

CRESC Working Paper Series

Working Paper No.75

Undisclosed and unsustainable: problems of the UK national business model

John Buchanan, Julie Froud, Sukhdev Johal, Adam Leaver and Karel Williams

December 2009

For further information: Centre for Research on Socio-Cultural Change (CRESC)

Faculty of Social Sciences The Open University

Walton Hall Milton Keynes MK7 6AA UK

Tel: +44 (0)1908 654458 Fax: +44 (0)1908 654488 Email: cresc@manchester.ac.uk or cresc@open.ac.uk

Web: www.cresc.ac.uk







UNDISCLOSED AND UNSUSTAINABLE: PROBLEMS OF THE UK NATIONAL BUSINESS MODEL

John Buchanan¹, Julie Froud², Sukhdev Johal³, Adam Leaver² and Karel Williams⁴

Corresponding author:

Karel Williams
CRESC
University of Manchester
178 Waterloo Place
Oxford Road
Manchester M13 9PL

Email: karel.williams@manchester.ac.uk

ABSTRACT

This paper presents new arguments and evidence about public and private employment creation in the UK. Our measures of public sector employment count state employees and estimate para-state employees whose private employment is state supported. On this basis, state and para-state since 1998 account for more than half the job creation nationally and for much more in the ex-industrial regions. Our argument is that the UK has an undisclosed business model of using publicly supported employment to cover the continuing failure of the private sector to generate and distribute welfare through job creation.

KEY WORDS: business model, employment, finance, state and para-state

¹ Workplace Research Centre, University of Sydney

² Manchester Business School

³ School of Management, Royal Holloway, University of London

⁴ Centre for Research in Socio-Cultural Change (CRESC), University of Manchester

This paper is dedicated to L. J. Williams (1927-2004), historian and economist, who used political arithmetic to study the relations between democracy, employment and welfare.

INTRODUCTION

This paper argues that the United Kingdom has an undisclosed business model of using publicly supported employment to cover the continuing failure of the private sector to generate welfare through job creation in the 1990s and 2000s. The business model was never deliberately hidden but equally never articulated or explicit as New Labour and our political classes presided over a distribution of welfare through job creation in ways which were not the subject of public discussion and criticism. This opacity was partly caused by the increasingly uninformative and irrelevant nature of the official statistics on employment in an economy of outsourcing. Official statistics precisely count the number of public employees in the state sector but official statistics do not adequately count the growing number of private employees in the para-state sector. The para-state includes activities like rubbish collecting or nursery education which are revenue dependent on government funding and activities like private health care that is dependent in many ways on government support. On our estimates in this paper, the para-state sector in the UK now employs a number equal to one-third of the total number of public sector employees. The UK business model of expanding state and para-state employment was never sustainable in the longer term because government expenditure and subsidy are limited. And these emerging problems have been crystallised and focused by the financial crisis which removes the pre-2007 stimulus of public reflation and private asset bubble. Going forward, the UK cannot sustain a reasonable diffusion of prosperity into disadvantaged regions and social groups; while the upcoming public expenditure cuts will aggravate the UK's national problems.

Our argument is deliberately framed using elastic cultural images like business model and unsustainability rather than scientistic political economy concepts like regimes of accumulation. The idea of a national business model may initially seem paradoxical but, as we have argued elsewhere, business model is an extendible term. At the enterprise level, for example, it can cover meeting diverse stakeholder expectations in non-profit organisations like the BBC (Leaver et al., 2009) as well as how to generate shareholder value in the corporatised private sector. In this article we extend the business model term to the national economy. Because jobs are the primary way of distributing welfare, the national business model issue is whether and how the economy can generate the quantity and quality of employment necessary to distribute welfare and diffuse prosperity across regions and social groups. Sustainability and unsustainability are even fuzzier metaphors whose meaning changes with time and place and these shifts need to be brought into our analysis. So this article also

examines how various authors from the 1970s to the present have socially constructed the sustainability of the British national economy through dystopian or utopian visions of national decline and renewal. These visions shift from the problems of deindustrialisation in the 1970s to the achievements of the financial services sector or the creative industries in the 2000s.

The article deploys a narrative and numbers approach which combines analysis of narrative visions with some old fashioned political arithmetic about jobs and employment. As in our earlier work on giant firm strategy (Froud et al., 2006), this article works by counterposing jointly authored social stories and our own independent analysis of the numbers. The first section of this article focuses on utopian and dystopian visions which construct economic narratives of national renewal or decline, partly by citing numbers that suit a prior concept of national strengths and weaknesses. Then in the next two sections of the article, we shift to a more open, numbers based political arithmetic about the sources of jobs and income since the early 1990s which define the national business model. Section two challenges the pretensions of finance by showing that this sector has created few jobs since the late 1990s, but does reinforce inequalities by strengthening the South versus the North and the working rich against the rest. Section three presents new estimates of expanding employment within the state sector of public employees and the para-state sector of private employees dependent on public support. In a fourth, concluding section, we bring narrative and numbers together to draw out the implications of limited job creation in an anaemic private sector and to raise some issues about the appropriate form and nature of regional and national policy.

1. UTOPIAN AND DYSTOPIAN VISIONS: NATIONAL AND GLOBAL

Advanced capitalist economies work partly by constructing narratives about how they are and where they are going. Social scientists sometimes represent their versions of these stories as models or ideal types with labels like Anglo-Saxon Capitalism or Post-Fordism. But it is probably more sensible to focus more broadly on the economic visions which are consumed individually by the broadsheet reader after being produced collectively by the political classes, business and media as well as academics. Hence this section presents an analysis of successive dystopian and utopian visions of the problems and achievements of the UK economy in an international context from the early 1970s onwards.

'How we are' visions typically work by removing the uneven, partial, unresolved and contradictory elements of the case while the 'where we are going' vision of the future works by extrapolating into an inherently uncertain future. Both kinds of vision are not so much varieties or stages of capitalism as heroic projections of benign or alarming current trends or developments at the enterprise, sectoral or national level. When narrative is in the ascendant, numbers and empirical cases are typically used rhetorically to illustrate a pre-existing point as when one sector like manufacturing or finance is presented as the 'leading' force for national renewal or decline. The utopian or dystopian vision accentuates the positive or the negative to construct a scenario of achievement and opportunity, or problems and threat. Put another way, utopias and dystopias are the grounded, collective hopes and fears of the present about a future that does (or does not) work.

There is neither simple cyclical alternation between utopia and dystopia nor any mechanical, one on one correspondence between achieved economic performance and optimism or pessimism. But, it is unusual for any vision of utopia or dystopia to last more than 15 years because capitalism works unpredictably through long upswings which sedate scepticism and through long downswings or shorter recessions which validate introspection. The history of British national visions since the 1970s is one of slow alternation: 1970s and 1980s dystopias about "too few producers" faded into euphoria about City success and knowledge industries in the 15 glorious years after the early 1990s; although dystopia was creeping back even before the onset of financial crisis in 2007. These national visions are nested in the broader changing vision of the global economy which has moved in parallel. We have macro economic dystopia about limits to growth in the 1970s followed by a more utopian vision of benign globalisation in the 1990s which was increasingly challenged in the 2000s when climate change and global warming became more urgent.

The global visions are interesting because, whereas British visions of the national future have been predominantly about whether and how production can be increased, the global dystopias have always been about how expanded consumption (and production) is unsustainable. There are sharp unresolved differences here about the possibility and desirability of increasing consumption of material goods and commercialised services as visions of global dystopias generally rework Malthusian pessimism about constraints on expansion. The economists' Meadows et al. frame the 1970s global vision, (1972) book *Limits to Growth* which dramatised the limits by modelling exponential increases in consumption against known resources and

generated fears which were then apparently confirmed by oil crises. These dark macro fears returned in the 2000s with a much broader base in natural science evidence about global warming. Most notably the economist Stern's *Review* (2006) predicted climate change would (like wars and depression in the twentieth century) create "major disruption". The future is always uncertain because of the unpredictability of capitalism and the limits of modelling but Stern clearly represents the best evidenced of all dystopias.

In between, there was euphoria as some enthusiasts presented benign globalisation as the latter day 1990s equivalent of free trade in the 1840s. On this scenario, low wage industrialisation diffused prosperity in Asia and exported cheap manufactures and surplus funds to Western economies who could find a different role in a new international division of labour whose viability was apparently confirmed by the US capacity to create jobs and a financial sector which managed global flows. As with the dystopias before and afterwards, the success of the utopian vision of globalisation was not that it compelled agreement but that it forced critics to debate on the terrain of globalization. Thus, Reich (1991) added empirical qualifications about the quality of some of the jobs in the USA while Stiglitz (2002) added political criticism of the global neo-liberal agenda.

Against this changing backdrop, there was then a changing vision of the UK's distinctive national problems. In the dystopian 1970s and 1980s the vision of the (right and left) economists was of "too few producers" as national debate operated with a productionist definition of sustainability. From this point of view, the question was: would manufacturing generate a suitable quantum of work and exports (because nothing else would). From the centre-right in their 1977 book, the Oxford economists Bacon and Eltis diagnosed a problem of "crowding out" as the expansion of the UK public sector diminished employment and investment in marketable goods and services. From the centre-left, Singh's famous 1977 Cambridge paper on "deindustrialisation" opened onto a vision of job loss and payments constraint after private sector manufacturing decline; a vision that was apparently confirmed in the Thatcher recession of the early 1980s which saw the permanent loss of more than 20% of British manufacturing jobs in just over 18 months.

The next phase of UK debate was one of confused transition from pessimism to optimism, complicated by several developments, including the second Thatcher recession after 1989 and the explicit recommendation of imported systems of

industrial production. The pain of living was partly assuaged by the drug of dreams and promises of revival and prosperity. As the unpleasant consequences of manufacturing job loss became clearer, so visionary dreams of a revitalised future for manufacturing beyond "mass production" became more important in Britain and in all the long industrialised countries. Hence, the Piore and Sabel (1984) book, which announced flexible specialisation and promoted Italian style industrial districts, was curiously subtitled "possibilities of prosperity". The Womack, Jones and Roos (1990) book announced Lean Production and promoted Japan, before explaining how all Western firms could prosper by using some variant on the Toyota Production System which incidentally generated good work. The various accounts of Post-Fordism subsequently generalised about emerging new realities largely by constructing a future which inverted the supposed characteristics of old style mass production in a new epoch where flexibilised production would meet differentiated demand.

But after five years or more of upswing by the later 1990s, things were being constructed quite differently because UK national prosperity was now being discussed as achievement not promise. Every prediction of the Left prophets of doom in the 1970s and 1980s had now come to pass and the outcome was a triumph in the 1990s. The deindustrialised future had arrived when the UK was running a substantial and growing trade deficit, while manufacturing employment declined at a faster rate in the later 1990s. And yet centre-right academics were triumphalist. Britain was now outperforming its continental European rivals by generating more growth and less unemployment; and this outperformance was confidently attributed to the invigorating Thatcherite policies of defeating organised labour, deregulating the labour market, privatising utilities and council housing and extending the sphere of markets and finance. When Eltis, after retirement, published *Britain, Europe and the EMU* (2000) he celebrated rising living standards, more inward investment and other indicators of the "transformation" in Britain which was consequently outperforming its European neighbours.

Manifest success and confident attribution encouraged New Labour to accept this scenario about Thatcherism as pain for gain. Meanwhile business leaders and government boosters in the later 1990s converged on a new vision. An onwards and upwards national trajectory would be sustained by the continued expansion of post-industrial leading sectors like financial services and creative industries, which were both 'bigged up' by selectively citing totals and removing points of reference. The financial services sector promoted itself at every opportunity because finance after

deregulation needed a favourable regulatory environment which was justified partly by elaborating a story of its achievement. Thus, the City of London Corporation website presented finance as a shining example of sectoral success which made a major national contribution in jobs, payments and taxes. The creative industries were more disparate and heterogeneous so that they had to be discovered through addition by New Labour politicians during the 'Cool Britannia' phase. Nearly a decade later, NESTA (2006) was able to add together advertising, TV, video games, music and design to find that these activities together accounted for 5% of UK employment and 4% of exports.

As always with visions, the point was not that everybody agreed and, for example, the claims about creative industries were strongly challenged (e.g. Atkinson and Elliott, 2007). But ideas about finance as a socially valuable leading sector undoubtedly helped to rationalise popular "feel good" and encouraged policy makers in the belief that it was important to maintain the competitiveness of London as a financial centre through light touch regulation. The importance of this alibi was demonstrated by the way in which the City returned to its established story about the social value of finance after the 2007 crisis, when the Wigley (2008) and Bischoff reports (2009) counted the benefits of finance in the hope that this might now deflect "over regulation".

These visions are not futurology which generates reliable, useful predictions because they often tell us more about the present than the future and are usually discredited by events within a decade. But visions should not be discounted as ephemeral confusions because they can usefully focus attention on what might be called supply side design flaws originating in capitalist modes of calculation. The 1980s debates about deindustrialisation usefully highlighted how firms and national sectors could manage their way to decline and retreat by making conservative financial calculations about investment in product and process (see Hayes and Abernathy (1980), Williams *et al.* (1983). More recently, the shift to shareholder value forms of calculation after the 1990s has required firms to cut back on social overhead costs including socially necessary provision for skill formation (see Watson *et al.*, 2003).

Furthermore, some visions do need to be taken more seriously than others. The scale and gravity of the consequences of climate change gives this global dystopia a force and importance for action which none of its predecessors ever had. The Stern calculation about investing 1% of GDP on green measures to prevent a 20% reduction in global GDP is no doubt illustrative and rhetorical because it depends on low discount

rates as part of a cost-benefit analysis which works by cumulating imprecise estimates. But the climate change dystopia is different because there is a fundamental asymmetry here between the global social benefits of being right and the inescapable and overwhelming costs of being wrong. Costly intervention against global warming needs to be set in this context. If Stern and others are right, we are collectively wrecking the planet by global warming with massive consequences which can be prevented or ameliorated; if Stern and others are wrong, then we will have made some green investments which in the event prove unnecessary. The question arising from this vision is not whether but how to intervene against climate change.

2. THE CONTRIBUTION OF FINANCE: SOME POLITICAL ARITHMETIC

At this point, the form of argument changes as we turn to political arithmetic represented in the earlier visionary debates by Bacon and Eltis and by Singh who all favoured a tabular, descriptive form of knowledge. That was displaced as mainstream economics went algebraic after the early 1980s and the old style applied economists were discursively cleansed from British university economics departments whose new paradigm was mathematical techniques plus formalised theory. Political economy was reinvented elsewhere in discourses like international political economy and human geography; which were however different from old-style applied economics because they added new preoccupations like Bretton Woods or new inflections like the cultural turn. In all this, the radical force of old style six tables and a commentary description has been overlooked and one of our aims is to demonstrate the neglected potential of this kind of political arithmetic.

In this section we use political arithmetic to challenge established views about the contribution of finance by considering numbers employed in the finance sector; and in the next section we use political arithmetic to develop new problem definitions by proposing new measures of state and para-state employment inside and outside the public sector. Before doing so, we can begin by confronting the scepticism of social constructionists who see numbers as just another rhetoric derived from pre-existing frames. Many of the visions considered in the last section select illustrative numbers, factoids and vignettes to dramatise a future that does (or does not) work. But, this section shows it is possible to use numbers in a different way to acquire new knowledge. In this case, the exploratory use of numbers has two key preconditions: first, a very clear concept of the relevant numbers about job creation: second, new measures of public employment which extend the field of the visible and take the argument in new directions.

Conceptually, employment data is relevant to our argument because income from employment is the primary mode of wealth distribution in economically developed, high income countries despite the introduction of large scale transfer payments and funded pensions. In the USA, for example, we can calculate the share of income from employment in total income for different income quintiles. From IRS sources in the 2000s, some 80% or more of all income in the three middle income quintiles comes from employment (Froud et al., 2010 forthcoming). Only at the extremes of the income distribution do social security transfer payments or unearned rentier income (including retirement pensions) become important as sources for whole quintile groups. From this point of view, the primary welfare question in all the advanced economies is always how many jobs (and what kind of jobs) the national economy is creating. This is particularly so in the UK case over the recent period from 1992 to 2007 which was one of sustained, strong output growth. This would ordinarily lead to employment growth because, moderated by productivity trends and real wage increases, labour always takes the largest share of output. The relevant empirics are given in the Office for National Statistics (ONS) 'Blue Book' (2009) which shows that UK real output on the Gross Value Added measure, increased by an average of 4% per annum; and which also discloses that labour's share of this output averaged more than 55% over these years, The arithmetically logical result will be new job creation; and the question of how many jobs and in what sectors is then an open empirical question which requires analysis of employment trends in different sectors.

It is difficult to answer the question about sectoral trends in an outsourced economy where allocating employment to different sectors is complicated because demand from one sector increasingly sustains employment in another. These complications will be addressed step by step in the discussion of finance and para-finance in this section and of state and para-state employment in the next section. In our alternative banking report (CRESC, 2009), we have questioned the UK finance sector's self-justifying story about how the expansion of financial services since the 1980s has been a great national success story. Here, we want to narrow the focus on to the one issue of employment, and in the next few paragraphs present numbers which demonstrate that finance was never a leading sector in terms of new job creation (even if we include para-finance jobs in other sectors sustained by demand from finance). But finance did play a major role in increasing inequality vertically by its effects on the national distribution of earned income and horizontally by accentuating increasing inequality between the major regions.

Table 1: Employees in Great Britain split by selected sectors

	Employees				
	Manufacturing	Business services excluding	Banking and financial services	All sectors	
		banking and finance			
	No.	No.	No.	No.	
1991	4,162,160	2,354,984	1,018,354	21,575,943	
1992	3,990,125	2,417,971	985,783	21,340,633	
1993	3,818,090	2,480,958	953,212	21,105,322	
1994	3,902,763	2,690,669	965,007	21,485,547	
1995	3,987,436	2,900,379	976,801	21,865,771	
1996	4,052,608	2,968,115	962,796	22,258,468	
1997	4,059,561	3,204,866	978,422	22,849,283	
1998	4,039,508	3,486,491	1,031,595	24,355,038	
1999	3,917,413	3,643,194	1,075,602	24,827,367	
2000	3,782,139	3,883,247	1,062,602	25,214,661	
2001	3,596,616	3,909,842	1,105,103	25,490,324	
2002	3,413,814	3,912,449	1,100,848	25,593,757	
2003	3,229,533	3,982,007	1,072,463	25,710,687	
2004	3,078,424	4,165,090	1,053,758	26,067,535	
2005	2,948,205	4,440,183	1,042,877	26,496,650	
2006	2,868,488	4,541,700	1,045,879	26,351,583	
2007	2,820,867	4,704,406	1,054,084	26,599,204	
Change 1991- 2007	-1,341,293	2,349,422	35,730	5,023,261	

Notes: The data excludes Northern Ireland and the self-employed. There is a break in the series in 1998 and 2005. The authors estimated data used for 1992 and 1994. *Source*: Nomis, Office for National Statistics, London.

We can begin by considering the published official data on job creation and private sector employment growth. From 1991-2007, the total number of employees (private and public, excluding self-employed) increased by 5 million from 21.6 to 26.6 million in the UK and, on official measures, the private sector accounted for 68% of that growth (NOMIS)

Table 1 shows that in line with established trends in the private sector, manufacturing employment continued to decline and service sector employment grew. Over seventeen years, the statistics show that British manufacturing employment declined by nearly 1.3 million to 2.8 million in 2007; and private business services employment increased about 2.4 million to 5.8 million. After dividing private service employment into different categories and isolating finance employment, the official statistics show that all the growth in employment is in general "business services" where employment more or less doubled to 4.7 million. The trend in numbers employed in "banking and financial services" was flat because the total of just over 1 million was more or less exactly the same in 2007 as in 1991. Official statistics show that the employment base in the finance sector is very limited and, quite remarkably, numbers employed in the finance sector did not increase in the huge finance-led boom of the 2000s.

The next question is to what extent these figures can be taken at face value. The answer depends on two considerations. First, on an understanding of the official classificatory procedures and criteria used to allocate jobs to finance and other sectors; and, second, on some estimation of the extent of para-financial employment i.e. the indirect out of sector employment sustained by demand from finance which is officially counted in other sectors like general business services.

The official categories are designed so that the finance sector totals include most of the jobs sustained by demand from finance. For example, using the Standard Industrial Classification (SICO3) criterion, employees in call centres which work for financial services companies will be allocated to financial services because the aim is to allocate employees by "industry" activity not by the type of job performed; only call centres which work for companies from several different sectors (such as utilities and financial services) are allocated to general business services. The demand of the wholesale sector in the City of London does generate additional para-finance jobs in law, accountancy and consultancy. Activities like private equity are heavy users of such support services, whose jobs are mainly counted in the general business services category, and the finance-led boom before 2007 undoubtedly did increase such parafinance employment. But these complications need not detain us for long because, if the direct employment base in the finance sector is relatively small, the indirect employment base in para-finance cannot be large. This follows from what we know empirically about the pattern of backward linkages from manufacturing and services and what we can then reason about the logic of varying the numerator on a small denominator.

The Keynesian studies of employment multiplier effects engage with a rather different object than industrial activity and sectoral boundaries. But such studies all show much stronger backwards supply linkages from manufacturing jobs than from service jobs which are generally less technically dependent on supplier inputs. In the US economy according to Bivens (2003) each US manufacturing job supports 1.66 supplier jobs and the comparable figures are 0.82 for a personal/business service job and 0.50 for a health services job. If the industry sector is broadly defined, many of these backwards linkage jobs would be, in official statistical terms, counted inside the relevant sector as with car component jobs supporting jobs in final assembly in the car industry. So the multiplicands which should be applied to estimate out of sector para-employment should be substantially smaller. For this reason, our central estimate is that each job inside the finance sector creates 0.50 of a para-finance job outside sector. At this point the small size of finance sector employment becomes relevant because, if finance directly employs only one million in sector, it does not matter greatly whether a multiplicand of 0.30 or 0.50 or 0.80 is used to estimate job creation out of sector. If we shift from suspiciously low 0.30 to implausibly high 0.80 estimates of the out of sector multiplicand, the estimated total of para-finance jobs only varies by 500,000 on a UK employee workforce of 26 million. If we take our middling estimate of 0.50, the total number of finance and para-finance employees is never more than 1.5 million, or not much more than half the number employed by British manufacturing even in its current emaciated state. When all the qualifications about para-finance have been considered, finance remains a relatively small source of employment, which has created almost no new jobs over the past fifteen years and (by implication) other forces are driving the general growth of "business services".

If we take a broader statistical view of the characteristics of the finance sector, it is notable that finance has always made a much stronger contribution to output and profits than to employment growth. As figure 1 shows, any generalisation is complicated by the way in which the share of the finance sector in output and profits varies cyclically. From a trough low of just 5.3% in 2001, the finance sector's share of UK output (GVA) increased to 9.1%; while the sector's share of profits (GOS) had increased to 12.8% just before the bubble burst. By way of contrast the finance sector's share of British employment is always smaller, generally stable and modestly declining. The finance sector, in 1992 directly employed 4.7% of the British workforce and by 2007 employed no more than 4.0% of a substantially larger workforce. Activity characteristics and business model considerations help to explain why finance makes

such a muted contribution to employment creation. The activity in the wholesale market is such that one employee can lift a lot of money; while the business model in retail mass marketing requires cost control in the branches and back offices which is partly achieved by head count reduction.

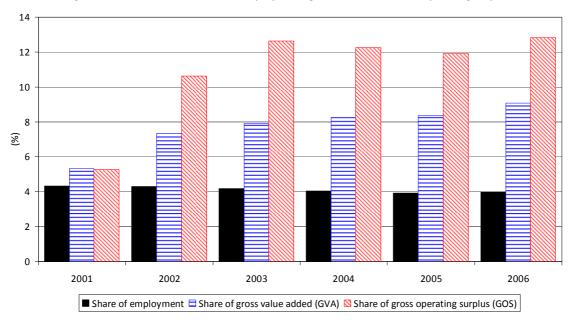


Fig. 1: Finance sector's share of UK employment, gross value added and operating surplus

Notes: The employment data excludes Northern Ireland and the self-employed.

Source: Nomis and United Kingdom Input-Output Analyses, various years, Office for National Statistics, London.

If finance was never a leading sector which could carry the national economy forwards, finance has been the great unleveller in the UK economy because it promotes a distribution of incomes which has increased social inequality from top to bottom and a distribution of jobs which has increased regional inequality. Vertically and horizontally, socially and spatially, the finance sector concentrates prosperity within the UK. There is already an established literature which sets post-1979 income distribution trends in a longer-term historical perspective. Atkinson *et al.* (2000) on the UK and Piketty *et al.* (2003) on the USA have shown that in both countries the trend is to increasing income inequality which, in historical terms, has returned the UK to Edwardian levels of inequality. This trend is associated with the rise of a new group of "working rich" centred on finance where bonuses tap a huge turnover base. If that social story is already familiar, the spatial, regional dimensions of the new inequality have been neglected because recent developments in regional inequality have not been set in a longer historical perspective. If we go back before the 1970s, British manufacturing was criticised for failing to diffuse prosperity spatially and the political classes

addressed that problem by symbolically sending car assemblers to the North West and Scotland. By the 2000s, finance is actively concentrating prosperity spatially in a way which undermines most kinds of regional policy and the problem is barely registered in political discourse.

Table 2: Financial services employment split by government office regions

	Employees		Share of total finance employment	
	1998	2007	1998	2007
	No.	No.	%	%
North East	20,915	28,388	2.0	2.7
North West	92,358	103,648	9.0	9.8
Yorks and Humber	76,524	88,286	7.4	8.4
East Midlands	40,952	43,776	4.0	4.2
West Midlands	71,351	66,869	6.9	6.3
East	86,080	72,006	8.3	6.8
London	313,620	325,813	30.4	30.9
South East	141,795	124,423	13.7	11.8
South West	79,918	78,358	7.7	7.4
Scotland	82,895	91,560	8.0	8.7
Wales	25,187	30,957	2.4	2.9
Total	1,031,595	1,054,084	100.0	100.0
				_
London and South East	455,415	450,236	44.1	42.7

Notes: The data excludes Northern Ireland and the self-employed. The finance category summates employees in the banking, intermediation, leasing insurance and pension sectors. The 2007 totals reflect a change in the data collection timing from December to September.

Source: Nomis, Office for National Statistics, London.

Horizontally the old regional problem of the 1960s was reinscribed more deeply in the new tertiary economy because north and south were on different trajectories of income growth, with more divergence of trajectory under New Labour after 1997 than under previous Tory governments. Under New Labour, from 1997-2007, using Gross Value Added (GVA) output measures, London and South East have annual real output growth rates of 6.4% and 4.7% respectively as against output growth of 3.5% in the North East and 3.1% in West Midlands (ONS, 2009). These growth trajectories are explained by broad patterns of regional specialisation which combine centralisation of most high income and growth activities in and around London and laggard growth of

the old industrial areas of the North and the Midlands. One aspect of this centralisation is the massive concentration of finance employment in London and the South East. As table 2 demonstrates, in both 1998 and 2007, London alone accounts for just over 30% of British employment in finance; while London and the South East region together consistently account for 43-44% or the better part of half of all British employment in financial services. By almost any measure, thanks to the City of London, finance is much more centralised than the economy as a whole. London has a growing weight in the national economy but in 2007 accounted for 16% of employment, while on the GVA measure, London accounted for only 18% of UK gross value added. It should be noted that regional GVA is based on an income measure and allocated on a residence basis which leads to understatement because the income of commuters is allocated to the surrounding region. Even so, the message is that finance feeds inequality.

3. STATE AND PARA-STATE: THE UNDISCLOSED BUSINESS MODEL

This section develops our argument that the UK's undisclosed business model of the 1990s and 200s was the expansion of state and para-state employment to cover an anaemic and financialized private sector whose apparent success in creating general "business service" jobs is as much about the expansion of para-state employment as about the revitalisation of autonomous private enterprise. This argument can only be sustained after analysis and measurement of the numbers officially recorded as publicly employed workers in the state sector and the undisclosed number of private employees in publicly supported jobs in the para-state sector.

This is an important issue for two reasons; first, large and increasing numbers are recorded as publicly employed in a state sector which on the official count grew to employ 5.8 million or 22% of the total workforce of 26 million in 2007 (Quarterly Public Sector Employee Survey); second, on our calculations below, there are an additional 1.7 million employed in 2007 as private employees in the para-state sector which is dependent on public support. If these estimates are credible, in terms of sectoral size, the para-state alone employs more than finance plus para-finance; and in terms of job creation, the state plus para-state together directly account for 57% all new jobs created in the past fifteen years. The expansion of para-state employment is then a major driver behind what appears in the official statistics as a growth of private employment in general business services; and, we will argue, also a major influence on regional policy. The implications for our view of what Thatcher achieved, and New

Labour has been doing, are so radical that we must begin by explaining the nature of the statistical problem and the new estimation methods we have used to impute parastate employment.

Since 1979 the expanding private sector is increasingly state sponsored and supported as successive Tory and Labour governments have promoted privatisation, PFI, subcontracting and outsourcing while in many different ways subventing private business. Consequently, the boundaries between public and private employment are blurred and old categories and measures become irrelevant. Official statistics have traditionally demarcated a state sector of public employees who are defined by the status of the employer; those, like doctors in general practice who contract with the NHS, are not included in the count. Such statistics do not measure and register the rise of a para-state sector of private employees whose jobs in a variety of ways depend on state sponsorship. Public funding and other support methods maintain old jobs like rubbish collecting which are contracted out, create new jobs in nursery education whose expansion is effectively state funded and sustain competing jobs in private schools and hospitals whose business models are underwritten by the state. In this case, a focus on the state sector and public employment understates the influence of the state in sustaining and creating jobs because the para-state is invisible. The trend of state sector employment totals is no guide to the trend of para-state totals because the totals could be negatively correlated by transfer if the outsourcing of activities like cleaning or IT involves many workers.

The Office for National Statistics (ONS), which collects official statistics, does recognise there is a discrepancy between old statistical categories and new economic structures when the state has many private clients. ONS also recognises the limits of household survey data about public employment because, for example, some Labour Force Survey (LFS) respondents misinterpret the survey which inquires about their employer not the premises on which they work. In late 2004, the ONS introduced a new Quarterly Public Sector Employees Survey (QPSES) which focused on employers and has obtained at least 90% returns from all organisations classified within the public sector. This new survey broadened the official definition of the public sector to also include public employees in trading activities that sell their output into the market economy, public corporations (such as Royal Mail) and quasi-corporations under local government ownership that receive more than half their income from the market place (http://www.statistics.gov.uk/downloads/theme_labour/PSEmethodology.PDF). These private employees are now consolidated into the public sector just as the profits

of majority owned subsidiaries of a major corporation are consolidated in corporate accounting. While the new ONS survey is valuable and the adjustment is sensible, it is also relatively crude because, for example, if a diversified business services conglomerate is 45% dependent on state revenue, none of its employment is allocated to the public sector. And the Quarterly Public Sector Employment Survey (QPSES) series only covers the period since third guarter 2004.

Hence our interest in developing a new and different method for estimating the state sector more broadly defined by adding a measure of para-state employment. Our procedure was to rework the official SIC 4-digit activity group employment totals in the ONS's Annual Business Inquiry (ABI), which has been published every year since 1998. The ABI includes employment information from more than 75,000 enterprises of all kinds in the public and private sectors with an 85% response rate because the survey is compulsory. The ABI survey only covers employees and excludes the self-employed but, from other statistical sources we know the size of this self-employed group is not increasing rapidly [3.4 million in 1998 and 3.9 million in 2007 on Labour Force Survey data from ONS].

From the ABI survey, the ONS calculates employment totals by activity using a 4-digit classification which at this level, for example, discriminates between employment in different kinds of primary, secondary and higher education. We then adjusted the ONS activity employment totals for each 4-digit group to obtain a publicly supported employment total (state plus para-state) by applying a divisor of between 1.0 and 0.25 to the ONS activity total in both 1998 and 2007. The divisor was varied according to our views of the weight of public sector expenditure or other support in sustaining employment in specific activity groups. In hospitals, for example, we identify all the employment as publicly funded; whereas in dentistry or dispensing chemists we identify half the employment as publicly funded. Appendix A lists the sectors and the weightings used on the 2007 ABI data. The virtue of this estimation procedure is that it provides a simple, intelligible and robust way of estimating publicly funded employment that discloses an extra 1.7 million publicly funded employees in the parastate sector.

The adjustment procedure is robust because most of this increase comes from rounding up and counting all employment as publicly supported in a few activities which sustain large-scale employment. Various kinds of health care, education, social

work and social control activity together account for more than 80% of the total 7.4 million employed in state plus para-state sectors in 2007; and the two activities of hospitals and primary education together account for 2.5 million employees. In the cases of health, education and social control, we count all employment in the activity group as publicly supported. This is justifiable because in these cases, small scale private provision is embedded in, and could not exist without, a public sector that provides many kinds of support: 93% of children are educated in state funded schools and 88% of the UK population has no private health insurance to sustain private treatment (Guardian Society, 29 October 2009). Independent schools and private hospitals all have enterprise business models which are dependent on fiscal favours from the state, do not pay for socially funded training and infrastructure and also derive some of their revenue from the state. In such cases, the client private sector is completely state dependent and would have to dramatically downsize its activity and workforce if state support were withdrawn and the private fee for service was raised.

We would not argue that our estimate of state plus para-state employment is a precise measure of the extent of state supported employment. Indeed, we believe one precise measure is impossible because dependence on state funding and other supports tapers away in a gradient and interacts in a variable way with enterprise business models in different sectors. Practically, therefore, all decisions about the boundaries of state employment are conventional choices. But we would prefer, for reasons explained above, our conventions and our state plus para-state totals since 1998, rather than the available official series which either give unadjusted totals of public sector employees or give post-2004 adjusted totals by adding organisations which draw most of their revenues from the state. These official measures in our view understate the role of the state by not recognising or underestimating the size of the para-state sector. The practical question then becomes: what do we see differently when we change the lens and adopt our ABI based estimates of state and para-state employment. In reply, we can summarise three key points about what state and para-state (S&PS) employment contributes nationally, regionally and in terms of gender.

Nationally, state and para-state employment (S&PS) makes a major contribution to job creation. As table 3 shows, between 1998 and 2007, S&PS employment increased by nearly 1.3 million from 6.2 to 7.5 million between 1998 and 2007. This accounted for no less than 57% of the total increase of 2.24 million in the number of employees from 24.4 million to 26.6 million on the ABI measure. The pattern from 1998 to 2007 is one of sustained increase on a large base with a 21% increase in S&PS employment over

the decade after 1998 so that S&PS together employ near 7.5 million or 28% of the workforce by 2007. The weight and force of S&PS employment creation, as well as the huge base, is such that, if the UK has a "leading sector", it is the state. And this requires us to revalue what Mrs Thatcher did and whether the 1980s represent a break. In our view, the employment outcome of the 1990s and 2000s is inline with pre-1979 trends. The difference is that authors like Bacon and Eltis (1976) could then argue that the expansion of state employment was "crowding out" but it now looks more like filling in.

Table 3: A comparison of private and public sector employment in 1998 and 2007

	1998		2007			
	Private	State and	Total	Private	State and	Total
	sector	Para-State		sector	Para-State	
		sector			sector	
	No.	No.	No.	No.	No.	No.
North East	671,212	274,500	945,712	689,256	340,453	1,029,709
North West	2,059,073	729,479	2,788,552	2,166,422	871,655	3,038,077
Yorks and Humber	1,517,580	532,167	2,049,747	1,578,401	661,829	2,240,230
East Midlands	1,316,506	435,892	1,752,398	1,388,915	524,330	1,913,245
West Midlands	1,747,825	542,916	2,290,741	1,711,305	647,688	2,358,993
East	1,659,112	528,725	2,187,837	1,737,994	639,562	2,377,556
London	2,945,471	818,628	3,764,099	3,139,941	938,788	4,078,729
South East	2,566,735	858,361	3,425,096	2,737,724	994,049	3,731,773
South West	1,412,208	538,650	1,950,858	1,573,320	663,278	2,236,598
Wales	712,501	325,590	1,038,091	779,107	407,525	1,186,632
Scotland	1,558,134	603,773	2,161,907	1,635,614	772,048	2,407,662
Total	18,166,357	6,188,681	24,355,038	19,137,998	7,461,206	26,599,204

Notes: State and Para-State sector refers to traditional public sector activities plus activities classified where the State provides a share of the income. The underlying data reflect SIC classifications at the time of collection and excludes Northern Ireland and the self-employed.

Source: Nomis, Office for National Statistics, London.

In terms of gender and contribution to the creation of female employment, S&PS made a much larger contribution. Employment is heavily gendered because rank and file workers in health and education are disproportionately female. In both 1998 and 2007, just over 69% of the S&Ps workforce is female and this female S&PS workforce always splits more or less equally into half full-time and half part-time female workers whereas only 21% of male S&PS workers are part-time. The end result is that the S&PS

sector is dominant in the creation of new full-time and part-time jobs for women. As figure 2 shows over the period 1998-2007, S&PS accounts for an extra 904,000 female jobs which split 60-40 between full-time and part-time; and these 904,000 new jobs account for no less than 81% of the total 1.1 million increase in female employment over these years. If high income capitalist countries are changing because wage earning households are increasingly dependent on two wage earners, in the UK case, the S&PS sector more than any other puts the second wage earner into the average household.

State and para-State 903,767 employees (81%)

Fig 2: Change in UK female employment between 1998 and 2007 split by private and state and para-state sectors

Notes: The data excludes Northern Ireland and the self-employed. Source: Nomis, Office for National Statistics, London.

Along another dimension of inequality, the regional contribution of S&PS is equally marked, especially if we consider its contribution to the employment bases in the exindustrial regions of the North and West. The ex-industrialised regions, especially the North East and West Midlands, have no other visible means of support except S&PS because, after losing an old industrial base, they are being partially compensated by the creation of new S&PS jobs in education and health plus pensions for surplus workers through the provision of long-term invalidity benefit. Figure 3 presents the basic data on the two Britains. In London and the South, S&PS accounts for no more than 38-44% of employment growth between 1998 and 2007; while in the Midlands, North, Wales and Scotland S&PS accounts for between 55% and 73% of the

employment growth over the same period. In smaller sub regions, S&PS makes an even larger contribution because in the North East and West Midlands, S&PS accounts for 79% and 153% of job increase 1998-2007. In these blighted ex-industrial regions S&PS is the only initiator of job creation. While private employment declined in the West Midlands, as table 3 shows, elsewhere the pattern is of modest increases in private sector employment of 5-11% on 1998 totals. But, as figure 3 shows, in all of the UK outside London and the South, 55-73% of new job creation is in S&PS job creation so that most of the remaining private sector job creation in outer Britain will be induced by the expenditure of S&PS workers. By implication, in a decade long boom after 1998, there was, at best modest autonomous private sector job creation, and at worst no autonomous private sector job creation outside London and the South, despite the post-Thatcherite conditions of flexible labour markets and lower rates of personal and corporate taxation.

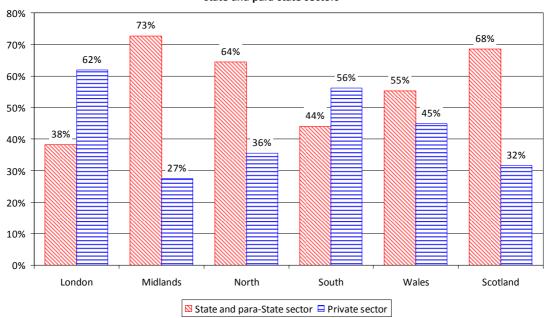


Fig. 3: Share of new job creation in the UK between 1998 and 2007 split by private and state and para-state sectors

Notes: The data excludes Northern Ireland and the self-employed. The Midlands group contains the government office regions (GOR) of East of England, East Midlands and West Midlands. The North group contains the GOR of the North East, North West and Yorkshire and Humber. The South contains the GOR of the South East and South West.

Source: Nomis, Office for National Statistics, London.

These striking figures make the case that the UK had an undisclosed business model of reliance on S&PS employment. This finding raises the historical question of what was new about New Labour's fiscal behaviour and the performative question about the relation between knowing, saying and doing in New Labour's economic policy.

As figure 4 shows, in the long term over the past four decades, real government expenditure has increased broadly in line with real GDP; and over shorter periods expenditure has increased most strongly in recession (1973-76, 1980-84 and 1989-93) when social security claims increase in a semi automatic way. The pattern under New Labour from 2000-7 is quite different because real expenditure increases sharply from £411 billion to £606 billion in a period of prosperity; and the largest increases in expenditure were discretionary increases in spending on health and education which together accounted for some £80 billion of the total near £200 billion increase in public expenditure.

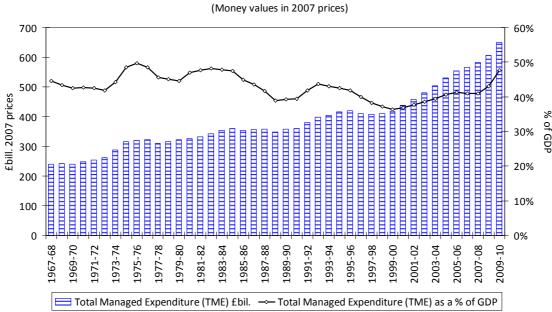


Fig. 4: UK public expenditure and share of GDP

Source: Public Expenditure Statistical Analyses 2009, HM Treasury.

Notes: 2009-10 data reflects HM Treasury estimates. Total Managed Expenditure

(TME) is the consolidated sum of current and capital expenditure of central and local government, and public corporations.

There is already a debate about the Clift and Tomlinson (2007) claim that New Labour engaged in "macro economic coarse tuning inspired by Keynesian thinking". And the question of how New Labour understood what it was doing can only be properly answered by historians after the archives are open. But the evidence so far does not suggest that Brown and Blair were clever enough to do one thing and say another in the tradition of business leaders like Jack Welch at GE. Their undisclosed business model was probably the unintended economic consequence of a crude political calculation. Health and education became social priorities as part of a Labour political

strategy for holding (mainly Southern English) swing voters who had supported Thatcher. But such expenditure could not be targeted on marginal constituencies and the unintended economic consequence was job creation across the country which was especially valuable for women and for the ex-industrial regions of the North, Midlands and the North West. This worked for a while because of favourable conjunctural circumstance as Labour accidentally benefited from a kind of super cycle with a long sustained 15-year upswing in GDP from the early 90s which increased the personal and corporate tax base.

The Blair Brown business model was less novel than might be supposed from the rhetoric about New Labour and the Third Way. Right wing Labour leaders like Ramsay Macdonald and Philip Snowden had always dreamed of using taxation and redistribution of the fruits of prosperity to build socialism (Skidelsky, 1988). Blair and Brown simply applied this model to making capitalism work. Nobody (except perhaps Vince Cable, the Liberal Democrat MP,) focused on unsustainability until the bubble burst. Afterwards, the political classes (including Cable) panicked about the symptoms of public and private debt without coming to terms with the fundamental problem of the private sector's anaemia in the 2000s which persists despite shock treatment by the Iron Lady in the 1980s.

4. NEW POLICY DIRECTIONS

How does our numbers and narrative analysis change things? If we put together the political arithmetic and visions, the results are both alarming and liberating. It is alarming because the political arithmetic about business model reliance on state and para-state employment challenges the generally accepted narrative about Mrs Thatcher's achievement and Britain's recent economic transformation. It is liberating because the dystopian vision about the problem of global warming in a nation with a feeble private sector licenses new kinds of state sponsorship which would both require deliver a different kind of finance. At least that could be so if our empirics do not license more fundamentalism from the Right about rolling back the state which is irrelevant if we have tried the market which has failed to change our established national trajectory or to forestall global warming. And, equally, that could be so if our empirics do not license complacency on the Left which is not so much historically vindicated as more than ever in need of relevant narrative and policies.

On the assumption that the productive economy was enfeebled by organised labour, state monopolies and high taxes, the Tories in the 1980s pursued aggressive state policies of crushing the miners, deregulating the labour market, privatising utilities, lowering income tax and corporation rates. New Labour never doubted the cause/effect connection between this enterprise agenda and economic transformation because in government (as in opposition) New Labour was confused by cyclical good fortune and unsustainable boom which was presented as the "strong economy" and the end of boom and bust, for which New Labour took some of the policy credit by giving the Bank of England independence in monetary policy and introducing a new system of light touch regulation which included the Financial Services Authority (FSA). More generally, the relation between Tory and New Labour policy levers and economic outcomes had always been obscured by political sleight of hand about public finance which papered over the cracks in the neo liberal imaginary. Mrs Thatcher was not a radical cutter of public expenditure because she paid the dole to cover the economic management mistakes which brought a high pound and high interest and at the same time arranged tax cuts for some in higher income groups by presiding over a regressive shift from income to consumption taxes; after Blair and Brown had abandoned Tory spending limits they spent the tax revenues of the boom to create a new kind of state led neo-liberalism and forestall national debate about what would otherwise have been jobless growth.

This perspective opens up a revisionist view of the recent past which now includes Blair and Brown's quiet struggle to keep things going by covering contradiction before 2007 as well as Thatcher's violent revolution for quixotic objectives after 1979. New Labour has been propping up a feeble and untransformed private sector whose problems are now horridly aggravated by bank failure and market crisis which was caused by the financial sector and has massive repercussions for the public sector. The outcomes are disappointing and paradoxical. Disappointing because the national economic miracle was announced prematurely when, unlike the man with palsy in Mark 2. 1-12, the British economy had not picked up its bed and walked. Paradoxical because removing obstacles and adding incentives produced not productive enterprise but financial engineering led by intermediaries like the bankers and private equity partners whose fees and charges diverted income to them.

The national business model may have been undisclosed but New Labour's politically motivated boosting of public social expenditure (which incidentally benefited the Midlands and the North) was more effective than any known regional policy

alternative. The old 1960s regional policies of redirecting activities to peripheral regions are structurally irrelevant. Policies of dispersal from the centre (by stick or carrot) lack credibility. Much of the new activity cannot be dispersed and sent north as manufacturing was in the 1960s while the City of London capably organises its own offshore dispersal to low wage Asia. Equally, much of the surplus ex-industrial population does not have the necessary competences for the new service economy; so closing down Liverpool is a think tank fantasy not a workable strategy for shifting the employable. The new 1990s policies of adding infrastructure and training to make locations more attractive are ineffectual because competitiveness demands improvements to sustain the City of London's position in a national economy with a persistent mismatch between workforce and economic requirements. The government faces imperative demands for infrastructure investment in London including Crossrail, Heathrow Terminal 5 and a third runway etc. Northern disadvantage remains because it is then hard to make a business case for infrastructure improvements like high-speed rail links. Training and up-skilling is largely dependent on government funding as employers have abdicated and workers increasingly gain qualifications they cannot use.

The problem was that New Labour's regional policy through expansion of national government spending was unsustainable. Under European Union (EU) rules and prevailing UK political conditions, the pre-crisis fiscal limits had been reached by 2007 when the government deficit reached 3% of GDP. All that changed after the crisis when the UK deficit was projected to increase towards 13% after the government went for extreme intervention to prevent bank failure and market seizure turning into a second great depression. The government was now willing to countenance much larger deficits after cutting interest rates towards zero and printing money under quantitative easing. The effects were uncertain because such stimulus was either inadequate in a deleveraging economy or inappropriate because it stoked the next asset price bubble. More fundamentally, extreme intervention to prop up the financial system is not an employment policy like increasing the precent of GDP spent on health services or raising the percent of the cohort in further education. On the IMF's estimates (Horton et al. (2009), £289 billion has already been spent in the UK on covering problems of solvency in banks and liquidity in financial markets (without creating a single job). The near inevitable medium term consequence will be political pressures for public expenditure cuts to reduce the deficit and incidentally reduce state and para-state employment without any discrimination about disadvantaged regions.

If all this is alarming, it is also liberating. If we put political arithmetic and vision together, the question is whether public policy on the state's role and size could now be deliberately adjusted after an explicit debate about the limited capabilities of the private sector, the dysfunctional behaviours of major actors and the role that the state quite properly should play in covering deficiencies in private sector calculation and performance. We do not want to go back to the pre-1979 practices which have been caricatured as weak corporatism, nationalisation and picking winners; nor is it a question of continuing with post-1979 supply side reforms like low taxes and incentives for enterprise. Instead we can use business model analysis and think in new ways about the field of public private relations as one where we can break old connections and establish new ones that produce different outcomes which are relevant to our national dilemma. The political arithmetic about job creation over the past decade indicates a UK problem about where do the jobs come from, especially for women and in the deindustrialised regions. The dystopian vision about climate change mandates action for a low carbon economy because of the asymmetries between the costs of getting it wrong and the benefits of getting it right should impel action.

The great national question of our time is whether we can find new ways of simultaneously solving both problems and create jobs by investing in green production and maintenance technologies and comprehensive renewal of the built infrastructure to reduce our carbon footprint. From this point of view, in the Bischoff Report (2009), banking and finance present themselves as here to help with meeting "social need". But the one certainty is that finance and banking, as we know them, are part of the problem.

Finance is irrelevant because it is focused not on physical projects but on coupons and portfolio allocation: intermediaries each year allocate a sum roughly equal to gross fixed capital formation mainly into issued coupons on the secondary market in shares and bonds. Banking is part of the problem because its lending is primarily focused on financing asset purchase: in the pre-2007 period, two-thirds of bank lending in the UK was on commercial and residential property and much of the rest went in lending to financial companies which were increasingly leveraged. We need to establish a much stronger, direct link between savings and physical investment in appropriately green infrastructure Thirty years after Thatcher won her first victory in 1979 we are at another historical turning point and, just as before, the key to seizing the opportunity is to have a new story about the means of wealth creation and distribution. This would revise Thatcher's first principle that the private sector create wealth and the public

sector consumes wealth, which is only true if the measure of wealth creation is private marketability and cost recovery with a surplus. If the measure is more social, as with the objective of limiting temperature rise from greenhouse gases, the issue is how public and private can be interconnected in innovative ways to deliver socially beneficial results including the jobs which are central to the distribution of welfare.

APPENDIX A: Standard Industrial Classification (SIC) 4-Digit activities classified as State and Para-State with employment weightings

A -11 11	Charles de adde de de de Charles de
=	Standard Industrial Classification
weighting	
1.00	0100: DEFRA/Scottish Executive Agricultural Data
0.05	3720: Recycling of non-metal waste and scrap
0.50	4523: Construction of highways, roads, airfields and sports facilities
0.50	5231: Dispensing chemists
0.50	5232: Retail sale of medical and orthopaedic goods
0.50	6220: Non-scheduled air transport
1.00	6230: Space transport
1.00	6411: National post activities
1.00	6511: Central banking
0.75	6711: Administration of financial markets
0.25	7310: Research and experimental development on natural sciences and engineering
0.80	7320: Research and experimental development on social sciences and
0.00	humanities
1.00	7511: General (overall) public service activities
1.00	7512: Regulation of the activities of agencies that provide health care, education,
4.00	cultural services and other social services excluding social security
1.00	7513: Regulation of and contribution to more efficient operation of business
1.00	7514: Supporting service activities for the government as a whole
1.00	7521: Foreign affairs
1.00	7522: Defence activities
1.00	7523: Justice and judicial activities
1.00	7524: Public security, law and order activities
1.00	7525: Fire service activities
1.00	7530: Compulsory social security activities
1.00	8010: Primary education
1.00	8021: General secondary education
1.00	8022: Technical and vocational secondary education
1.00	8030: Higher education
1.00	8042: Adult and other education not elsewhere classified
1.00	8511: Hospital activities
1.00	8512: Medical practice activities
0.50	8513: Dental practice activities
0.25	8514: Other human health activities
0.20	8520: Veterinary activities
1.00	8531: Social work activities with accommodation
1.00	8532: Social work activities without accommodation
0.50	9232: Operation of arts facilities
1.00	9251: Library and archive activities
1.00	9252: Museum activities and preservation of historical sites and buildings
1.00	9253: Botanical and zoological gardens and nature reserve activities
1.00	9900: Extra-territorial organisations and bodies

Source: Nomis, Office for National Statistics, London.

REFERENCES

- Eds. Atkinson, A. and Bourguignon, F. (2000) *Handbook of Income Inequality*, North-Holland, Amsterdam.
- Atkinson, D. and Elliott, L. (2007) Fantasy Island, Constable, London.
- Bacon, R. and Eltis, W. (1976) Britain's *Economic Problem: Too Few Producers*, Macmillan, London.
- Bischoff, W. and Darling A. (2009) *UK international financial services —the future: A report from UK based financial services leaders to the Government* [The Bischoff Report], HM Treasury, London.
- Bivens, J. (2003) Updated Employment Multipliers for the U.S. Economy, *Economic Policy Institute*, Washington DC.
- Clift, B. and Tomlinson, J. (2007) Credible Keynesianism? New Labour macroeconomic policy and the political economy of coarse policy tuning, *British Journal of Political Science*, 37, pp.47-69.
- CRESC Report (2009) An alternative report on UK banking reform, a public interest report by the Centre for Research on Socio Cultural Change, University of Manchester.
- Eltis, W. (2000) Britain, Europe and the EMU, St Martin's Press, New York.
- Froud, J., Johal, S., Leaver, A. and Williams, K. (2006) *Financialization and Strategy:* narrative and numbers, Routledge, London.
- Froud, J., Johal, S., Montgomerie, J. and Williams, K. (forthcoming) Escaping the tyranny of earned income? The failure of finance as social innovation, *New Political Economy*.
- Hayes, R. and Abernathy, W. (1980) Managing our way to industrial decline, *Harvard Business Review*, July-August.
- Horton, M., Kumar, M. and Mauro, P. (2009), 'The State of Public Finances: A Cross-Country Fiscal Monitor', *IMF staff position note*, IMF.
- Leaver, A. et al. (2009) Stressed by Choice: A Business Model Analysis of the BBC, British Journal of Management, 20(2), pp.252-264.
- Lovering, J. (1999) Celebrating Globalisation and Misreading the Welsh Economy: 'The New Regionalism' in Wales, *Contemporary Wales*, 11, pp.12-60.
- Martin, R. (2001) Geography and public policy: the case of the missing agenda, *Progress in Human Geography*, 25(2), pp. 189-210.
- Meadows, D., Meadows, D. Randers, J, and Behrens III, W. (1972) *The Limits to Growth,* Universe Books, New York.
- NESTA (2006) *Investing in the Creative Industries,* National Endowment for Science Technology and the Arts, London.
- Office for National Statistics (2009) *United Kingdom National Accounts, The Blue Book,* Palgrave Macmillan, London.
- Piketty, T. and Saez, E. (2003) Income inequality in the United States, 1913-1998, Quarterly Journal of Economics, 118(1).

- Piore, M. and Sabel, C. (1984) *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books, New York.
- Reich, R. (1991) The Work of Nations, Vintage Books, New York.
- Singh, A. (1977) UK industry and the world economy: a case of deindustrialisation, *Cambridge Journal of Economics*, 1(2):113–136.
- Skidelsky, R. (1988) Thatcherism, Chatto & Windus, London.
- Stern, N. (2006) *Stern Review on the Economics of Climate Change*, Cambridge University Press, Cambridge.
- Stiglitz, J. (2002) Globalization and its discontents, Allen Lane, London
- Watson, I., Buchanan, J., Campbell, I. and Briggs, C. (2003) *Fragmented Futures: New Challenges in Working Life*, Federation Press, Sydney.
- Wigley, B. (2008) London: winning in a changing world [The Wigley report], Merrill Lynch Europe Limited.
- Williams, K., Williams, J. and Thomas, D. (1983) Why are the British Bad at Manufacturing, Routledge & Kegan Paul, London.
- Womack, J., Jones, D. and Roos, D. (1990) *The Machine that Changed the World*, Rawson Associates, New York.