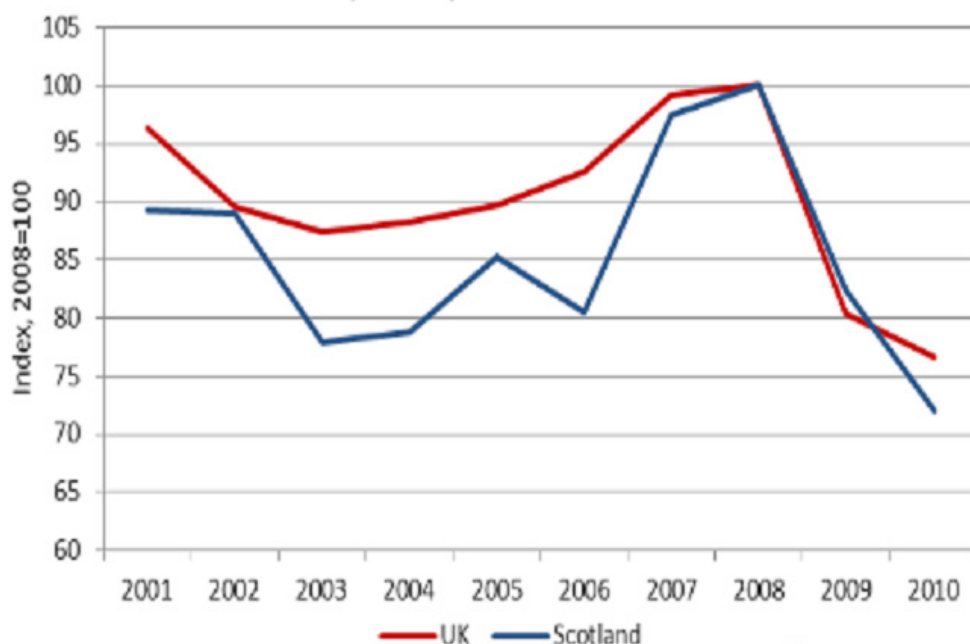
■ 3.2.2 A drop in Investment?

Another reason for the observed drop in productivity is the significant fall in investment since 2008. For the UK as a whole, recent ONS data indicated that business investment increased by 8.4% for the final quarter of 2013 compared to the position at the end of 2012. However, this still left capital formation rates below those of 2008⁵⁰. In Scotland, investment levels in 2010 were 28% below those of 2007, as:

48 Scottish Government 2014b. *Education Working for All*. Edinburgh: Scottish Government.

49 UKCES. 2014c. *UKCES Employer Skills Survey 2013: Scotland* [Online]. London: UKCES. Available: <https://www.gov.uk/government/publications/ukces-employer-skills-survey-2013-scotland> [Accessed 7 July 2014].

50 ONS 2014b. *Business Investment, Q4 2013 Provisional Results*. London: ONS.

Figure 3-4: Net Capital Expenditure 2001-2010⁵¹

Since 2010, there has been some evidence of a recovery but investment is still below the 2008 levels. This has long term implications, as under-investment at the moment will harm productivity over a number of years. Reasons include the hoarding of potential investment capital by companies (totalling £334bn in 2014⁵²), and the failure of the UK banking system to release loans for viable business formation or expansion⁵³. A further, related problem, is that many SMEs are now unwilling to even try to borrow the funds they need for further growth⁵⁴.

■ 3.2.3 Unemployment and under-Employment?

One important reason for the drop in productivity is the growth in both unemployment and under-employment as both effectively reduce the number of productive hours that are worked as well as the reduction in the productivity of the actual hours

51 Scottish Government 2013a. Business Investment. Edinburgh: Scottish Government.

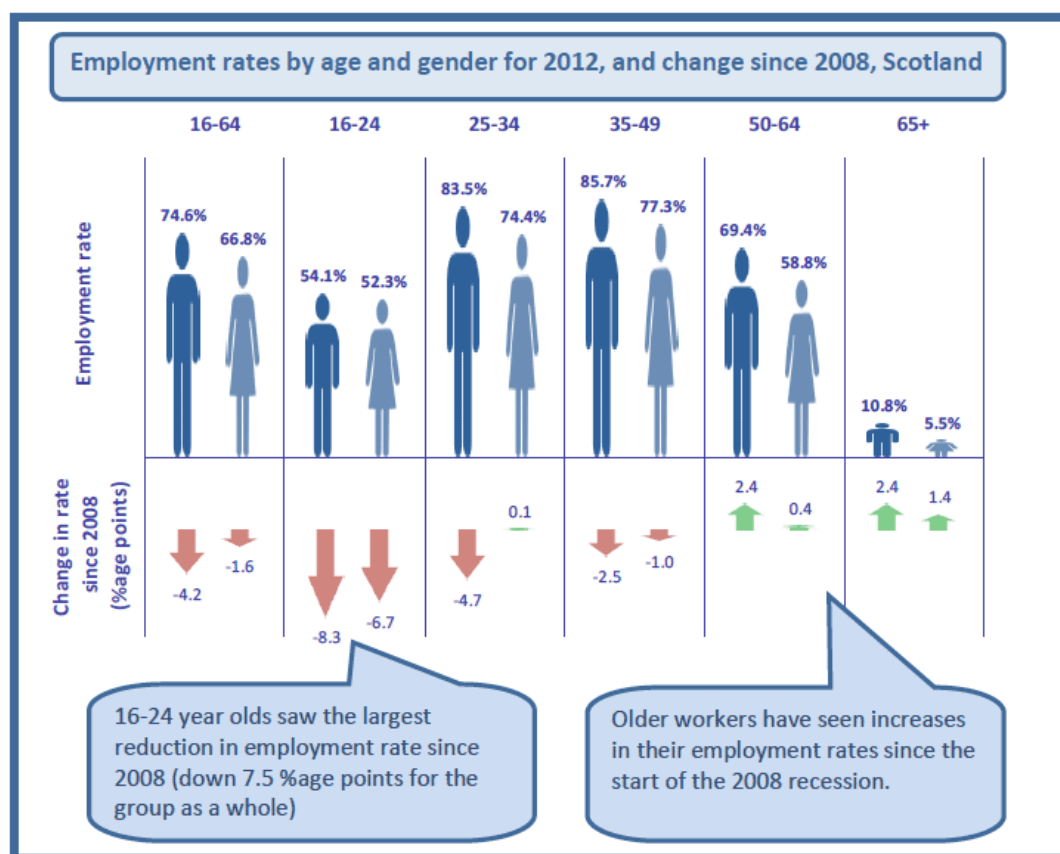
52 Mills, M. 3 January 2014. British Businesses Are Hoarding Billions That Could Be Invested in SMEs. Available from: http://www.huffingtonpost.co.uk/mark-mills/british-business-investment_b_4532077.html [Accessed 26 June 2014].

53 Lee, N. 2013. Credit and the crisis: Access to finance for innovative small firms since the recession. Lancaster: Lancaster University.

54 Brown, R. & Lee, N. 2014. *Are 'debt-shy' companies holding back the economy?* [Online]. London: Financial. Available: <http://finchannel.com/index.php/society/business-education/item/38205-are-debt-shy-companies-holding-back-the-economy> [Accessed 26 June 2014].

worked. Overall employment in Scotland has dropped by 2.8% since 2008⁵⁵ removing a substantial number of people from value producing work. This has hit those under 24 the hardest, as well as reflecting a significant gender bias:

Figure 3-3: Employment rates by age and gender, Scotland⁵⁶



Equally, the growth in under-employment is having an impact and many in employment are increasingly looking for more hours⁵⁷. This now affects almost 10% of those Scottish workers who have contracted hours of work (whether notionally full or part time). Thus table 3-9 excludes those on zero-hours contracts.

55 Scottish Government. 2014a. *Annual Population Survey, results for year to 31 March 2014* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/Resource/0045/00453501.pdf> [Accessed 22 June 2014].

56 Ibid.

57 ONS 2014a. *Analysis of Employee Contracts that do not Guarantee a Minimum Number of Hours*. London: ONS.

Table 3-8: Underemployed Workers⁵⁸

Pre-recession averages		
2005 to 2008	UK	Scotland
Average number of underemployed workers (,000)	1,934,544	178,080
Average total number of workers (,000)	28,691,470	2,474,067
Average underemployment rate	6.7	7.2
Post-recession averages		
2009 to 2012		
Average number of underemployed workers (,000)	2,827,796	243,545
Average total number of workers (,000)	28,644,780	2,451,883
Average underemployment rate	9.9	9.9

The growth of labour market insecurity, exemplified by zero-hours contracts, is the third main trend over the period since 2008. Till recently, this was largely ignored in the official statistics⁵⁹⁶⁰ but it is clear that such contracts are in use across the private and public sector, including by sub-contractors directly employed by the Scottish Government⁶¹. A recent survey by the Institute of Directors has indicated that zero hours contracts are more prevalent in large companies than in the SME sector, with some 20% of large firms indicating they make use of them⁶².

The impact on productivity is not clear, but such contracts rarely incorporate time for in-work training and the effect of uncertainty and low wages is demoralising for those caught in such a trap⁶³. Even temporary work has been seen to reduce the extent that employees identify with their company⁶⁴, and they are less likely to receive training while in work⁶⁵. Equally, many such employees report not being able to use their current skills, never mind acquire new ones⁶⁶.

58 ONS. 2013b. *Underemployed Workers in the UK, 2012* [Online]. London: ONS. Available: <http://www.ons.gov.uk/ons/rel/lmac/underemployed-workers-in-the-uk/2012/index.html> [Accessed 10 June 2014].

59 ONS 2014c. Estimating Zero-Hour Contracts from the Labour Force Survey. London: ONS.

60 Pyper, D. & McGuinness, F. 2014. Zero-hours contracts. London: House of Commons Library.

61 Scottish Government. 2013b. *FOI - Zero Hours Contracts and Staff Numbers* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/About/People/Directorates/HR/FOI/zerohourscontracts> [Accessed 10 June 2014].

62 Learning, D. f. E. a. 2014. Zero Hours Contracts. Belfast: DELNI.

63 Goos, M. & Manning, A. 2007. Lousy and Lovely Jobs: The Rising Polarization of Work in Britain. *Review of Economics and Statistics*, 89, 118-133.

64 De Cuyper, N., De Jong, J., De Witte, H., Isaksson, K., Rigotti, T. & Schalk, R. 2008. Literature review of theory and research on the psychological impact of temporary employment: Towards a conceptual model. *International Journal of Management Reviews*, 10, 25-51.

65 Cheung, S. Y. & McKay, S. 2010. Training and progression in the labour market. London: Department of Work and Pensions.

66 Schifferes, J. 2014. Human Capitals. London: City Growth Commission.

In effect, under-employment, and the increasingly use of short term (including zero hours) contracts is having a negative impact on productivity. Not only does the resulting under-employment have a significant effect on the number of hours worked, but also workers trapped on these contracts have little or no chance to develop their skills⁶⁷. A further problem is that employers in these sectors increasingly are not looking for well skilled employees⁶⁸, leading them to under-estimate the importance of training and development for their firms, their employees and the wider Scottish economy.

3.3 Summary

Overall, it is clear that the Scottish Government's goal of raising productivity is going to be a major challenge. The current trend is of falling productivity, and this is being worsened over the long term by the increase in both unemployment and under-employment. Short term contracts (including zero hours) tend to exclude workers from a long term involvement with their employer and they rarely have access to in-work training. The risk is, as often noted, that workers become trapped in a cycle of low skill jobs, that rely on state support to bring their income up to a minimum level and that tend to see further periods of unemployment and under-employment with little or no access to full time work⁶⁹. However, as noted, the current policy prescription of the Scottish Government is largely focussed on education-industry links.

67 Devins, D., Bickerstaffe, T., Mitchell, B. & Halliday, S. 2014. Improving Progression in low-paid, low-skilled retail, catering and care jobs. York: Joseph Rowntree Foundation.

68 UKCES 2014b. Precarious futures? Youth Employment in an International Context. London: UKCES.

69 Goulden, C. 2010. Cycles of poverty, unemployment and low pay. York: Joseph Rowntree Foundation, Schmuecker, K. 2014. Future of the UK Labour Market. York: Joseph Rowntree Foundation.

4. Links between Employment and Education

This section reviews current policy in three critical areas:

1. The design of formal (secondary and tertiary) education and the links to employment;
2. Support for those who are out of work;
3. In-work training and development opportunities.

In policy terms, the first issue is fully within the responsibility of the current Scottish Government, the second is dominated by the UK Department of Work and Pensions' (DWP) ineffective and punitive approach, and the last is given scant attention either by the Scottish or the UK Government.

■ 4.1 *Between Formal Education and Employment*

The *Curriculum for Excellence*⁷⁰ was first mooted in 2002 and then developed from a 2007 OECD Report *Quality and Equity of Schooling in Scotland*⁷¹ commissioned by the then Labour-Liberal Democrat administration, and implemented by the SNP in their initial minority administration after the 2007 election. It is intended to be fully implemented by 2016 and represents a broad based approach to the curriculum, supported by qualifications developed by the Scottish Qualifications Authority (SQA). The *Curriculum for Excellence* covers the entire primary and secondary school curriculum from 3-18 and aims to ensure young people are: successful learners; confident individuals; responsible citizens; and, effective contributors⁷².

The recent Wood report has present a broadly positive appraisal⁷³ of the Curriculum. However there have been repeated criticisms⁷⁴ that it has effectively narrowed the curriculum with too much emphasis on the acquisition of defined skills, rather than on a broad education. Some criticisms of similar approaches put too much stress on the claimed merits of the more traditional subject based curriculum⁷⁵, but there is a recurrent theme that a too narrow focus on outcomes and preparation for work leads to less effective approach to education.

70 Education Scotland 2013. Curriculum for Excellence. Edinburgh: Scottish Government.

71 OECD 2007. Quality and Equity of Schooling in Scotland Geneva: OECD.

72 Education Scotland 2013. Curriculum for Excellence. Edinburgh: Scottish Government.

73 Scottish Government 2014b. Education Working for All. Edinburgh: Scottish Government.

74 Phipps, S. 19 April 2012. Academic defends criticism of Curriculum for Excellence. Available from: <http://www.sec-ed.co.uk/news/academic-defends-criticism-of-curriculum-for-excellence> [Accessed 23 June 2014].

75 Ledda, M. 2008. A Liberal Education Policy. The Manifesto Club.

The Wood report also repeats a common complaint from employers about the UK school education that there is too little preparation for work in the curriculum, despite the existence of the *Skills for Work*⁷⁶ qualifications, noting that:

“More than 50 per cent of our young people don’t go to university and, of these, very few leave school with vocational qualifications with labour market currency. The majority have had limited access or exposure to the world of work with only 27% of employers offering work experience. For school pupils this is generally limited to one week in S4.

We are simply not preparing or equipping these young people for the world of work. There must be much more focus on providing them with the skills, qualifications and vocational pathways that will lead directly to employment opportunities⁷⁷”

The solutions proposed all revolve around a better fit of education and work, looking for all Scottish secondary schools to be “a long term partnership with employers within 3 years⁷⁸” and that a “focus on preparing all young people for employment should form a core element of the implementation of Curriculum for Excellence⁷⁹”. Other recommendations identify Modern Apprenticeships as desirable programmes for those who do not achieve Highers, and acknowledge existing discrimination in terms of gender, ethnicity, disability and those leaving care.

The issue is not whether or not these are sensible proposals in their own right, but that they ignore the realities of youth employment⁸⁰ and that, in 2011, 86% of employers who take on school leavers report they contribute to the organisation in a relatively short period of time⁸¹ and this has increased to 88% in 2013⁸². The largest identified weakness, in both surveys, is ‘lack of working world life experience’ rather than attitudes or skills.

In effect, there is little to disagree with in the Wood report, and its focus on work experience is useful, but in terms of its analysis it is far too narrowly drawn. The

76 SQA. 2014d. *Skills for Work* [Online]. Edinburgh: Glasgow. Available: <http://www.sqa.org.uk/sqa/25259.998.html> [Accessed 3 July 2014].

77 Scottish Government 2014b. Education Working for All. Edinburgh: Scottish Government., p. 7

78 Ibid., p. 9

79 Ibid., p. 10

80 Cook, R. 2013. The Changing Face of Youth Unemployment and Employment in Scotland 1992-2012. Glasgow: The Scotland Institute.

81 Davies, B., Gore, K., Shury, J., Vivian, D. & Winterbotham, M. 2012. UK Commission’s Employer Skills Survey 2011: UK Results. London: IFF Research.

82 UKCES. 2014c. *UKCES Employer Skills Survey 2013: Scotland* [Online]. London: UKCES. Available: <https://www.gov.uk/government/publications/ukces-employer-skills-survey-2013-scotland> [Accessed 7 July 2014].

consequence is that youth unemployment, under-employment and being trapped into jobs with low pay and low security become framed as problems caused either by the education system or the young people themselves. It makes no mention of the causes of lack of work, or of the increasing dominance of insecure employment in many sectors, nor of the long term consequences for productivity of low pay.

■ 4.2 Between Unemployment and Employment

At the moment, since this is connected to the benefits system, the issue of training and skills for those out of work is reserved to Westminster and remains under the control of the Department of Work and Pensions (DWP)⁸³. These schemes seem more based in an ideology that being out of work is a personal choice⁸⁴, delivered by companies tarred by frequent allegations of fraud⁸⁵ and use a mode of delivery that a cross-EU study has found to be ineffective⁸⁶. EU reports have found that the type of unregulated work experience programmes used by the DWP are ineffective in terms of skills acquisition and run the risk of being used as a form of labour substitution⁸⁷.

This policy failure matters for a number of reasons. First, unemployment, especially long term unemployment, has severe consequences for individuals, not least in the loss of self-esteem and failing to maintain, or develop, key skills. Second, the DWP model (introduced by New Labour, expanded under the Coalition and seemingly fully accepted by the current Westminster Labour Party) has the effect of harming the scope to generate an effective, supportive policy framework for this area. This is returned to in more detail in section 5, but, drawing from the evidence in table 3.4 there is little to gain from pushing people into sectors with low productivity, and to take jobs with limited security or long term prospects, if the real goal is to enhance Scotland's long term productive potential. One useful

83 Department of Work and Pensions. 2012. *Get Britain Working* [Online]. London: Department of Work and Pensions. Available: <http://www.dwp.gov.uk/policy/welfare-reform/get-britain-working/> [Accessed 21 August 2012].

84 Porter, J. 29 December 2013. The "Help to Work" pilots: success, failure or somewhere in between? Available from: <http://niesr.ac.uk/blog/help-work-pilots-success-failure-or-somewhere-between#U6mU9rHCmUk> [Accessed 24 June 2014].

85 White, A. 2013. *Bad management and cruelty: Iain Duncan Smith and the failures of the Work Programme* [Online]. London: New Statesman. Available: <http://www.newstatesman.com/uk-politics/2013/11/bad-management-and-cruelty-failures-work-programme> [Accessed 24 June 2014].

86 Bekker, S. 2010. EEO Review: Youth Employment Measures, 2010: Netherlands. Tilberg: University of Tilberg.

87 European Commission 2012b. Study on a comprehensive overview on traineeship arrangements in Member States. Brussels: European Commission, European Commission 2012a. Apprenticeship supply in the Member States of the European Union. Brussels: European Commission.

framework that could be adopted, and would minimise the risk of poor quality in-work training, is the existing *Certificate of Work Readiness*⁸⁸.

There has also been a failure to recognise the different requirements of those returning to the labour market after a period spent as a carer, rather than in unemployment⁸⁹. Improving the access of women to the labour market has been largely framed by the Scottish Government in terms of increasing the availability of childcare for pre-school children. However, the group of women returners is heterogeneous, spanning the range of qualifications and with shorter and longer periods out of the labour market. For many, if childcare is still an issue at all it will be related to care before and after school hours, and during the holidays. Yet breakfast, after-school and holiday clubs receive little attention in policy debate and their availability is uneven and vulnerable to local authority budget cuts.

For some of this group, the prime need is for re-training before re-entering the labour market. They will therefore have been particularly affected by the decision to shift the emphasis of FE colleges towards providing formal qualifications for those just above school age. The statistics show a significant reduction in the number of adult women participating in FE⁹⁰. Yet access for adults to short courses updating certain skills, such as IT-related ones, may be disproportionately effective in enabling certain previously skilled workers to resume productive paid employment. Again, the basic framework for this exists in the form of *National Certificates* and the *National Progression Awards*⁹¹.

4.3 In Work opportunities

The final aspect to using education to improve in-work productivity is the area of in-work training⁹². Those on part time, temporary or irregular employment contracts are largely excluded from in-work training and development and this then limits their likelihood of gaining full time work. Finally, even those in full time work report a drop in terms of in-work training over recent years. Recent data has found that take up in Scotland is more common among larger employers than SME⁹³s.

88 SQA. 2014b. *Certificate of Work Readiness* [Online]. Edinburgh: SQA. Available: <http://www.sqa.org.uk/sqa/64560.html> [Accessed 3 July 2014].

89 Blackburn, L. H. 2014. *RE: Comments on the importance of the FE Sector*. Type to Cook, R.

90 Dugdale, K. 2013. *Women and Work Debate* [Online]. Edinburgh: Scottish Parliament. Available: <http://www.keziadugdale.com/2013/12/04/women-and-work-debate/> [Accessed 1 July 2014].

91 SQA. 2014a. *About NQGs* [Online]. Edinburgh: SQA. Available: <http://www.sqa.org.uk/sqa/46552.3022.html> [Accessed 3 July 2014].

92 Cheung, S. Y. & McKay, S. 2010. *Training and progression in the labour market*. London: Department of Work and Pensions.

93 UKCES 2014a. *Briefing on Apprenticeships in Scotland*. London: UKCES.

The Scottish Government's Modern Apprenticeship programme offers both a framework and a wide range of awards, tailored, where appropriate, to the needs of particular sectors⁹⁴. It is designed to provide "public sector funding for apprenticeships [...] to encourage training that would otherwise not take place⁹⁵" but there is an expectation that the employer will contribute to the total costs.

In 2012/13 almost 26,000 commenced a modern apprenticeship and just under 20,000 had completed a programme of study⁹⁶. 53% of these are in sectors identified by the Scottish Government as critical in terms of Scotland's future. One particularly positive aspect is that some 40% of all apprenticeship programmes in Scotland last for more than 3 years⁹⁷. Broadly, the schemes have been successful and in 2012, 92% of those who completed a scheme were in employment and 70% were with the same employer.

However, the relative lack of attention to developing skills for the existing workforce, as opposed to for the under-24s, remains a significant gap⁹⁸, especially when matched to a too narrow focus on quantifiable skills at the expense of soft skills and non-formal learning. Again, the decision of the Scottish Government to re-focus the work of Further Education colleges on formal qualifications for recent school leavers will have reduced the opportunities for older workers to develop their skills, whether or not assisted by their employer. Nor has the Scottish Government chosen to go down the route recently taken in England of extending access to student loans to older students in further education (the "24+ advanced learning loan").

Further education colleges have traditionally been important in providing a variety of opportunities for developing existing skills or acquiring new ones, close to where individuals live and work. With opportunities for in-work training also falling, it is not clear what strategy is now in place in Scotland to ensure that the majority of the workforce, who will typically be working for many decades after leaving formal education, frequently for small employers, will have access to relevant learning throughout their working lives. Yet increasing productivity must involve regularly updating and improving the skills of the existing workforce and not only those joining it for the first time⁹⁹.

94 SQA. 2014c. *Modern Apprenticeships* [Online]. SQA: Edinburgh. Available: <http://www.sqa.org.uk/sqa/35912.html> [Accessed 24 June 2014].

95 Audit Scotland 2014. *Modern Apprenticeships*. Edinburgh: Audit Scotland., p. 26

96 Ibid.

97 UKCES 2014a. *Briefing on Apprenticeships in Scotland*. London: UKCES.

98 NIACE 2014. *Manifesto: General Election 2015*. Leicester: NIACE.

99 Schifferes, J. 2014. *Human Capitals*. London: City Growth Commission.

At the moment, take up of apprenticeships and the offer of formal training varies by sector across Scotland:

Table 4-1: Proportion of Employers offering apprenticeships¹⁰⁰

	%
Agriculture, hunting, forestry and fishing	16
Mining and quarrying*	*
Manufacturing	47
Electricity, gas and water supply	*
Construction	43
Wholesale and retail trade	18
Hotels and restaurants	22
Transport, storage and communications	29
Financial services	13
Real estate, renting and business activities	29
Public admin. and defence; compulsory social security	*
Education	35
Health and social work	22
Community, social and personal service activities	34

(* indicates sample size too small)

Of those who do not offer, or plan to offer structured training, 21% indicate that apprenticeships are not offered by their particular sector, 19% that their staff are fully trained and 11% that they are not recruiting. Given the discussion about the low level of productivity in the tourism sector, it is worrying that 29% of hotel and restaurant owners indicated that structured training played no part in their business¹⁰¹.

4.4 Summary

In different ways, the Scottish Government offers a considerable amount of support to employers to ensure there is a well trained workforce able to raise productivity levels in Scottish industry. The relative success of this is shown clearly in table 3-8. The secondary school curriculum is increasingly, some would say excessively, focussed on preparation for work and the Modern Apprenticeship programme provides a substantial subsidy to firms to provide training opportunities. Training and development for those out of work is far less effective and currently reserved

100 UKCES 2014a. Briefing on Apprenticeships in Scotland. London: UKCES.

101 Ibid.

to the DWP. The Wood Report¹⁰² primarily sees the reason for any residual weakness in education-industry links as resting with the education system or young people. In effect, there is a policy consensus that the solution to Scotland's productivity challenge is more focussed education and training.

There is an alternative reading to the data in section 3 and the review of current policy in this section. In effect, the flaw is not with the education system, or young people (which is not to say there are not areas that would benefit from improvement) but with the nature of employment. There is little point denying that the main cause of unemployment is the lack of work, nor that under-employment effectively masks the true level of unemployment. Scotland's employers have rarely been challenged about the use they make of young people exiting education or the impact of opting to offer insecure contracts where as recently as 1992 the norm was to offer full time structured work¹⁰³.

Equally there is a lack of support, even in the form of loans, for adults who wish to acquire new skills if this does not fit the Modern Apprenticeship framework¹⁰⁴. However, this should not be confused with asking individuals to pay for the acquisition of basic skills or the need to overhaul the entire framework of support for those out of work.

This is important, as continuing the current focus on education, rather than considering wider industrial and employment policy, will limit the scope to meet the ambitious targets set out in *Scotland's Future*¹⁰⁵ and the more recent *Scotland's Economy: the case for independence*¹⁰⁶. In addition, in the case of a no-vote in September 2014, improving both overall output and productivity will remain critical policy areas for Scotland. The next section, offers a range of proposals, based on the analysis in sections 3 and 4 and taking account of the different outcomes in the 2014 independence referendum.

102 Scottish Government 2014b. Education Working for All. Edinburgh: Scottish Government.

103 Cook, R. 2013. The Changing Face of Youth Unemployment and Employment in Scotland 1992-2012. Glasgow: The Scotland Institute.

104 NIACE 2014. Manifesto: General Election 2015. Leicester: NIACE.

105 Scottish Government 2013c. Scotland's Future: Your Guide to an Independent Scotland. Edinburgh: Scottish Government.

106 Scottish Government 2014f. Scotland's Economy: the case for independence. Edinburgh: Scottish Government.

5. Proposals

These proposals are split into two broad groups. The first, largely drawing on section 4 are concerned with the viability of the current education and training policy and how that might be improved. The second, relying on section 3, considers the need for an explicit industrial strategy and to rethink the nature of employer-employee relations.

The final section considers what changes might be made if the current devolution settlement is retained, what types of powers would be needed in the case of 'devo-max' and the implications of independence.

5.1 Education

The evidence presented in table 3-7, and from employer surveys¹⁰⁷, gives support to the view that broadly Scotland's education system is working and producing well qualified school leavers and graduates. There are problems, identified in other Scotland Institute reports, such as the correlation between attainment and social class¹⁰⁸, starting at the pre-school stage¹⁰⁹, that mean those from poor backgrounds are constrained in their likely attainment. Equally, there is clear evidence that those from ethnic minorities, or with disabilities, are less likely to find work regardless of their education attainment¹¹⁰. However, those who exit with appropriate awards are well suited to contribute to the development of Scotland's economy.

As such, the challenge to Scotland's education system is the need to remove discrimination on the basis of social background in terms of educational attainment and opportunities.

However, in terms of post-24 access to learning and skills, and provision for those who leave school early there are significant problems. One is that the SNP has tended to underplay the value of FE colleges which can provide opportunities for individuals who have underperformed at school¹¹¹ or simply wish to retrain or

107 Davies, B., Gore, K., Shury, J., Vivian, D. & Winterbotham, M. 2012. UK Commission's Employer Skills Survey 2011: UK Results. London: IFF Research.

108 Cook, R. 2012a. The Personal, Social and Economic costs of Social Exclusion in Scotland. Glasgow: Scotland Institute.

109 Ibrahim, A. 2014. Early Start 4 Scotland. Glasgow: The Scotland Institute.

110 Cook, R. 2012b. Social Exclusion in Scotland. Glasgow: Scotland Institute.

111 Hermannsson, K., Keep, E., Lecca, P., Peat, J., Sutton, L. & Swales, J. K. 2012. Further Education, the Scottish Labour Market and the Wider Economy. Edinburgh: David Hume Institute.

refresh skills that do not require a higher education qualification. The advantage of using the FE sector is that it has a network of colleges across Scotland, it is well used to supporting their local economy and, in using the SCQF framework, it can help individuals build specific aspects of learning into broader qualifications.

The second set of recommendations concern the field of support for those who are out of work. At the moment, this is reserved to Westminster and administered by the DWP. Specific proposals include:

1. Regardless of the outcome in September 2014, the approach to the provision of training and support for those out of work should become the responsibility of the Scottish Parliament;
2. On this basis, there needs to be a clear focus on the acquisition of independently assessed skills, using the current SCQF framework;
3. Opportunities for work experience should be structured to avoid the problem of poor quality placements and labour substitution that is a product of the DWP's approach¹¹²;
4. Specifically, it is suggested that all work experience for those out of work be structured using the *Certificate of Work Readiness*¹¹³ or similar approach;
5. All work experience opportunities should be paid, by the employer, at least at the minimum wage and ideally at the living wage;
6. Different people need to acquire or renew their skills at different stages in their working life. At the moment, the DWP ignores this, seeing all those who are unemployed as needing low level skills training;
7. There is a need to identify how to structure child care, especially for children of school age, to ease the return to work of their parents and to reflect the potential variation in working hours.

The third area is the question of in-work training. The current approach is more or less to offer subsidies to either individuals or employers to create some opportunities exist. In terms of direct state support, it is unlikely that more can be done in this respect so the most effective approach is to use public sector procurement to influence behaviour. In particular:

112 European Commission 2012a. Apprenticeship supply in the Member States of the European Union. Brussels: European Commission.

113 SQA. 2014b. *Certificate of Work Readiness* [Online]. Edinburgh: SQA. Available: <http://www.sqa.org.uk/sqa/64560.html> [Accessed 3 July 2014].

1. Consider building in a minimum commitment to training and development for all bodies directly funded by the Scottish Government, including Local Authorities, the NHS, various funded 'National Bodies'¹¹⁴, as well as central government;
2. Use public sector procurement to prevent the use of zero hours contracts, and to promote the living wage, and also to require private sector employers to offer a minimum level of training for all their staff;
3. Finally, if any company is in receipt of funds derived from central government, they should be required to offer a minimum level of training and development.

■ 5.2 Work

The issue of training and development for those either in work or out of work has been noted above. However, drawing on the data in section 3, there is a need to think about what type of employment will best suit the needs of Scotland.

■ 5.2.1 Industrial Policy

The concept of industrial policy has been disregarded by most UK governments since 1979 on the grounds it represents 'state interference in the market'¹¹⁵. In reality, all UK Governments since 1979 (and before) have followed an industrial policy, in effect to favour the interests of the City of London over the needs of the UK's manufacturing base¹¹⁶.

If Scotland is to address the productivity problem, an active industrial policy is essential. As is clear from the analysis in section 3, certain areas, that have seen substantial growth in employment, are plagued by low wages and low productivity. Some improvements are possible (and this is addressed below) but essentially there needs to be a deliberate shift of approach from sectors with low productivity to those that have higher productivity.

114 Scottish Government. 2014d. *National Public Bodies Directory* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/Topics/Government/public-bodies/about/Bodies> [Accessed 10 April 2014].

115 Franklin, P. 8 January 2014. Industrial policy is back, but watch out for the bad ideas that come with it. Available from: <http://www.conservativehome.com/the-deep-end/2014/01/industrial-policy-is-back-but-watch-out-for-the-bad-ideas-that-come-with-it.html> [Accessed 26 June 2014].

116 Davis, A., Offenbach, D., Stevens, R. & Grant, N. 2013. *Takeovers and the Public Interest* London: Policy Network.

At the moment the Scottish Government has identified a number of ‘key areas’¹¹⁷ and manufacturing is missing from this list. However, even recently, Scotland has lost 150,000 jobs in manufacturing, yet it is still a major employer, offering relatively high wages and with a rate of productivity that means it could be the basis for overall productivity growth in the Scottish economy. Overall:

1. There is a need to promote and support the Scottish Manufacturing sector in order to both increase employment and productivity;
2. The ICT sector has relatively low productivity and some reasons include a focus away from programming towards software usage. This sector needs to be supported in moving towards the higher technology and more demanding applications;
3. Construction, Life Sciences and the Creative Industries all have productivity rates at around 75% of the Scottish average. Construction has the capacity to expand in terms of the workforce, but there is a need to ensure this is matched by a commitment to training;
4. Tourism and Retail have productivity rates at 25% of the Scottish average but have become large employers. Retail is characterised by direct customer interaction (almost 67% of those employed) and tourism (which includes catering) has 40% of its employees in the most basic of work¹¹⁸. Both sectors are marked by high labour turnover. At the moment, most employers are mainly motivated by cost minimisation rather than developing a well skilled, committed workforce. This feeds into a perception that such jobs are lacking prospects and are something the people feel forced into. For both sectors, a key aspect is to use the existing structure of awards and training to address the view that such jobs are low paid and unskilled;
5. In addition, there is a need for a strong regional element. Different regions across Scotland face very different challenges and it is essential that local authorities have substantial flexibility to adapt policy to meet local needs.

117 Scottish Government. 2014g. *Scottish Annual Business Statistics* [Online]. Edinburgh: Scottish Government. Available: <http://www.scotland.gov.uk/Topics/Statistics/Browse/Business/SABS/Sectors> [Accessed 10 June 2014], Scottish Government 2014f. *Scotland’s Economy: the case for independence*. Edinburgh: Scottish Government.

118 Devins, D., Bickerstaffe, T., Mitchell, B. & Halliday, S. 2014. *Improving Progression in low-paid, low-skilled retail, catering and care jobs*. York: Joseph Rowntree Foundation.

In effect, if the Scottish Government is serious about improving productivity, then it needs to consider both what type of jobs are needed and how to address the varying productivity issues. As is clear, this varies by sector. Tourism, as one example, is a major employer in Scotland, and one that could easily expand and is very important in some areas of Scotland. In that case, the challenge is to work with the sector to improve commitment to training and development and the wages available. On the other hand, areas such as ICT, Construction and Manufacture are potentially major employers and are all fields where investment (both in capital and in training and development) should see gains in productivity. In addition, as part of an overall industrial policy there is a need to address the variation in the type of work across Scotland¹¹⁹.

The Scottish Government has made a start on this analysis but there is a need for it to be more systemic. Areas such as the production of renewable energy offer the means to create expertise not just in the generation of energy but also in linking that energy to the wider economy. Thus, renewable energy is an instance of a sector where expertise can be built up in manufacturing (of the generation equipment), installation and transmission, and to export this expertise globally.

■ 5.2.2 *Issues about the nature of Work*

This leads onto the second batch of recommendations, which are about the nature of employment. Scotland's employers receive substantial levels of state support. This is both indirect in the form of an educated workforce and a legal, physical and social infrastructure within which they work and direct in the form of subsidies to train their workforce as well as the state stepping in to alleviate the worst problems caused by low pay.

Given the current legal framework, there is relatively little the Scottish Government can do directly about the problems caused by insecure employment, temporary contracts, zero-hours contracts, low pay and lack of training or career options. The exception is to use its position as a purchaser of goods and services from the private sector and as a large employer itself (around 520,000 people)¹²⁰. This allows it to set some standards about security of work, wage level, access to training and opportunity for progression. It is the lack of these that traps too many people into low pay, low skilled work¹²¹.

119 NIACE 2014. Manifesto: General Election 2015. Leicester: NIACE.

120 Joseph Rowntree Foundation 2013. Addressing Poverty Through Local Governance. York: Joseph Rowntree Foundation.

121 Duffy, J., Gall, G. & Mather, J. 2013. Working Together: A vision for industrial democracy in a

5.3 Independence, Devo-Max or the Status Quo?

This paper has identified five parts to addressing the issue of how to improve productivity in Scotland:

- Education, especially the links between secondary and tertiary education and employment;
- Support for those out of work;
- Education and training for those in work;
- The need for a structured industrial strategy;
- The need to consider how to improve working conditions.

Of these, the first is wholly the responsibility of the Scottish Government even under the current structures. By contrast, the second is reserved to the DWP. For the final three, the situation is more complex. Some aspects are already in the power of the Scottish Government, in that it can use its position both as an employer and a purchaser of goods and services to influence behaviour. Equally, the Scottish Government has already identified ‘priority areas’ for state support and investment. The difference is this report argues this should be done on the basis of the ability of a sector to both provide substantial growth in employment and to contribute to raising the average levels of productivity in Scotland.

However, while the Scottish Government has some freedom to develop policy the key elements are reserved to Westminster. While the Scottish economy in many ways mirrors that of the rest of the UK, this paper, and other analyses, indicate there is a specifically Scottish dimension to both the advantages and problems. At the least, to address the issues raised in this paper would mean that welfare (and thus policy around assisting those who are out of work) should be fully devolved and that the UK needs a regional approach to industrial policy, reversing the narrow focus on the needs of the City of London’s financial sector that has dominated UK policy since the 1970s.

Common Weal economy. Glasgow: The Jimmy Reid Foundation, Goulden, C. 2010. Cycles of poverty, unemployment and low pay. York: Joseph Rowntree Foundation, Schmuecker, K. 2014. Future of the UK Labour Market. York: Joseph Rowntree Foundation.

6. Conclusion

If this report has a single simple conclusion it is that Scotland has the workforce it needs (chapter four) but not the work it needs (chapter three). This is not to say that everything in connection with either education-work links, or post-education training and development is as good as it can be, but there is reasonable evidence to suggest the recent drop in productivity is not a consequence of a less well trained workforce.

The problem lies in two related areas – the lack of work, and the nature of that work. The recession has seen an increase in unemployment and a large increase in under-employment (and of insecure employment) allied to which there has been a major drop in investment as firms hoard cash and banks have failed to support the productive economy. Thus a critical part of an industrial strategy has to be the creation of the financial institutions that will support these developments. Access to capital, and making productive use of the current reserves built up by large companies, are both key requirements.

The nature of work is important. Some problems stem from treating employees as costs, and creating working contracts where all the benefits accrue to the employer and none to the employee. Short term, insecure work is almost never well paid productive work. The second issue is that the creation of jobs in areas such as retail or tourism is no substitute for the loss of work in areas such as manufacturing.

Thus if the Scottish Government is to realise its, seemingly modest, aim of increasing productivity by 5.2% between 2017 and 2029, then it needs to start from an industrial strategy that supports the creation of well paid, productive work. It also needs to consider how to improve productivity in areas such as tourism and leisure. It should be stressed, that regardless of the vote in September 2014 about independence, addressing this challenge should be a major focus.

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- Davis, A., Offenbach, D., Stevens, R. & Grant, N. 2013. *Takeovers and the Public Interest* London: Policy Network.
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