

# Futureskills Scotland

## Skills in Context

A Briefing prepared by the  
Centre for Enterprise



Highlands & Islands  
ENTERPRISE



Scottish Enterprise

## CONTENTS

FOREWORD	3
INTRODUCTION	4
1. THE MAGICIAN'S HAND	5
2. HOW HISTORIC IS HISTORIC?	11
3. THE VALUE OF SKILLS FORECASTING?	17
4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?	21
5. CONCLUSION	27
END NOTES	29

### FOREWORD

The Centre for Enterprise (CFE) produced **Skills in Context 1.0**<sup>1</sup> to stimulate a conversation around public policy in the area of skills, enterprise and economic development. When **Skills in Context 1.0** was drawn to our attention, we were impressed by the extent of the research it drew upon, its logical approach and its challenging, but tactful, presentation. We felt that the issues it raised and the conversations it sought to stimulate should be discussed in a Scottish context. Our Expert Briefing series provides the vehicle to share and debate this work.

We asked Michael Davis and his colleagues from CFE to update **Skills in Context** in two ways; to incorporate the outcomes of the Leitch Review and to include more Scottish-specific evidence.

CFE's paper starts with a restatement of the importance of skills. Skills matter. But the focus quickly moves to the discussion on **'How much do skills matter and where do they matter most?'**

The paper reviews the importance of skills in terms of explaining the moderate productivity performance of the UK. A number of crucial points are made along the way:

- **productivity performance is not determined by skills level alone. Indeed, much of the UK's productivity gap with America, France and Germany is for reasons other than skills**
- **skills are often a lower-order concern in company decision-making, behind product market strategy and the organisation of the production process**
- **a purely demand-led approach might not lead to the Government's stated desire for a highly skilled workforce. Some employers can choose a low-skill route which is profitable for their business**

The paper takes a pragmatic approach. The demand for improved skills is driven by the existence of an economic opportunity or the fulfilment of a personal or social goal. In Scotland, we are well-placed to understand these drivers, as the Scottish Executive's **Lifelong Learning Strategy** highlights that learning and skills have value outside the economic arena.

With reference to the recent UK policy debate on skills, the point is made that taking the economic evidence out of context can lead to oversimplified policy recommendations. CFE's technique of **'fishing in the footnotes'** reveals how simplified headlines in the skills debate mask the complexities and nuances of the underlying analysis. In summary, overly-simplistic headlines and any resultant policies can be counter-productive as they seem far-removed from our understanding of how the labour market works.

We need to adopt a forward-looking approach. Yet looking to the future is a difficult business. The perils of forecasting are spelled out in the paper and Futureskills can empathise with these, perhaps more than most. The future is uncertain and to pretend otherwise in public policy risks much. But this must not be an excuse for inaction. The paper concludes that we cannot plan in detail for an uncertain future, but we can ensure that any system we design is inherently adaptive to changing conditions.

So, what might we do? The paper concludes with a restatement of the importance of skills in personal, social and economic terms. It suggests that any strategy for skills needs to ensure that the supply of skills is capable of adapting and responding to demand; it also highlights the importance of creating the conditions which encourage employers to demand more highly-skilled workers.

Michael and his colleagues have produced a challenging analysis, placing skills in context. The paper is a strong stimulus to the ongoing debate in Scotland, suitably referenced to allow interested readers to delve further into the source.

The paper should be warmly welcomed by all those with an interest in a thorough and well-evidenced debate on Scotland's skills and labour market performance.

Futureskills Scotland  
March 2007

### INTRODUCTION

The publication of the Final Report of the Leitch Review of Skills has once again provided an opportunity for the UK Government to proclaim its belief in the central importance of skills to the UK economy.

Every year since 1998, with one exception, the Government has produced a public policy position on skills. 1998 saw the DfEE Learning Age Green Paper<sup>2</sup>, leading to the establishment of the National Skills Taskforce, which in turn published three reports, the final one in 2000<sup>3</sup>. After a short pause, 2001 and 2002 saw the publication of two reports from the Performance and Innovation Unit (PIU) of the Cabinet office on workforce development<sup>4</sup>. In 2003 we had the Government's Skills Strategy; in 2004, HM Treasury's Skills in the Global Economy; 2005 delivered a Skills White Paper and Interim Leitch Review and finally in 2006, the Leitch Review of Skills<sup>5</sup>. To quote from this latest iteration:

**"In the 21st Century, our natural resource is our people - and their potential is both untapped and vast. Skills will unlock that potential. The prize for our country will be enormous - higher productivity, the creation of wealth and social justice...The alternative? Without increased skills, we would condemn ourselves to a lingering decline in competitiveness, diminishing economic growth and a bleaker future for all<sup>6</sup>."**

We agree. So as before, the starting point for the **conversation** - the central importance of skills to UK prosperity, both social and economic - is taken as a given. Yet our acceptance of this basic tenet can sometimes lead us to assume too much. Perhaps paradoxically, strategies based on this premise can sometimes misalign with the economic and business realities that they are intended to serve.

Few would disagree with a statement that skills matter, but this simple assertion of this doesn't take us very far. The more interesting questions to ask are: how much do skills matter and where do they matter the most? Like many good things that we **should** do - taking regular exercise, recycling etc. - in reality any decisions are made relative to other choices that face us each day; everything has an opportunity cost. Investing more resources in skills has the consequence of investing less in something else. Moreover, the wider contexts in which a skills investment is made - the skill level, industry etc. - further determine the opportunity cost of that investment.

For **Skills in Context 2.0**, we have retained the format of the first conversation, (which was to examine four commonly expressed statements on UK adult skills policy), but revised the content in light of the final report from Lord Leitch and general feedback from readers. Where possible, we have sought to add references in the specific context of the Scottish economy. As before, the intention of this playful exercise is not to devalue the contribution of skills, but rather to increase our understanding of how skills policy can be aligned to our strategies for ensuring current and future economic prosperity.

## 1. THE MAGICIAN'S HAND

### 1. THE MAGICIAN'S HAND

#### Productivity to skills to qualifications – just like that!

1.1 The original inspiration for *Skills in Context* came from the following quote from the 2003 Skills Strategy:

**“our skill gaps remain stubbornly persistent. Output per hour worked is around 25 per cent in the US and Germany and over 30 per cent higher in France than in the UK. While we compare well at higher education level, our percentage of the workforce qualified to intermediate skill levels (apprenticeship, skilled craft and technician level) is low: 28 per cent in the UK compared with 51 per cent in France and 65 per cent in Germany.”**

1.2 It is the classic example of how skills policy seamlessly links a concern for our relatively poor labour productivity performance to skills levels and then to differences in qualification rates – leaving the reader with the impression that one must cause the other. Like a *trompe l’oeil*, it is easy to assume that a lack of skills causes low productivity and that consequently, if we improve the skills base of our workforce, labour productivity will increase. Roll forward to 2004 and the Treasury’s *Skills in the Global Economy* is a little more cautious in its position:

**“A substantial body of evidence shows that a lower level of skills in the UK explains at least part of the gap between productivity here and elsewhere. For example, one study suggests that 12% of the gap with France and 20% of the gap with Germany is a result of the UK having a relatively less skilled workforce<sup>8</sup>.”**

1.3 The Treasury position is qualified: **“at least part of the gap;”** and it limits the reference to skills rather than the narrower test of qualifications, but once the impression of low productivity as a function of low educational attainment is made, the strategy is a logical conclusion: increase qualification levels to increase productivity.

1.4 Forward again to 2006 and the Leitch Review throws caution to the wind, stating in the Executive Summary:

**“Whereas skills were once a key lever for prosperity and fairness, they are now the key driver. Achieving world class skills is the key to achieving economic success and social justice in the new global economy<sup>9</sup>.”**

1.5 This boldness is underpinned by a series of examples, such as the assertion that investing in basic skills delivers returns **“equivalent to more than £4 for every £1 invested<sup>10</sup>”**. Case closed? Well maybe not – this line of argument all moves just a bit too fast, leaving at least two points worthy of further exploration. The first, (which we’ll pick up in chapter 2), is the ease with which skills and qualifications are used so interchangeably. The second is to clarify what is meant by **“at least part of the gap”**? It matters because this is the key to understanding the context of skills and its potential contribution to the UK economy. Finally, and just for fun, a rate of return of £4 to £1 appears very impressive, so impressive in fact that we will return to explore this claim in more detail at the end of the chapter.

#### WHAT MAKES UP 80% OF OUR PRODUCTIVITY GAP?

1.6 The final report from Lord Leitch says that:

**“Evidence shows that around one fifth of the UK’s productivity gap with countries such as France and Germany results from the relatively poor skills of workers in the UK – if the UK had similar skill levels as these countries, its national income would be significantly higher<sup>11</sup>”.**

1.7 So let’s start by tracking down the source of that 20% productivity gap attributable to skills. The Leitch reference and that used in other policy statements comes from work by O’Mahoney and de Boer – the relevant statistics are summarised in the table below.

**TABLE 1**  
**Comparisons of Labour productivity<sup>12</sup>**

Total Economy	US	France	Germany
Labour productivity (Value added per hour worked) Relative levels (UK = 100)	130	129	117
Percentage contribution	%	%	%
Total Capital - of which:	52	80	81
Physical Capital	51	80	81
Skills	1	12	19
Total Factor Productivity	48	8	0
Total	100	100	100

## 1. THE MAGICIAN'S HAND

1.8 Table 1 indicates that in the time that it takes a UK worker to produce 100 widgets, their German counterpart will have produced 117, the French worker 129 and the US worker 130. In explaining the reasons for this difference, skills do have a role - but only as one element. The more interesting stories are found by exploring the two other variables; investing in capital and total factor productivity.

### First, Investing in Capital

1.9 One variable stands above the others in explaining our productivity gap with Europe. Comparing our performance to that of France and Germany, our smaller stock of physical capital accounts for 80 per cent of the difference in productivity. A big part of this capital deficit is explained by an under-investment in public capital, such as transport infrastructure, houses and hospitals<sup>13</sup>. In other words, whilst the UK worker toils up and down the country on congested roads and delayed trains, the continental worker enjoys the speed and reliability of the autobahn and TGV. Of course, any stressed out sales rep could have told you this, but it is worth stating to make the point that greater investment in skills alone will not close our productivity gap with France and Germany.

### Second, Total Factor Productivity

1.10 Total Factor Productivity is an economist's term to account for what's left over. Imagine you are trying to isolate why the American worker is better than the UK worker. First you deduct the contribution of capital, then skills (both are resources) - and still the American worker is more productive. This residual is what is known as Total Factor Productivity, which relates to how efficiently available resources are deployed. More specifically, this can relate to how well physical capital and skills are used and/or the effectiveness of business and management practices<sup>14</sup>.

1.11 Going back to Table 1, we observe that just over half the gap with the US is attributable to physical capital, with just under half attributable to Total Factor Productivity - only one per cent of our productivity gap with the US is due to skills. If, for example, there are two businesses of the same size, inputs, market opportunities, etc., but one is based in the US and one in the UK, the US business will produce 130 widgets and the UK 100. Half of that difference will be attributable to the US business deploying its resources more effectively.

1.12 This analysis is based on the total economy; comparisons against the market economy make for even more depressing reading - output per hour worked here is almost 40% below that of the US. To quote the economist John Van Reenen:

**“John Doe in the US could take Thursday and Friday off and still produce as much as poor John Bull in the UK toiling away throughout the working week<sup>15</sup>.”**

### Which means that skills come third

1.13 Now of course at a macro level 'skills in context' to a wider productivity agenda is stressed; HM Treasury identifies skills as one of the five drivers of productivity alongside innovation, capital, competition and enterprise<sup>16</sup>. Our observation is that this interdependence of skills is lost the further you move away from literally the executive summary of any policy statement and the closer you get to the operational delivery. It is far too simplistic to assert that investing in skills (or more narrowly) qualifications will yield productivity returns and whilst all Treasury economists would no doubt agree the reality on the ground is somewhat different.

## 1. THE MAGICIAN'S HAND

1.14 This point is reinforced by looking at the qualification profile of Scotland compared to that of the UK as a whole. Leitch tells us that Scotland has a better skills profile than the UK average, with **“both a higher proportion of its working age population (31 per cent) with at least a Level 4 qualification compared with the UK average, and a smaller proportion (28 per cent) with less than a Level 2 qualification<sup>17</sup>.”** The UK averages for these figures are 29 and 35 per cent respectively. Yet despite a better skills profile, the DTI Regional Competitiveness Index shows that Scotland does not enjoy better productivity than the UK as a whole: it has a Gross Value Added figure of £16,944 per head, compared to £18,051 for the UK<sup>18</sup>. Similarly, Canada’s skills profile looks better than the United States’, with over 40 per cent of the workforce with higher level skills<sup>19</sup>, but its GDP per hour worked is only 80 per cent of that of the United States, lower too than the UK at 83 per cent of the US figure<sup>20</sup>. This illustrates the obvious point that productivity performance is not determined by skills levels alone. Simply put, upskilling a workforce without a corresponding improvement in the equipment they use or the markets they service will rarely achieve more than a marginal improvement in overall productivity, and little more in profit for the business. It also underlines the importance of integrating any business intervention for skills firmly within an equivalent offer for business support - and accepting that skills are the junior partner.

1.15 So for the UK to top the international productivity tables, the strategy would be to invest in more physical capital than the Germans and French and improve our leadership, physical capital and entrepreneurial capabilities to get ahead of the Americans - **before** starting on skills. Incidentally, this follows the same order as the strategy of most individual business, as observed by research commissioned by the Department for Education and Skills.

**“Skills are a third or even lower order matter in the decision making of an organisation. First comes a decision as to the nature of the product to be taken to market. Then comes decisions about how the chosen product is to be produced. Only then will employers consider what skills and what mix of skills are needed to facilitate the chosen production process<sup>21</sup>.”**

## THE IMPORTANCE OF LEADERSHIP AND MANAGEMENT

1.16 In **Skills in Context 1.0**, we concluded this chapter by emphasising the importance of leadership and management. Decisions on what markets to compete in, with the requisite product, service, price and specification are made by leaders and managers and the mix of these decisions all impact on the productivity of businesses. A significant part of our productivity gap with the US is a reflection on the relative skills and capabilities of UK leaders and managers. For example, in manufacturing, 10 to 15 per cent of the total factor productivity gap can be explained by the gap in management practices<sup>22</sup>. As Leitch points out, our management practices in manufacturing are ranked behind the USA, Germany and France, and according to the Labour Force Survey, 41 per cent of UK managers hold less than a Level 2 qualification<sup>23</sup>.

1.17 Yet there is nothing intrinsic to the UK environment to **prevent** companies achieving top scores in management practices - it is ultimately the choices made by individual managers that will make the difference<sup>24</sup>. Therefore we were pleased to see the emphasis that the final Leitch Review placed on the importance of leadership and management:

**“Good management is a prerequisite to improving business performance, a key aspect of which is effective use of workforce skills. It is managers in a business that decide on product and service strategies, whether to invest in training and how to deploy the skills of their workers. Improving management skills in the UK has two important effects; it increases the demand for skills and their effective deployment in the workplace, and it improves the overall standards of performance in organisations<sup>25</sup>.”**

1.18 Indeed, leadership and management received far more prominence in the final report than it did in the interim one, although we do have an interest to declare here - CFE provides project support to the DfES/DTI Leadership and Management Advisory Panel and supported their submission to the Leitch Review<sup>26</sup>. That aside, it is to be hoped that the increased profile of leadership and management might underline its role in realising the returns made on investment in workplace skills.

## 1. THE MAGICIAN'S HAND

### JUST FOR FUN...

1.19 Let's look again at that statistic from Leitch claiming that investment in basic skills will bring a return of more than £4 for every £1 invested<sup>27</sup>. By foraging through the footnotes this appears to be based on the cost benefit analysis of improving skills contained in the Interim Leitch Review. This estimates that an investment of £800 million for adults and £200 million for young people in improving levels of basic skills would deliver an average annual return over 15 years of £1.8-2.2 billion for adults and £2.2-2.4 billion for young people<sup>28</sup>. Taken together, this amounts to an average annual return of between £4 billion and £4.6 billion for an annual cost of just £1 billion. This is based on the underlying assumption that productivity and employment will rise if more people achieve Level 1 basic skills, all other things being equal. This statement is problematic for four reasons, as it:

- Assumes a uniform cost of engagement and training for bringing people up to Level 1 standards – probably underestimating the costs of engagement;
- Probably over-estimates the economic effects (in productivity and increased employment) that educating these people will bring. Look at the figures for young people: an annual benefit of £2.2-£2.4 billion for an annual cost of £200 million<sup>29</sup> – this is almost as much as the projected benefits for implementing all of the recommendations in Leitch (average of £2.5 billion annually over 30 years)<sup>30</sup>.
- Effectively counts some of the people twice as educating young people would make the stock of adults without Level 1 smaller. They calculate the effects of investment in adult and young people's basic skills in isolation from each other, and then add them together at the end.
- Assumes that 100% of the increase in qualifications at this level will be taken up as productivity gains. What that means in practice is that the unqualified worker with said new qualification certificate will be paid a higher wage and the business will charge a higher price, which the consumer is prepared to pay.

1.20 Again, the point is not that skills aren't important, but rather that using overly simplistic headlines can actually undermine the value that skills can play. Why? Because the policy statements come across both as naive and far removed from the day to day environment in which business decisions are made, which is an obvious barrier to employer engagement.

### Encore

1.21 Well if you insist, two more playful forays through the footnotes of skills and productivity presentation:

- In the final Leitch Review it is stated that "Over three fifths of employers who have had dealings with their SSC think that SSCs have had a positive impact on skills development in their sector<sup>31</sup>." This sounds like quite a positive statement, but if we look at the source of the quote, a Skills for Business Network survey of employers, we find that the percentage of employers who were aware of their SSC at all stands at only 35 per cent, of whom only nine per cent had had any dealings with an SSC in the last 12 months<sup>32</sup>. This works out at around three per cent of all employers. Thus, the initial statement in Leitch looks much less impressive - three fifths of the three per cent of employers who have had dealings with their SSC in the last 12 months think that they have had a positive impact on skills development in their sector - this works out at less than two per cent of employers.
- The Executive Summary of the Treasury's productivity paper of March 2006 congratulates the UK's progress in being "the only country in the G7 to have maintained the impressive productivity pace of the US (the gap was 30 percentage points and is now 27)<sup>33</sup>." This implies to the reader that the gap is indeed narrowing, but later in the body of the report it states that the Government "only defines changes in international productivity gaps of five or more percentage points relative to the UK level as significant<sup>34</sup>" and it admits that the narrowing of the gap with the US can only be made "tentatively"<sup>35</sup>.

## 1. THE MAGICIAN'S HAND

### THE VALUE OF FISHING IN THE FOOTNOTES

1.22 This chapter has sought to highlight the sleight of hand often used when making the case for increased investment in skills. Indeed, you could be forgiven for thinking that the solution to the UK's famous productivity gap lies solely in improving our skills base. In fairness, Government does recognise that skills alone cannot solve our problems - skills are identified as one of five key drivers of productivity. Yet there are occasions when the impact of skills can be oversold, for example when Leitch refers to skills as "the key driver" of prosperity and fairness<sup>36</sup> with barely a mention of the other four<sup>37</sup>.

1.23 Skills policy cannot be divorced from a wider strategy for economic development. After all, capital investment and total factor productivity are responsible for a higher proportion of our productivity gap than skills - 99% of the gap with the US (see Table 1). We agree with John Philpott of CIPD, when he emphasises the importance of effective people management; to be used effectively, skills must be allied with other people management practices<sup>38</sup>.

**"An increased supply of skills is a necessary, but not sufficient condition, for higher productivity<sup>39</sup>."**

1.24 And Prof. Ewart Keep who says:

**"If raising demand for skills is a policy goal, policy needs to find ways to encourage more employers to raise their game in terms of their product market strategies<sup>40</sup>."**

#### What does this mean in practice?

1.25 Of course, it's easy to snipe from the sidelines. So based on what we've learnt in preparing this chapter, we asked ourselves what we would do if given the HM Treasury pen for a day. Here are two actions just for starters:

1.26 First, an acceptance that what fundamentally drives the demand for skills is the existence of an economic opportunity or the fulfilment of a personal or social goal. The Lifelong Learning Strategy for Scotland highlights how learning can contribute to the development of society "through the achievement of other social goals such as civic participation, sustainable development, improved health and wellbeing, reduced crime and greater social cohesion<sup>41</sup>". This is all too often overlooked. Decisions to invest in skills are derived from an initial opportunity or goal and then sustained, increased or decreased in response to an ongoing assessment of that opportunity. The proposition of derived demand was used extensively by the Performance Innovation Unit's reports on workforce development, entitled **In Demand**, but has subsequently been lost without trace<sup>42</sup>.

1.27 A rough metaphor would be to imagine moving through time on the x-axis and current level of investment in skills on the y-axis. In the context of the employer's overall strategy what we should be looking to understand are those that are investing in skills above the average for their market (because of threat or opportunity); those who are investing in line (it's what is expected) and those that are either consciously or sub-consciously investing below trend. Policy should then be concerned with considering interventions at a market and employer level and asking:

- **Market level:** is the market as a whole investing in skills above or below the average for an economy and what needs to change in the market to change the rate of investment? (greater competition, regulation, etc.)
- **Employer level:** what is the intervention which would most effectively encourage an employer to change its strategy to one that pursues the optimum path of high value add? (greater support for leaders and managers, product offers for high performance working, etc.)

## 1. THE MAGICIAN'S HAND

- 1.28 In both instances the emphasis would be on evaluating skills decisions in the context of the economic environment in which decisions to invest or not invest are made<sup>43</sup>. It means that regional and sectoral strategies rather than slavishly reporting against qualification levels, skills gap etc, would see to establish what the likely changes in economic conditions which would consequently change the appetite of a sector/region for or potentially against a greater investment in skills. It is a subtle but substantive change to how the current debate is framed.
- 1.29 Second, businesses are not automatons responding slavishly to external stimuli - large or small, they have leaders and managers interpreting the external and internal environment and then making decisions. Notwithstanding our declared interest, it continues to be an area of public policy concern. As the Leadership and Management Advisory Panel noted in their submission:
- “The future of how we do business, create wealth and lead institutions which deliver public services is not a uniform horizon that we all approach in unison. There is leadership and management practice in the UK today that is the future for many; depressingly there is also leadership and management practice out there that persists from the past<sup>44</sup>”.**
- 1.30 The policy objective is to understand how we accelerate the dissemination of leading management practice to all organisations. This would involve a critical assessment of providers of leadership and management training - particularly at further and higher education level - and asking if they actually accelerate or inhibit this process. The recommendation of the Leadership and Management Advisory Panel is to use the practices of leading employers to accelerate change by opening up their own leadership programmes to other employers.
- 1.31 Moreover the Panel is also keen to see a more critical examination of how leadership and management development opportunities are ‘delivered’; particularly to small and medium sized enterprises. Their early observation is that often management qualifications are literally ‘demonised’ as irrelevant to the needs of owner managers when in fact that conclusion is normally to do with how the development is delivered. Owner manager preferences for coaching, peer/action based learning, case study learning are not incompatible with qualifications. It would however require tutors and providers to reflect quite critically on how they do what they do, particularly once you get out of the sphere of the leading business schools. In sum how can you bring the teaching innovation and practice of leading business schools into your local college? This is something that we think is worth a further conversation.

## 2. HOW HISTORIC IS HISTORIC?

### 2. HOW HISTORIC IS HISTORIC?

#### OUR HISTORIC SKILLS DEFICIT

2.1 As we identified in *Skills in Context 1.0*, the headline comparisons for qualification attainment do not make for great reading:

**TABLE 2**  
Qualification at Level 2 and above - total workforce<sup>45</sup>

Qualified at level 2 and above	% Total workforce
UK	64
France	77
Germany	85
Singapore	67
USA	73

2.2 Given a total workforce of nearly 28 million and a cohort of new entrants each year of approximately 314,000, it seems reasonable enough for the 2005 Skills White Paper to find that:

**“the weaknesses in our national skills performance have been well rehearsed. They go back generations, reflecting some powerful economic and social factors<sup>46</sup>.”**

2.3 What do we mean by generations? Well at least 60 years according to one study:

**“After World War II, however, the German lead in the provision of intermediate level vocational training became substantial, with the spread of apprenticeship into services. Given the importance of developments within services for the German overtaking of Britain in terms of aggregate labour productivity during the post-World War II period, this German lead in the provision of intermediate level vocational skills in services is of major significance<sup>47</sup>.”**

2.4 The Leitch Review continues this theme, but is more specific in identifying the source of the problem:

**“The UK’s skills base has been historically weak, the product of longstanding failures in the education and training system...the UK’s skills base remains mediocre by international standards<sup>48</sup>.”**

2.5 Qualification levels vary considerably across the UK, with Scotland ahead of the UK average in the number of the working age population with a Level 4 qualification (31% vs. 29%) and a smaller proportion of those without a Level 2 (28% vs. 35%). Yet the unfavourable international comparisons presented by Leitch are largely based on the qualification levels of the UK’s adult population (25 to state pension age). The performance of younger people presents us with a less gloomy picture - there is much to suggest that our qualification deficit is historic and improving rather than historic and continuing.

**TABLE 3**  
Qualification at Level 2 and above - total workforce<sup>49</sup>

Qualified at level 2 and above	% 19-21 Total	% 25-28 Total
UK	72	73
France	84	86
Germany	68	85
Singapore	83	82
USA	66	73

2.6 As a consequence, the indicators are toward a stock of low qualifications rather than a continual flow, though there is still clearly a leak of newly unqualified people into the labour market. For example, in England in Spring 2006, 22.5 per cent of 55-64 year olds and 17.6 per cent of 50-54 year olds had no qualifications, compared with 7.6 per cent of 20-24 year olds and 7.4 per cent of 25-29 year olds<sup>50</sup>. These underlying figures do not sit easily with our current skills policy, which focuses heavily on younger people (not that this is necessarily irrational - returns on human capital investment in a 20 year old can potentially be felt for 40 years or more).

## 2. HOW HISTORIC IS HISTORIC?

2.7 In December 2006, the Learning and Skills Council announced their 2006/07 budget allocations for further education. Whilst there is an increase of 8.6 per cent over the previous year for 16-18 year olds, and 2.6 per cent for Additional Learner Support, there is only a 0.3 per cent increase in 19+ funding, following on from a cut the previous year<sup>51</sup>. Yet the qualification gap between younger and older workers is actually widening. In 2004, 79% of 25 to 29 year olds were qualified to Level 2 or higher, compared to 67% of adults aged over 50. In recent years there has been more improvement amongst younger adults than older adults and so the gap has widened from nearly 8 percentage points in 1997 to nearly 13 percentage points in 2004<sup>52</sup>. So as concluded by the Department for Trade and Industry in 2003:

**“The UK’s labour force problem appears to be mainly a problem of the current stock of employees; in terms of inflows from recent graduates the UK does not lag its European competitors or the United States<sup>53</sup>.”**

2.8 Does it matter? Well, in 1995 the majority of the working age population was under 40. By 2015, that position will be reversed, with around 55% of the working age population over 40<sup>54</sup>. So yes, it does matter; those without qualifications will probably be in the workforce for longer than they expected and the demographics will continue to increase the average age of the workforce. In its recent review of the Scottish labour market, Futureskills Scotland concluded that:

**“The principal issue will be around the ageing of the workforce. In the longer-term, there will be fewer young people in the workforce. The proportion of working-age people from older age groups will increase over the next two decades<sup>55</sup>.”**

2.9 Leitch outlines the key targets set by the Government and Devolved Administrations to improve skills in the UK. The targets set are stretching, for example, a reduction by 40% of the number of adults in the workforce that lack a Level 2 or equivalent qualification by 2010. The report continues:

**“If all targets are met and are combined with improvements brought about as increasingly well-qualified young people flow into the adult population, the UK’s qualification profile will improve significantly<sup>56</sup>.”**

2.10 In view of our historic stock of low qualifications, this would appear to be a very big “if”. But before we man the barricades and start to demand increases in adult funding, is the historic qualification deficit not prompting other questions? In particular:

- Does ‘unqualified’ equate to ‘unskilled’? and
- Is our historic deficit in qualifications not the result of a demand-led system?

### DOES ‘UNQUALIFIED’ EQUATE TO ‘UNSKILLED’?

2.11 There is a whole literature exploring the extent to which qualifications are a fair approximation of skills. This is accepted by Leitch:

**“There is no perfect measure of skills. The most common measures of skills are qualifications, although it is possible to have skills without having qualifications<sup>57</sup>.”**

2.12 But if qualifications are taken as a fair approximation of skills, is the opposite true? Does the absence of a qualification make an employee unskilled? Whilst evidence of this is harder to come by - since the question simply isn’t asked - we can consider it another way.

2.13 For the past 10 years, unemployment has been in steady decline, the UK now has one of the highest employment rates in the G7 at almost 75 per cent. In 2006, the employment rate in Scotland was higher than the rest of the UK for the first time in a decade. At the same time, Leitch tells us that skills are **“a key determinant of employment”** and that a third of 25-64 year olds in the UK lack a Level 2 qualification<sup>58</sup>, double the proportions of the US and Germany. Yet it would appear that our relative qualification deficit has not prevented UK workers from finding employment in greater numbers than their counterparts in countries with a larger qualification base.

## 2. HOW HISTORIC IS HISTORIC?

- 2.14 So does the qualification deficit we have with our international competitors really matter? Possibly not as much as we think. The 2006 Employers Skills Survey<sup>59</sup>, shows that the proportion of employers affected by skills gaps (which is where employers define employees to be in some way not proficient in their job) has continued to decrease, as it has every year since 2001. Although skills gaps affect 16 per cent of employers, this represents about only about 6 per cent of employees and is substantially less attention grabbing than the 1 in 5 workplaces reporting skills gaps that was used in the 2004 Employer Skills Survey<sup>60</sup>.
- 2.15 Moreover, this represents a fall from nine per cent in 2001, and secondly, this is considerably less than the third of adults Leitch tells us have no or low qualifications<sup>61</sup>.

### Playing with six per cent (nine per cent for Scotland)<sup>62</sup>

- 2.16 Rather than saying that six per cent of the workforce aren't proficient in their jobs, you could start by saying that at any one point in time in the UK workforce, with the constant flow of new and leaving workers, people changing jobs etc, we have 94 per cent proficiency and that is pretty good. Indeed, the number of people starting new jobs would account for a significant proportion of skills gaps - whether they are young people entering the labour market, people rejoining after periods of economic inactivity or people changing jobs. In November 2006, some 21.55 million people were in full-time employment in the UK, with 7.48 million in part-time employment<sup>63</sup>. One estimate puts the number of job vacancies due to workers leaving the labour market due to temporary and permanent retirement and mortality at just under 11 million over ten years<sup>64</sup>, so 1.1 million on average annually - this is nearly four per cent of the workforce. Assuming these jobs are filled by less experienced people, it would appear that a certain level of skills gaps is unavoidable. Indeed, as Futureskills Scotland caveat in their reporting of skills gaps:
- “most skill gaps - around two-thirds - result because the employee has not been in the job long enough and/or because they have not yet completed their training. These ‘transitory’ skill gaps are likely to close as the employees gain more experience or complete their training<sup>65</sup>.”**
- 2.17 Of course six per cent of the workforce not proficient in their job is still a significant figure, but it is important to note that these are purely employers' perceptions of skill gaps. It could be that these six per cent are skilled but demotivated, skilled but poorly deployed. Alternatively it could be an understatement in that the management of an organisation reports individuals to be proficient when another more skilled manager would conclude otherwise. Indeed you could then hypothesise that the existence of a level of skills gaps is a healthy indicator; in that you have leaders and managers constantly challenging how their business works within a market that is continually innovating.
- 2.18 From a different perspective, the six per cent could simply be a result of that being the best that employers can buy for the wages that they choose or that their marketplace forces them to offer. This is very important as all of the employer surveys of this kind lack a very important balancing perspective - that of price. Current surveys make no allowance for the employer who reports a skills gap which is actually the result of poor pay and conditions, perceptions of the sector, poor management and so on. Some so-called skills gaps could in fact have more to do with the motivation of an employee. One survey of employees found that the key influences on the effort they put into a job include, in order of importance, the clients or customers, fellow workers, a supervisor or boss, reports and appraisals and pay incentives<sup>66</sup>. Ensuring employees are well motivated may well help to reduce unnecessary underperformance.

## 2. HOW HISTORIC IS HISTORIC?

### Why does it matter to know if 'unqualified' equates to unskilled?

2.19 This matters, because presently one of the primary goals of skills policy in England is to increase the number of adults that attain their first Level 2 qualification (as mentioned earlier, the target is to reduce the number of adults without a Level 2 by 40 per cent). So we must be clear about what this is buying. Is it a validation of the skills and experiences that these individuals already have? Or is it a genuine uplifting of their skills and an improvement of their future employability prospects? Implicitly, Leitch follows the validation line:

**“Qualifications help people when they need to move job and help employers judge applicants for work. According to a recent survey, the contents of the application form or CV, including qualifications gained, are the most frequently used selection method (66 per cent) by employers<sup>67</sup>.”**

2.20 This is supported by research commissioned by the Department for Work and Pensions that found:

**“there is greater value to an NVQ level 2 undertaken at the employing organisation, suggestive of their role in accrediting current capabilities rather than demonstrating newly gained knowledge<sup>68</sup>.”**

2.21 If the uplifting of skills is reflected through increased earnings then the evidence isn't there to support it for those achieving NVQs at Level 2. Indeed, some studies have actually found **negative** returns at this level<sup>69</sup>. A recent report by the Sector Skills Development Agency concluded that:

**“the evidence seems to suggest that the content - and hence the real value of the qualifications to employers - varies substantially across sectors...We know that qualifications do not equate to skill and perhaps NVQs in some sectors are not providing employers with the skills that employers need<sup>70</sup>.”**

2.22 In reality, we invest public money in Level 2 qualifications not because of their inherent value but as a means to an end. Policy recognises this by concluding:

**“Unlike the returns at Level 2, where the market failures are most acute, employers and individuals benefit directly from training at Level 3<sup>71</sup>.”**

2.23 So the policy line shifts to saying that Level 2 is all about establishing the platform for future progression to Level 3 where real productivity gains are to be found - or at least an expectation that employers will pay. Secretary of State for Education Ruth Kelly told the Learning and Skills Development Agency Summer Conference in June 2005:

**“I described earlier Level 2 as the platform for career and life. That is why we are making it free, giving it priority and making it available in the workplace as well as in the classroom. For Level 3, we will use the framework of the National Employer Training Pilots... to test our approach to working in partnership with employers...We do this with a clear expectation that at this level employers must contribute more to the cost<sup>72</sup>.”**

2.24 But if the value is in the journey to Level 3 rather than the attainment of the Level 2, then why not make this explicit in any publicly funded intervention for raising qualification levels? To do otherwise risks focusing too sharply on the validation of skills and hampering attainment beyond Level 2. This was highlighted by the Adult Learning Inspectorate report on the Employer Training Pilots released in December 2005:

**“Unfortunately, too much emphasis is being placed on an assess-assess-assess approach, accrediting learners' existing skills as a means of gaining an NVQ. In these cases, learners are not sufficiently challenged, and are being denied the opportunity to enhance their existing skills and to learn new ones<sup>73</sup>.”**

In particular...

**“Inflexibility in working towards higher-level NVQs restricts progress. Only provision up to level 2 is fundable, although many learners are capable of achieving at higher levels, even though they may not have a level 2 qualification<sup>74</sup>.”**

## 2. HOW HISTORIC IS HISTORIC?

2.25 So rather than focussing on Level 2 as the priority, why not focus on making Level 2 the priority where it is linked to a continued journey to Level 3? This means looking beyond the two regional Level 3 Train to Gain pilots - it involves shifting the expectations of individuals, employers and providers to concentrate on progression. If the Level 2 agenda is a **productivity** agenda, then the evaluation conversation should be around what adds the greatest value: to invest widely in engaging as many employers as possible in Level 2 workplace qualifications or with the same sum to invest only in those employers who are prepared to match the investment at Level 3?

### IS OUR HISTORIC LACK OF QUALIFICATIONS NOT THE RESULT OF A DEMAND-LED SYSTEM?

2.26 In their 2005 Skills White Paper, the Government outlined the 'Core Strands' of its skills policy. The first of these was:

**"To work in partnership with employers to enhance skills by putting their needs and priorities centre stage in the design and delivery of training for adults. The main vehicle will be the National Employer Training Programme, working alongside business support programmes to raise demand for skills to a more ambitious level<sup>75</sup>."**

2.27 Following on from this in **Agenda for Change**, the Learning and Skills Council declared that:

**"We need to bridge the productivity gap with our international competitors. To do that, colleges - and other training providers - will have to go further in offering employers the opportunity to prepare the skilled employees they require<sup>76</sup>."**

2.28 In part, this is a response to the experience of many employers that find publicly funded training to be unsatisfactory, this is the case as provided by the CBI:

**"Whereas private sector providers achieve high levels of satisfaction, colleges too often fail to meet business need. Over three quarters (76 per cent) of employers were 'very satisfied' or 'satisfied' with the overall responsiveness of private training providers, compared to only 46 per cent for college provision<sup>77</sup>."**

2.29 The picture in Scotland seems better, with 82 per cent of workplaces either 'very satisfied' or 'fairly satisfied' with the level of training provided by FE colleges and only seven per cent dissatisfied - although this is still slightly behind the satisfaction with private training providers at 88 per cent<sup>78</sup>. CBI Scotland instead laments the failure of the system at an earlier stage:

**"Schools are failing to engage meaningfully with too many young people, leaving them far short of being 'work-ready', often with few or no qualifications at all and little to show for the years spent in classrooms. As a consequence, Scottish businesses have to invest an unacceptably high proportion of the £2bn they commit to training annually, on what is effectively remedial education, rather than on sharpening their competitive edge<sup>79</sup>."**

2.30 But isn't the UK's qualification deficit the **result** of a demand-led system? From two perspectives: from individuals who have found that they have got by without a Level 2 qualification, or not been hindered enough to want to do something about it; or from employers who likewise have managed without their employees having these qualifications.

2.31 This is further illustrated by the Department for Work in Pensions research cited earlier:

**"in many sectors employers did not appear to place much emphasis on formal qualifications unless they required graduates, or there were legislative requirements for employees to have, e.g. NVQ level 2<sup>80</sup>."**

2.32 Furthermore:

**"In a survey of over 2,000 British companies, employers reported that of the factors they considered when recruiting, qualifications ranked fifth (66 per cent), behind experience (89 per cent), skills (87 per cent), motivation (86 per cent), and references (73 per cent)<sup>81</sup>."**

## 2. HOW HISTORIC IS HISTORIC?

2.33 Yet employers certainly invest in training, the same CBI survey found that 98% of employers provide job specific training to their staff<sup>82</sup>, and more modestly, and perhaps more robustly, the 2005 National Employers Skills Survey found that two-thirds of employers had provided training to their employees in the last 12 months<sup>83</sup>. The issue here is that this level of employer commitment has not, *vis-à-vis* other countries, been significant enough to make up for the historic stock of low **qualifications** in the adult workforce. In part this reverts back to the previous conversation as to whether ‘unqualified’ translates to ‘unskilled’, but in this context what we are seeking to highlight is that a demand-led approach might not itself result in the attainment of the nation’s aspirations for a highly skilled (or rather, qualified) workforce.

### GETTING TO THE PUNCH LINE

2.34 At the point of interface between provider and employer, current policy advocates raising the demand for **skills** but devotes the majority of the funding to providing **qualifications**. Certainly, further reform is required to make qualifications a better proxy for skills; Leitch recommends that Sector Skills Councils be given a clearer remit to drive this process forward:

**“SSCs will be responsible for identifying and approving vocational qualifications for their sectors in England with only SSC-approved, vocational qualifications at NVQ Levels 1 to 5, including Foundation Degrees, eligible for public funding<sup>84</sup>.”**

2.35 Yet there is no evidence of demand for simply more qualifications. It leaves the conversation to be continued and to ask why the historic qualifications deficit has persisted for so long. In **Skills in Context 1.0**, we questioned if reducing the deficit was still relevant as a policy goal. After all, it is primarily a comparison with two European competitors who themselves have not exactly enjoyed leading levels of productivity growth in recent years. As HM Treasury is keen to stress, the UK is the only G7 country to have maintained the impressive productivity pace of the US<sup>85</sup>.

2.36 Yet Leitch not only endorses this approach, it goes further and advocates **doubling** the projected rates of improvement (i.e. qualifications) at most skill levels. The rationale here is that our qualification deficit is such that even if our existing targets are met by 2020, we would still remain no better than average when compared to our international competitors.

2.37 So on one level, we lost the argument - the qualification race is still on and we have now resolved to run twice as fast. This in itself is not a problem, as long as we keep our eye on the real prize - increased productivity - rather than the accumulation of qualifications, which is perhaps best regarded as a mechanical lure running on the inside rail. Our immediate effort should be to understand the applicability of qualifications as a proxy for the skills that individuals and employers look for. Or, as we’ll turn to in the final chapter, perhaps question whether it is an absolute that all employers are interested in investing in skills, not because they haven’t ‘seen the light,’ but simply because it doesn’t make economic sense for them to do so.

### 3. THE VALUE OF SKILLS FORECASTING?

### 3. THE VALUE OF SKILLS FORECASTING?

3.1 Current UK skills policy is predicated on two calls to action. The first, which we have covered, is that skills are important because of our historic failure to invest; the second is that they will matter even more in the future. This is a central tenet of the Leitch Review that recommends the UK commits to being a world leader in skills by 2020<sup>86</sup>.

3.2 Leitch makes the case on the basis of unflattering international comparisons, citing those skill levels where our current aspirations don't even match the standards already achieved by our global competitors<sup>87</sup>. This represents a substantive change in argument formulation since even up to spring 2006 the case had been made on the basis of forecasts of demand. For example, the 2005 Skills White Paper declared that:

**"We must substantially raise our ambition for the number of people who gain Level 3 skills and qualifications. By 2012, some two thirds of all jobs (both new and existing) are expected to require qualifications at Level 3 or higher<sup>88</sup>."**

3.3 Then more recently from the Chancellor of the Exchequer in his March 2006 budget statement:

**"Today the British economy has just 9m highly skilled jobs. By 2020 it will need 14m highly skilled workers. And of 3.4m unskilled jobs today, we will need only 600,000 by 2020<sup>89</sup>."**

### WHOSE DEMAND?

3.4 But in both cases, the question must be asked - whose articulation of future demand for higher skills is this? The example taken from the 2005 Skills White Paper was unpicked in **Skills in Context 1.0**, so let's scrutinise the Chancellor's prediction this time round. We'll start by using the now familiar method of fishing in the footnotes. First, the statistics used here are not derived from surveys asking employers about their future needs, nor are they derived from current employer surveys and then extrapolated forward. The Chancellor's prediction is derived from evidence submitted to the Leitch Review, looking at alternative skill scenarios to 2020<sup>90</sup>. It is essentially a forecast based on a series of substantive assumptions.

3.5 Now setting aside the ability of any forecasting model to make predictions with such an air of certainty<sup>91</sup>, the real bite is that the quote is derived from a statement about supply rather than demand. The evidence paper submitted to the Leitch Review actually says:

**"by 2020 fewer than 2% of the workforce [1.8% on 32m] are projected to have no formal qualifications<sup>92</sup>."**

3.6 This typifies the practice of using predominately supply side models of analysis and then assuming the corresponding level of demand, as observed in the Interim Leitch Review:

**"It is highly likely that the economy will move towards equilibrium over time, adapting industrial and occupational mix to match the quality of the available labour supply<sup>93</sup>."**

### 3. THE VALUE OF SKILLS FORECASTING?

- 3.7 Significantly, the assumption of a corresponding increase in demand to meet increasing supply is rarely found outside of the headline-grabbing reports. From the same paper outlining alternative skill scenarios to 2020:
- “...although supply-side improvements in the provision of education and training are no doubt a prerequisite, the more important factor is stimulating demand among employers for highly skilled workers, with the concomitant changes in training and product strategy this implies<sup>94</sup>.”**
- 3.8 So, what matters more - a good headline, or realism in forecasting future skills needs? The following press release from the Sector Skills Development Agency shows how a slight misunderstanding of a statistic can leave an official statement open to vast misinterpretation.
- “Beauticians and business managers rather than plumbers or electricians will make up tomorrow’s workforce, according to a new report.**
- It expects an additional 1.3 million jobs to be generated by 2014 - with women expected to take the lion’s share - and a further 11 million new workers required to replace those leaving their jobs in the next decade.**
- ‘Working Futures 2004-2014’ - the most detailed and comprehensive set of employment projections ever published for the UK - forecasts a growth in managerial, protective service, professional and associated professional occupations, culture, the media and sports, caring personal service and customer services by 2014<sup>95</sup>.”**
- 3.9 SSSA is right to point out the importance of replacement demand because of those who have left jobs due to retirement, career moves, mortality or related reasons. Replacement demand dwarfs new demand due to expansion and is expected to be over eight times higher over the ten year period<sup>96</sup>. But, hang on a second, the implication that the country requires “a further 11 million new workers” is counterintuitive and, in fact, a misinterpretation. Since the entire workforce is under 30 million people, if more than a third of this needed replacing by new workers in the next ten years we should all be panicking and predicting economic collapse. But - you can relax a little - we know the claim seems incredible and indeed if we look closely we can see why. The 11 million figure refers to job openings that will need filling due to people leaving the workforce because of “retirement and mortality”. You might well assume that both these factors are pretty terminal and must mean that new workers are required to replace the old. However, the answer lies in the definition of ‘retirement’ used by the authors of **Working Futures**. The retirement rates used are based on data from the Labour Force Survey, which show the percentage of those employed one year ago who have retired from employment, **either temporarily or permanently<sup>97</sup>**. Thus, this includes those people who are temporarily economically inactive for whatever reason, be it a career break, illness, or, particularly for females, raising a family. These people are potentially able to rejoin the workforce at a later stage and thus do not need a new entrant to replace them. An important aspect of the confusion is the use of the term “new workers needed”, rather than “new job openings”, which would give a more accurate, as well as less alarming, spin on the issue.

### 3. THE VALUE OF SKILLS FORECASTING?

3.10 The point here is to exercise caution when reading such forecasts, as noted by the authors in the technical annex for **Working Futures**:

**“The results provide a useful benchmark for debate and policy deliberations about underlying policy trends. However, they should not be regarded as more precise than the general statements in the text<sup>98</sup>.”**

3.11 Unfortunately, we often accept variable estimates of the future as statements of fact and use them as the basis for future planning. The **Financial Times** columnist John Kay is quite direct on this point and refers to anyone who claims to forecast the future as simply a charlatan<sup>99</sup>. Yet these cautionary notes around planning often get lost at the operational level as forecasts create the backdrop against which learning providers must produce their strategic plans.

#### THE PERILS OF FORECASTING

3.12 In our first **Skills in Context** paper we concluded this chapter by saying that:

**“...the more fundamental point is the perils of forecasting itself - not by its action but by its consequence. Forecasting creates a momentum that says we can predict and therefore plan for the future with a degree of confidence that all of the footnotes and caveats in the analysis do not really support.”**

3.13 So we are pleased to note that the Leitch Review reaches the same conclusion:

**“The Review’s analysis shows that previous approaches to delivering skills have been too ‘supply driven’ based on the Government planning supply to meet ineffectively articulated employer demand. This approach has a poor track record - it has not proved possible for employers and individuals to collectively articulate their needs or for provision to be effectively planned to meet them... Under a planned system, the incentives are for providers to continue doing what they have done in the past so long as that meets the requirements of planning, rather than responding flexibly as demand changes<sup>100</sup>.”**

3.14 It seems a bit unfair to blame individuals and employers for not coordinating themselves to articulate their future needs. No car manufacturer or property developer would get much sympathy from the business press for blaming poor sales on inarticulate customers. Nevertheless, the headline recommendation from the Leitch Review is encouraging:

**“The Review recommends a fully demand-led approach, with an end to this supply-side planning of provision<sup>101</sup>.”**

With the result that:

**“This will give FE providers a real incentive to deliver skills that employers’ and individuals’ need flexibly and responsively<sup>102</sup>.”**

3.15 However, these two simple quotes signify substantive change for the further education sector, particularly general further education colleges who want to compete in the employer marketplace. This is far from simply having one more marketing push so that local employers understand what local colleges offer, or simply setting up an arm’s length business development unit. It is about fundamentally reengineering a significant part of the business of the college so that it is systemically capable of building and managing customer relationships with employers to whom they successfully deliver training solutions.

#### ADAPTIVE CAPACITY - RESPONDING TO WHAT YOU DON'T KNOW

3.16 Our recommendation from **Skills in Context 1.0** was that rather than trying to predict the future and plan accordingly we should focus on the adaptive capacity of providers. This was because in our view, the opportunity cost of such crystal ball gazing is to forgo the potentially more fruitful route of developing the adaptive capacity of local learning provision and infrastructure. So for example, rather than trying to plan future provision 5 - 10 years out, we should learn to measure and reduce the response times needed for the development of new provision to meet new and future needs. Accurately forecasting the future is incredibly difficult. For those that need convincing, take time to recall how much you knew about iPods or blogging 5 years ago; or ask if you would have understood what a leading retail Chief Executive was talking about when he announced his firm would be ‘carbon neutral’ by 2012<sup>103</sup>.

### 3. THE VALUE OF SKILLS FORECASTING?

- 3.17 A focus on adaptive capacity would require a significant change in the way we look at skills from both a demand and supply side perspective. For example, whilst current employer skills surveys focus on the volume of hard to fill vacancies, skill shortage vacancies and skill gaps, adaptive capacity would focus on the time it takes to fill these vacancies. It is analogous to a hospital waiting list - the size of the list matters less than the average time it takes to be treated.
- 3.18 It would force us to look critically at how we fund and develop the social infrastructure for learning. For example, funding on the basis of quality improvements over three year cycles rather than one year output contracts. Under Success for All, three year development plans are a step towards this for colleges, but the emphasis is still on outputs related to funding.
- 3.19 Taking employers and their current needs at face value is not the way forward. We need a wholesale re-evaluation of actual employer demand for skills. This is not to say that our ambitions should be clipped, or that the development of skills has no merit outside of purely economic concerns. Rather, it is to say that a one-size-fits-all policy is doomed even if applied to a single industry - let alone to the whole economy. Skills policy must be centred on building capacity to improve responsiveness to the needs of the individual and of business, but dynamically rather than through forecasting. Adaptive capacity would be about equipping at the point of interface with employers the skills to help employers articulate their needs, accepting that it is an imprecise discipline - particularly if we are keen to understand the latent skill demands of employers. That way we can fund and improve learning provision - not merely start from assumptions about presumed (and unpredictable) outputs.
- 3.20 Equally, such strategies for adaptive capacity are not simply a one way street of seeing how far, colleges in particular, can bend to meet the needs of local employers. It is about their being a genuinely participative engagement between employers and providers who see a sense of shared ownership in what both are trying to achieve. Just as in industry there are large corporations who take a keen interest in the development and performance of their supply chain; so should be the same level of interest by employers in the supply of skills. It is far too easy for employers to be passive bystanders and the sense of urgency often portrayed by employer organisations nationally isn't always matched by a willingness to act locally.

#### A post script good news story to finish

- 3.21 Since we put together the first paper others have had similar thoughts and so in the FE Reform White Paper the government proposed a single new standard in England to accredit: responsiveness to business needs, excellence in delivering training, commitment to continuous improvement and competence in meeting sector specific needs<sup>104</sup>. The overarching goal is to give providers a framework of criteria designed to test their readiness to meet employer needs and for employers a 'quality mark' that they recognise and trust. It is encouraging because it is putting the emphasis on the ability of the provider to respond, rather than to plan. Again, to declare CFE's interest in this we have been working with the Learning and Skills Council in the development and testing of this new standard.<sup>105</sup>

## 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

### 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

- 4.1 If you were to ask us for a one line summary of what the final report of Lord Leitch is trying to achieve, it is either the creation of a genuinely demand led system for the delivery of adult skills or more subtly taking away all the excuses for why employers don't invest in skills. It has taken two standard employer reasons for not investing in qualifications (1) don't meet business needs, and (2) providers aren't responsive and simply resolved to take them away.
- 4.2 The responsibility for making sure that qualifications meet employer needs will be passed to employers via Sector Skills Councils and public funding for training will become demand-led through Train to Gain. Indeed in the creation of a demand-led system a quick review of the summary recommendations of the Leitch Review shows that 7 out of the 8 are effectively for the supply side. It reveals an inherent bias to seeing the skills and productivity debate as principally a problem of supply. It therefore provides the perfect opportunity to revisit the conversation we presented in **Skills in Context 1.0, low skill equilibrium inspired by whom?**
- 4.3 First, very briefly, what is the low skill equilibrium, from a DTI commissioned study in 2003:
- "A low skills equilibrium is a situation where an economy becomes trapped in a vicious circle of low value added, low skills and low wages<sup>106</sup>."**
- 4.5 This idea developed over time and by 2005 it appeared in the Skills White Paper in the following guise:
- "[A] lack of skills makes it harder for employers to introduce the innovations, new products and new working methods that feed improvements in productivity. That creates a risk of 'low skills equilibrium', where employers do not express a need for skills because they pay low wages to low-skilled staff to produce low-value goods and services<sup>108</sup>."**
- 4.6 In other words, whilst the end point is an equilibrium of low demand and low supply of skills, it has its origins in a lack of skills (supply). This supply side modelling is also present in the Leitch Interim Report, where it is suggested that the economy adapts in response to the supply of skills available:
- "It is highly likely that the economy will move towards an equilibrium over time, adapting industrial and occupational mix to match the quality of the available labour supply<sup>109</sup>."**
- 4.7 So as long as the supply of skills available to business is low, we will stay in low skill equilibrium; but if we were to increase the supply of high skilled workers in the economy, businesses would automatically adjust their strategies to make use of this higher skill supply. In the words of the Leitch Interim Report:
- "the projections confirm the obvious conclusion that if efforts are made to move towards greater use of higher-skilled labour in the economy, then the shift towards higher-skilled occupations will be more pronounced than in 'business as usual'<sup>110</sup>."**

### SUPPLY...

- 4.4 The concept of a low skill equilibrium has had its place in the UK's skills debate for a number of years now; its origins as an idea can be found in a work by Finegold and Soskice which states:
- "The majority of enterprises are staffed by poorly trained managers and workers to produce low quality goods and services<sup>107</sup>."**

## 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

- 4.8 Thus, according to Leitch (and other Treasury reports), the limiting factor preventing our economy moving towards higher value added production is an inadequate supply of higher skills, which keeps demand for higher skills down. In the economics of money supply it is analogous to Say's Law<sup>111</sup> where supply creates its own demand - increase the supply of money to increase its demand. By the same token, increase the supply of skills and employers will demand more. Well, maybe. The problem is Say's law was conceived in reference to monetary policy and money is a far more liquid asset to trade than human skills.
- 4.9 Proof that such a policy, of increasing supply in anticipation that demand will follow, is usually cited by the observation that:
- "the wage returns to a degree have remained broadly stable over the past decade despite large increases in the number of graduates - demand for high skill workers has risen broadly in line with their supply<sup>112</sup>."**
- 4.10 In short it is principally a problem of supply. As Prof. Ewart Keep notes in **Market Failure in Skills**:
- "...the tendency by national policy makers to identify market failure in skill supply [is] by making broad aggregate level comparisons of stocks of skills between the UK and other developed countries. These international comparisons are seen as important because policy makers believe that VET [vocational educational training] is key to delivering superior economic and social performance<sup>113</sup>."**
- DEMAND...**
- Do we have alignment of our skills aspirations with market conditions?**
- 4.11 The Scottish Executive's skills aspirations mirror those of the UK as a whole - as far as possible, they wish to increase the numbers of people with high skills and decrease those with low skills<sup>114</sup>. But where is the evidence that there is the economic or employer demand to employ these higher skilled people?
- 4.12 Right from the outset Lord Leitch in his foreword comments that **"Too many of us have little interest or appetite for improved skills<sup>115</sup>."** Indeed, plans to stimulate employer engagement and demand for skills are discussed in detail; it is just as discussed the actions fall to the supply side<sup>116</sup>. From a Futureskills Scotland study on the Scottish labour market we find that although employment is growing in Scotland and there are significant new job opportunities, few employers report skills shortages (5%) or skills gap (9%)<sup>117</sup>. Based on the argument we have already outlined, one might say that this is merely because there is currently a lack of supply of skills, thus a lack of demand from employers. However, the report concludes that:
- "the demand for labour in Scotland is not unduly stretching the available labour pool, in either qualitative or quantitative terms<sup>118</sup>."**
- 4.13 This fact is key. It shows that although the Scottish skills profile has indeed risen, the demand from employers has, at least so far, failed to rise at the same rate to take advantage of the extra skills or to turn this into any substantive productivity gains. Demand for higher skilled individuals is projected to rise, but who is to say that it will meet the ambitious PSA targets for skills increases? The study also showed that, far from employers demanding higher skills, vacancy rates were generally highest in jobs which **"usually require lower levels of skills or qualifications and which generally offer lower rates of pay<sup>119</sup>"**. Even in the Leitch Review it is admitted that the increase in the proportion of high skilled workers is leading to increased demand for less skilled workers in some service sector jobs, such as the hospitality sector<sup>120</sup>.

## 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

4.14 Developing a causal relationship here is difficult, but these observations suggest that the lack of demand for higher skills in Scotland is **not** due to a lack of supply. This is contrary to what is commonly assumed by policy makers who are normally reluctant to challenge employers head on. In fact, global unemployment has risen dramatically in the last decade and this global over-supply of labour is also **“characterised by the fact that it is increasingly educated<sup>121</sup>”**. Will our national desire for higher skills eventually lead to an oversupply of high skilled workers and an undersupply of lower skilled workers? The economic modelling for this (as covered in the last chapter) says not, but as we have already identified, these models of future demand are in the main projections of supply, inverted to mirror an assumed match in demand. In fact, let’s finish with two quotes from the authors of the LSC’s *Skills in England*, which is a pretty voluminous assessment of skills and in its comments of developments in skills strategy says:

**“The policy levers to raise the skill levels in the workforce are principally supply-side ones. Hence, there is emphasis on targets for various qualification levels. But this raises an issue about whether or not there is an appropriately corresponding demand for skills from employers; and, in particular, whether employers are able to harness the full capability of their workforces through the effective deployment of skills<sup>122</sup>.”**

### **Changing the market to match our aspirations - decreasing the opportunity cost of training?**

4.15 If it is true that the global economic opportunities are increasingly lying with higher skills, what could explain the lack of a ‘demanding demand’ from employers in some quarters? Well, for at least some of the 37 per cent of Scottish employers who didn’t offer any training to their employees<sup>123</sup>, we must assume that it was a perfectly logical business decision.

4.16 At this point, some readers will throw up their hands in horror. Have these employers not heard the impassioned view of Sir Digby Jones (newly appointed National Skills Envoy) who on Radio 4’s *Today* programme said **“China wants your lunch, India your dinner”** and (paraphrasing) **“employers who don’t invest in basic skills can’t really complain if their car then gets nicked<sup>124</sup>.”** Well maybe they have, but in the context of all the decisions that these employers make (which includes those in the public sector) they obviously reached the conclusion that it wasn’t in their interest to do so. According to one discussion of the problem in Scotland, firstly, the quality of evidence to prove that training ‘pays’ is “not very compelling”, and secondly, the picture of how employers process any evidence they do get on the benefits of training is “incomplete, but gloomy<sup>125</sup>”. Simply making further impassioned pleas to invest is likely to have little more than a marginal impact. As Prof. Ewart Keep comments:

**“Attempts to correct market failure through the promotion of the benefits of training have seemed to generate relatively limited effect<sup>126</sup>.”**

4.17 To effectively tackle the third of employers that do not train their staff means changing the economic frameworks in which businesses think about their business models and the relative opportunity cost of the resources available. For example - and this is not one to win the business vote - in the DTI paper the authors Wilson and Hogarth suggest:

**“Although there may be scope for some micro-level interventions, much more radical changes, such as raising the level of the minimum wage, may be needed if employers are to be shocked into following product and skill strategies that place a greater emphasis on higher skill levels. Such a policy would force employers to move away from strategies which rely upon the use of low skilled labour, paid at the current minimum wage level, and encourage strategies that place greater emphasis on raising productivity and skill levels<sup>127</sup>.”**

#### 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

- 4.18 Such a proposal would raise the relative cost of labour; it's comparable to policies adopted in continental Europe. If the opportunity cost of labour is higher relative to other inputs - through minimum wages and higher transacting/redundancy costs - then training to get the most out of your labour input becomes a preferred strategy. Put another way: training to ensure workers' skills remain relevant to their employer's needs becomes a cheaper option than redundancy. However, evidence suggests that UK employers are "spending at least as much as, if not more than, European competitors on training"<sup>128</sup> which, much to the relief of the employer lobby, negates the argument of simply rising the minimum wage. But it does highlight how the decision to invest in training must be taken in the context of the strategy of the business and the wider economic policy framework of a region or nation.
- 4.20 Conversely, those industries for which qualifications are not a statutory requirement (agriculture, forestry and fishing, manufacturing, construction and retail for example<sup>131</sup>) see the lowest levels of training. For these industries, a greater emphasis on training and qualifications does not currently make sense as a business strategy - if an employee can perform their duties to a satisfactory standard without training, why spend money on it? Those at the upper end of the occupational hierarchy, such as professionals and associate professionals, are more likely to receive training than those involved in areas such as plant and machine operations and elementary occupations<sup>132</sup>.
- 4.21 The economic impact of having a qualified workforce undoubtedly depends on the sector. The most qualified sectors in Scotland (with the highest percentage of employees with a Level 3 qualification or above), do not necessarily correspond with the most productive or with those with the fewest skills gaps. Health and social work for example, has a high proportion of qualified staff with 65% of employees with a Level 3 qualification or above; this is higher than say, than financial services with 63%<sup>133</sup>. However, health and social work is among the least productive of Scotland's sectors, with a GVA per employee of £22,700 - only above hotels and catering at £16,900. Financial services meanwhile, has a towering GVA per employee of £60,400<sup>134</sup>. Similarly, public administration and defence has one of the highest qualified workforces (67% with a level 3 or above<sup>135</sup>), but also one of the highest skills gaps rates in Scotland, with 12% of employees not proficient in their jobs<sup>136</sup>.

#### WE MUST UNDERSTAND THE MARKET CONDITIONS TO EFFICIENTLY STIMULATE SKILLS GROWTH

- 4.19 If the policy goal is to increase employer engagement in training then we must have a deeper understanding of how market conditions affect a business's decision to invest in skills. Looking at Scotland, we find that the industries most likely to offer any training to employees are public administration and defence, education, energy and water, financial intermediation and health and social work<sup>129</sup>. Financial intermediation and health and social work were the only sectors to provide off-the-job training to more than half of their staff<sup>130</sup>. In truth, it is unlikely that these employers train their staff out of benevolence or in response to a particular policy agenda, but because a qualification is a prerequisite of being able to practise and so training more staff becomes a business necessity.
- 4.22 It seems that a qualified workforce is not an automatic ticket to higher productivity or fewer skills gaps - the outcomes of qualifying a workforce depend hugely on what the sector is. It therefore seems unwise to deploy the stick rather than the carrot to raise qualifications levels across the board, without taking account of the different market conditions faced by each sector.

## 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

### Some employers are simply happy not to invest in skills

4.23 A Department of Trade and Industry review of the Low Skill Equilibrium found that:

**“Generally the organisations studied are content with their product market positions and are not contemplating anything like step change in investment, skills, or product market strategies<sup>137</sup>.”**

4.24 Inert demand for skills isn't simply a result of a lack of skilled supply; it has as much to do with the strategies that businesses have chosen to adopt. They are 'happy' where they are using the supply of skills available to them which aligns with the position that they have taken up in the market. This makes it very dangerous to assume that by simply raising the supply of skills we will see a corresponding increase in demand. Nor is it simply a case of working alongside business support programmes to raise demand for skills to a more ambitious level, because as the DTI study observes:

**“Moreover, for many of these organisations, their current strategies are, at least for the time being, delivering the desired results, in terms of profitability and business success. They are not failing businesses ... The research indicates that, currently at least, there is a thriving marketplace for goods and services sold on the basis of low cost and supported by low wages<sup>138</sup>.”**

4.25 We've added bold to the word 'thriving' to emphasise that this isn't a case of businesses who just haven't yet seen the 'light' following the path of high value add strategies powered by investments in human capital. These are businesses whose rational decision-making, evidenced in their current bottom line is not to invest in skills because their business model runs quite effectively on the basis of low wages. This means that they are only 'bad employers' if we attach certain normative values on to our ideas of what 'good employers' are. Economically they are pursuing a rational strategy. A business support service that then advocates 'training for the bottom line' is doing so without any connection to the context in which individual businesses are operating.

4.26 Furthermore, the policy prescription isn't then to simply create a new message that 'high value add is good for your business' (with a heavy hint that skills are part of this) and again to keep repeating for those that don't respond. As a DfES research paper looking at the sectors of plastics processing, print, logistics and insurance services in the UK found:

**“Government policy makers are frequently urged to do more to encourage companies to adopt higher value added product strategies. However, it is hard to see how government policy can have a direct impact on product strategy and formation in MVA [medium value add] type companies<sup>139</sup>.”**

4.27 The report identifies two reasons for this: first, as we have already covered, because they are profitable and when demand for these services remains strong they have little incentive to change. Second, even in those businesses which are not making a profit, the decision to change is predominantly determined by the availability of internal resources - particularly senior management.

4.28 Whilst it is true that we as a society have an aspiration that UK businesses should compete on the basis of innovation and unique value, driven by investments in human capital, it is dangerous to assume that it is an aspiration shared by all of us. Demand for skills may not be as great as we as a nation would like, but we won't convert all businesses simply by repeating "skills (or even high value add) are good for your business", regardless of the response. We should accept that, for some businesses, profitability and market position are derived quite rationally from a decision not to invest in the workforce, either current or future, and in producing low value products. Again, this is not to present an argument that businesses shouldn't invest, or even that they should not invest more, only to question what levels of investment are appropriate for particular businesses and to emphasise that the proper utilisation of skills can only come through understanding the business context in which they are situated.

## 4. LOW SKILL EQUILIBRIUM - INSPIRED BY WHOM?

### THE KEY TO INVESTING PUBLIC MONEY IN SKILLS IS TO UNDERSTAND DEMAND FIRST

4.29 Of course it is absolutely right to collectively aspire for individuals and businesses to continually invest more in human capital as a key plank of our economic and social development. For this to occur, either businesses' or individuals' need to evolve their strategies to the 'high value add path' or the structures in which these decisions are being made need to change. Since the likely impact of skills interventions can only be properly understood within the economic framework in which individuals and businesses implement their strategies - so, to better understand how skills policy can add the greatest value we need first to understand the context in which they will be played out.

4.30 Future conversations should therefore reflect on:

- how the age, size and competitiveness of a sector impact upon the decisions of businesses to train;
- the role of labour mobility and migration, its opportunity cost and its impact upon decisions;
- the extent to which competition, for labour resource and market share, impacts upon decisions to train;
- the impact of regulation, and so on.

4.31 For example, rather than looking to identify what businesses invest in training and development, we might look to identify what it is that causes them to change their 'normal' rate of investment? At a macro level we need to decide whether it is better to stimulate demand by investing in leading sectors for productivity growth so that they lift up the average or assist those below 'the bar' to bring them up to the average<sup>140</sup>. Whilst no doubt that is a complete conversation in itself, the key conclusion is that skills policy and action has to be part of that same wider debate for economic development, whether it is drawn geographically or sectorally. And that this means moving away from national one size fits all policies, to policies that are sufficiently contextualised to genuine business issues.

## 5. CONCLUSION

### 5. CONCLUSION

- 5.1 Imagine the year is 2010 and HM Treasury has a few employer representative bodies around for a chat. The opening line from the minister is “why don’t employers train?” for which the first response is, “we do, it is just that qualifications don’t meet our needs”. To which the minister replies, “But you have Sector Skills Councils and they are responsible for making qualifications meet your needs”. The minister asks again “why don’t you train?” for which the second response is, “we do, it is just that colleges aren’t responsiveness to our needs”. To which the minister replies “but all public investment is now routed through demand-led funding mechanisms”. The minister turns to the officials and asks “is there anything I can do to go beyond voluntary pledges...?”
- 5.2 It serves to illustrate that the Leitch Review has sought to do two things, both of which are welcome. Firstly, to raise our collective ambition as to the importance of skills to our economic and social well being, both now and increasingly into the future. Whilst secondly removing (predominately through supply side reforms) all the reasons why employers in (defensive mode) would argue why they don’t invest in skills to qualification standards. Only one recommendation, the employer pledge puts any real onus on employers to do something<sup>141</sup>.
- It all comes down to demand**
- 5.3 In so doing the Leitch Review has sharpened the policy debate even further, calling for further supply reforms and the creation of a demand-led system, all presupposing more than ever that such a demand exists. Of course, there is a genuine question mark over whether such a demand-led system will ever be created. As Ewart Keep concludes in his recent paper **State control of the English education and training system - playing with the biggest train set in the world:**
- “Letting others play with the train set seems to be proving hard to do...unless and until the state manages to allow this, it finds itself trapped in a situation where it has to do more and more, leaving less and less opportunity of motive for others to play a more active role in the E&T system and develop their capacity to act as strong partners<sup>142</sup>.”
- 5.4 But let us suspend this very legitimate concern and come back to our principal argument, are we sure that there is the demand out there to meet the aspirations that the Leitch Review has set? Our conclusion is that too often in seeking to make the case for greater skills investment the presentation of the argument causes the question to be overlooked. As we’ve sought to set out in this paper in principally in two key areas:
- 5.5 Firstly, the presentation of the case for greater skills investment overlooks the pivotal role of leadership and management as the prime determinant in making business decisions, including how skills are developed and deployed. We think that the Leitch Review has gone along way to recognise this. What needs to happen next is for this same sense of recognition to be adopted by employers and providers of management education. For the former this is always a difficult subject as all too often the need for improvement rests with everyone - below us!
- 5.6 Secondly, the implicit assumption that employer demand for skills but more specifically qualifications will simply materialise in response to increased supply. Or that employers have lots of untapped demand for qualifications, particularly at higher levels seems quite dangerous. What we’ve sought to show is that any public intervention for skills has to be within the context of a wider strategy for economic development. And that ultimately someone has to be accountable for ensuring economic conditions to fuel the derived demand for skills.
- 5.7 Our conclusion is that just as collectively the policy instruments of supply have Public Sector Agreements for meeting qualification targets, which department or agency would be prepared to take ownership of a (PSA) target for the creation of economic opportunities that drive the demand for skills in the first place?

## 5. CONCLUSION

### But the creation of a demand-led system is still very much welcome

- 5.8 This is not in anyway to argue against the case that the Leitch Review makes for the creation of a demand-led system, but simply to remind ourselves that a responsive supply is a necessary, but not a sufficient state of affairs to reach.
- 5.9 Moreover, our final conclusion is that whilst the recommend abandonment of crystal ball gazing and supply side planning by the Leitch Review is a welcome one it will create huge challenges and opportunities for colleges and providers. As we have already covered colleges who see this as just one more marketing push will be sorely disappointed. Being genuinely responsive to the needs of employers as at least part-paying if not full paying customers will be a huge challenge for the sector. The prize of success is great, but so is the level of initial investment.

### Finishing where we started

- 5.10 The starting proposition for this conversation, which remains true at the finish, is that skills do matter and it is important for personal, social and economic reasons for us all to aspire to a highly skilled workforce as a necessary complement to a high value added economy. We restate our commitment to that belief. What this conversation has sought to demonstrate are the dangers of taking the economic evidence out of context in order to substantiate the belief. The result is that too often a proposed action which is derived from the oversimplification of the analysis is at best naive and at worse destroys value by deadweight actions.
- 5.11 A strategy for skills in context would for us have a very simple goal; to focus on the economic levers that raise employer self-interest in pursuing high value add, high skill strategies whilst ensuring sufficient incentives and regulatory alignment for supply to adapt and respond to this demonstrable demand.

## END NOTES

## END NOTES

- <sup>1</sup> [http://www.cfe.org.uk/component/option,com\\_docman/task,cat\\_view/gid,24/Itemid,34/](http://www.cfe.org.uk/component/option,com_docman/task,cat_view/gid,24/Itemid,34/)
- <sup>2</sup> HM Government (1998) **The Learning Age**, DFEE, <http://www.lifelonglearning.co.uk/greenpaper/>
- <sup>3</sup> HM Government (2000) **Skills for all: Proposals for a National Skills Agenda**, Final report of National Task Force, DFEE.
- <sup>4</sup> HM Government (2001) **In Demand: Adult Skills for the 21st Century - Part 1**, The Performance and Innovation Unit, the Cabinet Office, CABI J01-8682/0112/D16, [http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd\\_1/report/Finalrep.pdf](http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd_1/report/Finalrep.pdf) , and HM Government (2002) **In Demand: Adult Skills for the 21st Century - Part 2**, The Strategy Unit, the Cabinet Office, [http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd\\_2/report/downloads/su-adult-skills.pdf](http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd_2/report/downloads/su-adult-skills.pdf)
- <sup>5</sup> HM Government (2003) **21st Century Skills: realising our potential**, DFES, DTI, HM Treasury & DWP, Cm 5810, <http://www.dfes.gov.uk/skillsstrategy/uploads/documents/21st%20Century%20Skills.pdf> , HM Treasury (2004) **Skills in the global economy**, Pre-Budget Report, [http://www.hm-treasury.gov.uk/media/8F5/94/pbr04skills\\_410.pdf](http://www.hm-treasury.gov.uk/media/8F5/94/pbr04skills_410.pdf) , HM Government (2005) **Skills: Getting on in business, getting on at work**, DFES, DTI, HM Treasury & DWP, Cm 6483, <http://www.dfes.gov.uk/skillsstrategy/index.cfm?fuseaction=content.view&CategoryID=6> , Leitch Review of Skills (2005) **Skills in the UK: The long-term challenge**, HM Treasury [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm) , and Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf)
- <sup>6</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.1.
- <sup>7</sup> HM Government (2003) **21st Century Skills - Realising Our Potential**, Cm 5810, <http://www.dfes.gov.uk/skillsstrategy/uploads/documents/21st%20Century%20Skills.pdf> , p.12.
- <sup>8</sup> HM Treasury (2004) **Skills in the Global Economy**, Pre-Budget Report, HMT, [http://www.hm-treasury.gov.uk/media/8F5/94/pbr04skills\\_410.pdf](http://www.hm-treasury.gov.uk/media/8F5/94/pbr04skills_410.pdf) , p.8.
- <sup>9</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.9.
- <sup>10</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.60.
- <sup>11</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.29.
- <sup>12</sup> O'Mahoney & de Boer (2002) **Britain's relative productivity performance: Update to 1999**, NIESR. <http://www.niesr.ac.uk/pdf/BRPP02.PDF>
- <sup>13</sup> J. Van Reenen (2004) **Working Better, Centre Piece**, LSE, <http://cep.lse.ac.uk/centrepiece/v09i2/vanreenen.pdf>
- <sup>14</sup> See CIPD (2006) **Public policy perspectives: People, productivity and performance**, <http://www.cipd.co.uk/NR/rdonlyres/8FC5B46A-7372-46DC-B38B-82718C73F9E9/0/pubpolpers0106.pdf> , pp.8-9.
- <sup>15</sup> J. Van Reenen (2004) **Working Better, Centre Piece**, LSE <http://cep.lse.ac.uk/centrepiece/v09i2/vanreenen.pdf> , p.4.
- <sup>16</sup> HM Treasury (2006) 'Chapter 3: Meeting the productivity challenge', Budget 2006 [http://www.hm-treasury.gov.uk/media/20E/EA/bud06\\_ch3\\_192.pdf](http://www.hm-treasury.gov.uk/media/20E/EA/bud06_ch3_192.pdf) , p.42., and HM Treasury, DTI (2006) **Productivity in the UK: Progress and new evidence**, HMT DTI [http://www.hm-treasury.gov.uk/media/1E4/71/bud06\\_productivity\\_513.pdf](http://www.hm-treasury.gov.uk/media/1E4/71/bud06_productivity_513.pdf)
- <sup>17</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.41.
- <sup>18</sup> ONS Regional GVA, December 2006, [http://www.statistics.gov.uk/downloads/theme\\_economy/RegionalGVA\\_Dec06.pdf](http://www.statistics.gov.uk/downloads/theme_economy/RegionalGVA_Dec06.pdf)

## END NOTES

- <sup>19</sup> OECD (2006) **Education at a Glance**, OECD Indicators 2006, <http://www.sourceoecd.org/upload/9606061e.pdf> , p.37.
- <sup>20</sup> OECD (2006) **OECD estimates of labour productivity for 2005**, <http://www.oecd.org/dataoecd/28/17/36396820.xls> .
- <sup>21</sup> I. Green, K. Mayhew, & E. Molley (2003) **Employers Perspective Survey**, DfES Publications.
- <sup>22</sup> CIPD (2006) **Public policy perspectives: People, productivity and performance**, <http://www.cipd.co.uk/NR/rdonlyres/8FC5B46A-7372-46DC-B38B-82718C73F9E9/0/pubpolpers0106.pdf> , p.14, see also N. Bloom et al (2005) **Management Practices Across Firms and Nations**, Centre for Economic Performance, LSE <http://cep.lse.ac.uk/management/management.pdf>
- <sup>23</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , pp.89-90.
- <sup>24</sup> CIPD (2006) **Public policy perspectives: People, productivity and performance**, <http://www.cipd.co.uk/NR/rdonlyres/8FC5B46A-7372-46DC-B38B-82718C73F9E9/0/pubpolpers0106.pdf> , pp.14-15.
- <sup>25</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.89.
- <sup>26</sup> Leadership & Management Advisory Panel (2006) **Raising our ambition** [http://www.cfe.org.uk/index.php?option=com\\_docman&task=doc\\_download&gid=96&Itemid=34](http://www.cfe.org.uk/index.php?option=com_docman&task=doc_download&gid=96&Itemid=34)
- <sup>27</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.60.
- <sup>28</sup> Leitch Review of Skills (2005) **Skills in the UK: The long-term challenge**, HM Treasury [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm) , pp.95-96.
- <sup>29</sup> Leitch Review of Skills (2005) **Skills in the UK: The long-term challenge**, HM Treasury [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm) , p.96.
- <sup>30</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.15.
- <sup>31</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.78.
- <sup>32</sup> SSDA (2006) **Skills for Business Network 2005: Survey of Employers**, SSDA, Research Report 18, [http://www.ssda.org.uk/ssda/pdf/060830%20R%20Research%20Report%2018%20\(1\).pdf](http://www.ssda.org.uk/ssda/pdf/060830%20R%20Research%20Report%2018%20(1).pdf) , pp.17, 28 & 34.
- <sup>33</sup> HM Treasury (2006) **Productivity in the UK 6: Progress and new evidence**, [http://www.hm-treasury.gov.uk/media/1E4/71/bud06\\_productivity\\_513.pdf](http://www.hm-treasury.gov.uk/media/1E4/71/bud06_productivity_513.pdf) , p.2.
- <sup>34</sup> HM Treasury (2006) **Productivity in the UK 6: Progress and new evidence**, [http://www.hm-treasury.gov.uk/media/1E4/71/bud06\\_productivity\\_513.pdf](http://www.hm-treasury.gov.uk/media/1E4/71/bud06_productivity_513.pdf) , p.25.
- <sup>35</sup> HM Treasury (2006) **Productivity in the UK 6: Progress and new evidence**, [http://www.hm-treasury.gov.uk/media/1E4/71/bud06\\_productivity\\_513.pdf](http://www.hm-treasury.gov.uk/media/1E4/71/bud06_productivity_513.pdf) , p.34.
- <sup>36</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.9.
- <sup>37</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.29.
- <sup>38</sup> John Philpott (2006) 'Raising Productivity: From skills to High-Performance Working', in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p.170.
- <sup>39</sup> John Philpott (2006) 'Raising Productivity: From skills to High-Performance Working', in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p.170

## END NOTES

- <sup>40</sup> Ewart Keep (2006) Market Failure in Skills, SSDA Catalyst Issue 1, <http://www.ssda.org.uk/ssda/pdf/060131%20D%20SSDA%20Catalyst%20no1%20Market%20Skills%20Failure.pdf> , p.4.
- <sup>41</sup> Scottish Executive (2003) **The Lifelong Learning Strategy for Scotland**, <http://www.scottishexecutive.gov.uk/Resource/Doc/47032/0028819.pdf> , p.7.
- <sup>42</sup> HM Government (2001) **In Demand: Adult Skills for the 21st Century - Part 1**, The Performance and Innovation Unit, the Cabinet Office, CABI J01-8682/0112/D16, [http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd\\_1/report/Finalrep.pdf](http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd_1/report/Finalrep.pdf) , p.8, and HM Government (2002) **In Demand: Adult Skills for the 21st Century - Part 2**, The Strategy Unit, the Cabinet Office, [http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd\\_2/report/downloads/su-adult-skills.pdf](http://www.cabinetoffice.gov.uk/strategy/downloads/su/wfd_2/report/downloads/su-adult-skills.pdf) , p.14.
- <sup>43</sup> For more on this see Dickerson A, (2006) Regional Productivity and Skills in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p. 301
- <sup>44</sup> Leadership & Management Advisory Panel (2006) **Raising our ambition** [http://www.cfe.org.uk/index.php?option=com\\_docman&task=doc\\_download&gid=96&Itemid=34](http://www.cfe.org.uk/index.php?option=com_docman&task=doc_download&gid=96&Itemid=34)
- <sup>45</sup> Steedman, McIntosh & Green (2004) **International Comparisons of Qualifications: Skills Audit Update**, Research Report, DTI, RR548, p.8.
- <sup>46</sup> HM Government (2005) **Skills: Getting on in business, getting on at work**, DFES, DTI, HM Treasury & DWP, Cm 6483, <http://www.dfes.gov.uk/skillsstrategy/index.cfm?fuseaction=content.view&CategoryID=6>
- <sup>47</sup> Broadberry & O'Mahony (2005) **Britain's Twentieth Century Productivity Performance in International Perspective**, <http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/broadberry/wp/labmkt5.pdf> , p.21.
- <sup>48</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.40.
- <sup>49</sup> Steedman, McIntosh, Green (2004) **International Comparisons of Qualifications: Skills Audit Update**, DTI, Research Report RR548, p.8.
- <sup>50</sup> DFES (2006) 'Chart B: Level of highest qualification held by people of working age, by age group, England, Spring 2006 (Percentage distribution)', <http://www.dfes.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=37&chid=162>
- <sup>51</sup> Letter from David Russell, LSC Director of Resources, 19 December 2006. <http://readingroom.lsc.gov.uk/lsc/National/id-furthereducationfunding200607-updateandanalysis-letter-19dec2006.pdf> , p.1.
- <sup>52</sup> HM Government (2005) **Skills: Getting on in business, getting on at work**, DFES, DTI, HM Treasury & DWP, Cm 6483, <http://www.dfes.gov.uk/skillsstrategy/index.cfm?fuseaction=content.view&CategoryID=6>
- <sup>53</sup> Michael E. Porter & Christian H. M. Ketels (2003) **UK Competitiveness: moving to the next stage**, DTI Economics Paper 3, <http://www.dti.gov.uk/files/file14771.pdf> .
- <sup>54</sup> DfES (2003) **Skills Strategy - Technical Supplement on underlying data and evidence**, DfES
- <sup>55</sup> Futureskills Scotland (2006) **The Scottish Labour Market 2006**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report\\_The\\_Scottish\\_Labour\\_Market\\_2006.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report_The_Scottish_Labour_Market_2006.asp) , p.4.
- <sup>56</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.44.
- <sup>57</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.28.
- <sup>58</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.40.
- <sup>59</sup> LSC (2006) **National Employers Skills Survey 2005: Key Findings**, LSC. <http://readingroom.lsc.gov.uk/lsc/2006/research/commissioned/nat-nationalemployersskillssurvey2005keyfindings-re-june2006.pdf>

## END NOTES

- <sup>60</sup> LSC (2004) **National Employers Skills Survey 2004: Key Findings**, LSC.  
<http://readingroom.lsc.gov.uk/lsc/2005/research/commissioned/national-employers-skills-survey-key-findings-2004.pdf>
- <sup>61</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury  
[http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.40.
- <sup>62</sup> Futureskills Scotland (2006) **The Scottish Labour Market 2006**,  
[http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report\\_The\\_Scottish\\_Labour\\_Market\\_2006.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report_The_Scottish_Labour_Market_2006.asp) , p.32.
- <sup>63</sup> ONS (2007) **Labour market statistics; January 2007**, <http://www.statistics.gov.uk/pdfdir/lmsuk0107.pdf> , p.2.
- <sup>64</sup> R. Wilson, K. Homenidou & A. Dickerson (2006) **Working Futures 2004-2014, National Report**, IER, SSDA,  
<http://www.ssda.org.uk/ssda/PDF/Working%20Future%2020042014%20National%20R%20060215.pdf> , p.85.
- <sup>65</sup> Futureskills Scotland (2005) **Skills in Scotland 2004**,  
[http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.24.
- <sup>66</sup> Alan Felstead, Duncan Gallie & Francis Green (2002) **Work Skills in Britain 1986-2001**,  
<http://www.skope.ox.ac.uk/WorkingPapers/Workskills%20in%20Britain.pdf> , p.73.
- <sup>67</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury,  
[http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.28.
- <sup>68</sup> Becci Newton, Jennifer Hurstfield, Linda Miller, Rosie Page and Karen Akroyd (2005) **What employers look for when recruiting the unemployed and inactive: skills, characteristics and qualifications**, DWP,  
<http://www.dwp.gov.uk/asd/asd5/rports2005-2006/rrep295.pdf> , p.34.
- <sup>69</sup> Anna Vignoles & Nattavudh Powdthavee (2006) 'Using returns to education to understand sector skill needs', in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p.144.
- <sup>70</sup> Anna Vignoles & Nattavudh Powdthavee (2006) 'Using returns to education to understand sector skill needs', in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p.151.
- <sup>71</sup> HM Government (2005) **Skills: Getting on in business, getting on at work: Part 2**, DfES, Cm 6483-2,  
<http://www.dfes.gov.uk/publications/skillsgettingon/docs/SkillsPart2.pdf> , p.7.
- <sup>72</sup> Ruth Kelly, speech to the Learning and Skills Development Agency Summer Conference, 21 June 2005.
- <sup>73</sup> Colin Ashton, Stephen Oliver-Watts, Jean Holden-Smith, Steve Townsley, June Cramman, Sheila Willis, Bryan Davies, James Wallace, Liz Warriner (2005) **ALI Employer Training Pilot Survey**, ALI,  
<http://www.dfes.gov.uk/research/data/uploadfiles/RR695.pdf> , p.6.
- <sup>74</sup> Colin Ashton, Stephen Oliver-Watts, Jean Holden-Smith, Steve Townsley, June Cramman, Sheila Willis, Bryan Davies, James Wallace, Liz Warriner (2005) **ALI Employer Training Pilot Survey**, ALI,  
<http://www.dfes.gov.uk/research/data/uploadfiles/RR695.pdf> , p.21.
- <sup>75</sup> HM Government (2005) **Skills: Getting on in business, getting on at work: Part 1**, Cm 6483-1,  
<http://www.dfes.gov.uk/skillsstrategy/uploads/documents/Skills%20WP%20Part%201.pdf> , p.9.
- <sup>76</sup> LSC (2005) **Learning and Skills - the agenda for change: The Prospectus**, LSC,  
<http://readingroom.lsc.gov.uk/lsc/2005/quality/reshaping/agenda-for-change-prospectus.pdf>, p.v.
- <sup>77</sup> CBI (12 September 2005), Latest Employment Trends Survey, Press release,  
<http://www.cbi.org.uk/ndbs/Press.nsf/0/3fd7fd2afd2f2c8b80257074004b930d?OpenDocument> .
- <sup>78</sup> Futureskills Scotland (2004) **Employer Engagement with Further Education; Further results from the Scottish Employers Skill Survey 2004**,  
[http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Employer\\_Engagement\\_with\\_Further\\_Education\\_1.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Employer_Engagement_with_Further_Education_1.asp) , p.23.
- <sup>79</sup> CBI (2006) **The Scottish Economy: the priority of priorities**.

## END NOTES

- <sup>80</sup> Becci Newton, Jennifer Hurstfield, Linda Miller, Rosie Page and Karen Akroyd (2005) **What employers look for when recruiting the unemployed and inactive: skills, characteristics and qualifications**, DWP, <http://www.dwp.gov.uk/asd/asd5/rports2005-2006/rrep295.pdf> , p.58.
- <sup>81</sup> Becci Newton, Jennifer Hurstfield, Linda Miller, Rosie Page and Karen Akroyd (2005) **What employers look for when recruiting the unemployed and inactive: skills, characteristics and qualifications**, DWP, <http://www.dwp.gov.uk/asd/asd5/rports2005-2006/rrep295.pdf> , p.34.
- <sup>82</sup> CBI (12 September 2005) Latest Employment Trends Survey, Press Release, <http://www.cbi.org.uk/ndbs/Press.nsf/0/3fd7fd2afd2f2c8b80257074004b930d?OpenDocument> .
- <sup>83</sup> LSC (2006) **National Employers Skills Survey 2005: Key Findings**, <http://readingroom.lsc.gov.uk/lsc/2006/research/commissioned/nat-nationalemployersskillssurvey2005keyfindings-re-june2006.pdf> , p.17.
- <sup>84</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.79.
- <sup>85</sup> HM Treasury, DTI (2006) **Productivity in the UK: Progress and new evidence**, HMT, DTI, [http://www.hm-treasury.gov.uk/media/1E4/71/bud06\\_productivity\\_513.pdf](http://www.hm-treasury.gov.uk/media/1E4/71/bud06_productivity_513.pdf) , p.2.
- <sup>86</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.3.
- <sup>87</sup> For example, the Leitch Review notes that in 1994 Sweden has levels of functional literacy of 92.5% where in the UK we only aspire for 90% by 2020, Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.61.
- <sup>88</sup> HM Government (2005) **Skills: Getting on in business, getting on at work**, DFES, DTI, HM Treasury & DWP, Cm 6483, <http://www.dfes.gov.uk/skillsstrategy/index.cfm?fuseaction=content.view&CategoryID=6> , p.18.
- <sup>89</sup> Chancellor of the Exchequer (22 March 2006) Budget Statement.
- <sup>90</sup> Rachel Beaven, Derek Bosworth, Richard Lewney & Rob Wilson (2005) **Alternative skills scenarios to 2020 for the UK Economy**, Cambridge Econometrics/Warwick Institute for Employment Research report for the SSDA, [http://www.hm-treasury.gov.uk/media/ECC/3A/alternative\\_skills\\_scenarios\\_execsummary.pdf](http://www.hm-treasury.gov.uk/media/ECC/3A/alternative_skills_scenarios_execsummary.pdf)
- <sup>91</sup> See Martin Wolf (22 March 2006) 'Enough of Soviet tractor planning', in **The Financial Times**, [http://www.ft.com/cms/s/e181f4c6-b9b4-11da-9d02-0000779e2340,dwp\\_uuid=2da00b34-ba75-11da-980d-0000779e2340.html](http://www.ft.com/cms/s/e181f4c6-b9b4-11da-9d02-0000779e2340,dwp_uuid=2da00b34-ba75-11da-980d-0000779e2340.html) , in which on that specific quote he said "he has no idea how many skilled people the economy will need (or, more precisely, demand) by then. Such "plans" are not worth the paper they are written on".
- <sup>92</sup> Rachel Beaven, Derek Bosworth, Richard Lewney & Rob Wilson (2005) **Alternative skills scenarios to 2020 for the UK Economy**, Cambridge Econometrics/Warwick Institute for Employment Research report for the SSDA, [http://www.hm-treasury.gov.uk/media/ECC/3A/alternative\\_skills\\_scenarios\\_execsummary.pdf](http://www.hm-treasury.gov.uk/media/ECC/3A/alternative_skills_scenarios_execsummary.pdf) , p.iii.
- <sup>93</sup> Leitch Review of Skills (2005) **Skills in the UK: The long-term challenge**, HM Treasury [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm) , p.79.
- <sup>94</sup> Rachel Beaven, Derek Bosworth, Richard Lewney & Rob Wilson (2005) **Alternative skills scenarios to 2020 for the UK Economy**, Cambridge Econometrics/Warwick Institute for Employment Research report for the SSDA, [http://www.hm-treasury.gov.uk/media/ECC/3A/alternative\\_skills\\_scenarios\\_execsummary.pdf](http://www.hm-treasury.gov.uk/media/ECC/3A/alternative_skills_scenarios_execsummary.pdf) , p.v.
- <sup>95</sup> SSDA (23 February 2006) 'Beauticians not plumbers the future of the UK workforce', <http://www.ssda.org.uk/ssda/Default.aspx?page=2523>
- <sup>96</sup> R. Wilson, K. Homenidou & A. Dickerson (2006) **Working Futures 2004-2014, National Report**, IER, SSDA, <http://www.ssda.org.uk/ssda/PDF/Working%20Future%2020042014%20National%20R%20060215.pdf> , p.83.
- <sup>97</sup> R. Wilson, K. Homenidou & A. Dickerson (2006) **Working Futures 2004 - 2014 Technical Report**, IER, SSDA, <http://www.ssda.org.uk/ssda/PDF/Working%20Future%2020042014%20Technical%20Report%20R%20060215.pdf> , p.46.

## END NOTES

- <sup>98</sup> R. Wilson, K. Homenidou & A. Dickerson (2006) **Working Futures 2004 - 2014 Technical Report**, IER, SSDA, <http://www.ssda.org.uk/ssda/pdf/Working%20Future%2020042014%20Technical%20Report%20R%20060215.pdf> , p.87.
- <sup>99</sup> J. Kay (2003) **The truth about markets**, Penguin, p.116 - referring to those who can forecast the stock market and future passenger numbers for air transport 10 years out.
- <sup>100</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.12.
- <sup>101</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.74.
- <sup>102</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.76.
- <sup>103</sup> Marks & Spencer (15 January 2007) 'Marks & Spencer launches "Plan A" - £200m 'eco-plan'', Press Release, <http://www2.marksandspencer.com/thecompany/mediacentre/pressreleases/2007/com2007-01-15-00.shtml>
- <sup>104</sup> DfES (2006) **Further Education: Raising Skills, Improving Life Chances**, CM 6768, <http://www.dfes.gov.uk/publications/furthereducation/docs/6514-FE%20White%20Paper.pdf> , p.24.
- <sup>105</sup> Further information can be found at [www.newstandard.co.uk](http://www.newstandard.co.uk)
- <sup>106</sup> Wilson & Hogarth (eds) (2003) **Tackling the Low Skills Equilibrium: A Review of the Issues and some new evidence**, DTI <http://www.dti.gov.uk/files/file11007.pdf> , p.vii.
- <sup>107</sup> Finegold & Soskice (1988) 'The failure of training in Britain: Analysis and Prescription', **Oxford Review of Economic Policy**.
- <sup>108</sup> HM Government (2005) **Skills: Getting on in business, getting on at work**, Cm 6483-1, <http://www.dfes.gov.uk/skillsstrategy/uploads/documents/Skills%20WP%20Part%201.pdf> , p.6.
- <sup>109</sup> Leitch Review of Skills (2005) **Skills in the UK: The long-term challenge**, HM Treasury [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm) , p.79.
- <sup>110</sup> Leitch Review of Skills (2005) **Skills in the UK: The long-term challenge**, HM Treasury [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm) , p.80.
- <sup>111</sup> Jean-Baptiste Say (1803) 'A Treatise on Political Economy, or the production, distribution and consumption of wealth', English translation, <http://www.econlib.org/library/Say/sayT0.html> .
- <sup>112</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury, [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.33.
- <sup>113</sup> Ewart Keep (2006) **Market Failure in Skills**, SSDA Catalyst Issue 1, <http://www.ssda.org.uk/ssda/pdf/060131%20D%20SSDA%20Catalyst%20no1%20Market%20Skills%20Failure.pdf> , p.6.
- <sup>114</sup> Scottish Executive (2003) **The Lifelong Learning Strategy for Scotland**, <http://www.scottishexecutive.gov.uk/Resource/Doc/47032/0028819.pdf> , pp.33-34.
- <sup>115</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury, [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.2.
- <sup>116</sup> See Chapter 5, Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury, [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) .
- <sup>117</sup> Futureskills Scotland (2006) **The Scottish Labour Market 2006**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report\\_The\\_Scottish\\_Labour\\_Market\\_2006.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report_The_Scottish_Labour_Market_2006.asp) , p.32.
- <sup>118</sup> Futureskills Scotland (2006) **The Scottish Labour Market 2006**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report\\_The\\_Scottish\\_Labour\\_Market\\_2006.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report_The_Scottish_Labour_Market_2006.asp) , p.9.
- <sup>119</sup> Futureskills Scotland (2006) **The Scottish Labour Market 2006**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report\\_The\\_Scottish\\_Labour\\_Market\\_2006.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/NationalReports/Report_The_Scottish_Labour_Market_2006.asp) , p.37.

## END NOTES

- <sup>120</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.33.
- <sup>121</sup> Phillip Brown, Hugh Lauder, David Ashton & Gerbrand Tholen (2006) 'Towards a high-skilled, low-waged economy? A review of global trends in education, employment and the labour market', in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p.63.
- <sup>122</sup> LSC (2006) **Skills in England 2005 Volume 2: Research Report**, LSC, <http://readingroom.lsc.gov.uk/LSC/2006/research/commissioned/nat-skillsinengland2005vol2-re-july2006.pdf> , p.13.
- <sup>123</sup> Futureskills Scotland (2004) **Skills in Scotland 2004**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.30.
- <sup>124</sup> Sir Digby Jones (17 January 2007) interviewed on Radio Four's Today Programme in his newly appointed role as National Skills Envoy.
- <sup>125</sup> Ewart Keep & Ken Mayhew (2006) **Can Employers be Persuaded that Training Pays?**, Futureskills Scotland, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Can\\_Employers\\_be\\_Persuaded\\_that\\_Training\\_Pays.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Can_Employers_be_Persuaded_that_Training_Pays.asp) , pp.9 & 10.
- <sup>126</sup> Ewart Keep (2006) **Market Failure in Skills**, SSDA Catalyst Issue 1, <http://www.ssda.org.uk/ssda/pdf/060131%20D%20SSDA%20Catalyst%20no1%20Market%20Skills%20Failure.pdf> , p.9.
- <sup>127</sup> Wilson and Hogarth (2003) **Tackling the Low Skills Equilibrium: A Review of Issues and Some New Evidence**, Final Report, DTI.
- <sup>128</sup> Francis Green, Steven McIntosh & Anna Vignoles (2004) **Scoping Study on International Comparisons of Non-Certified Learning**, DTI, <http://www.dti.gov.uk/files/file10995.pdf> , p.2.
- <sup>129</sup> Futureskills Scotland (2004) **Skills in Scotland 2004**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.30.
- <sup>130</sup> Futureskills Scotland (2004) **Skills in Scotland 2004**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.33.
- <sup>131</sup> Futureskills Scotland (2004) **Skills in Scotland 2004**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.31.
- <sup>132</sup> Futureskills Scotland (2004) **Skills in Scotland 2004**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.32.
- <sup>133</sup> ONS (2004) **Labour Force Survey**.
- <sup>134</sup> ONS (2005) **GVA statistics**, [http://www.statistics.gov.uk/downloads/theme\\_economy/RegionalGVA\\_Dec06.pdf](http://www.statistics.gov.uk/downloads/theme_economy/RegionalGVA_Dec06.pdf) , p.5, and ONS (2007) **Quarterly Employee Jobs Series**, <http://www.scotland.gov.uk/Resource/Doc/933/0023509.xls>
- <sup>135</sup> ONS (2004) **Labour Force Survey**.
- <sup>136</sup> Futureskills Scotland (2004) **Skills in Scotland 2004**, [http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report\\_Skills\\_in\\_Scotland\\_2004.asp](http://www.futureskillsscotland.org.uk/web/site/home/Reports/WhatEmployersThink/Report_Skills_in_Scotland_2004.asp) , p.26.
- <sup>137</sup> Wilson and Hogarth (2003) **Tackling the Low Skills Equilibrium: A Review of Issues and Some New Evidence**, Final Report, DTI.
- <sup>138</sup> Wilson and Hogarth (2003) **Tackling the Low Skills Equilibrium: A Review of Issues and Some New Evidence**, Final Report, DTI.
- <sup>139</sup> G. Mason (2005) **In Search of High Value Added Production: How important are skills?**, DfES Research Report 663, p.6.
- <sup>140</sup> See A. Dickerson (2006) **Regional Productivity and Skills** in Sam Porter & Mike Campbell (eds) (2006) **Skills and Economic Performance**, SSDA, p.301.
- <sup>141</sup> Leitch Review of Skills (2006) **Prosperity for all in the global economy - world class skills**, HM Treasury, [http://www.hm-treasury.gov.uk/media/523/43/leitch\\_finalreport051206.pdf](http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf) , p.139.
- <sup>142</sup> Ewart Keep (2006) **State control of the English education and training system - playing with the biggest train set in the world**. *Journal of Vocational Education and Training*, p.62.

If you require this publication in an alternative format and/or language please contact the Scottish Enterprise Helpline on 0845 607 8787 to discuss your needs.

Futureskills Scotland  
Scottish Enterprise  
150 Broomielaw  
Atlantic Quay  
Glasgow  
G2 8LU  
Tel: 0141 248 2700  
Fax: 0141 221 3217

[www.futureskillsscotland.org.uk](http://www.futureskillsscotland.org.uk)  
email: [futureskillsscotland@scotent.co.uk](mailto:futureskillsscotland@scotent.co.uk)

SE/1986/MAR07

