IPPR

DON'T BANK ON IT

THE FINANCIALISATION OF THE UK ECONOMY

REPORT

Tony Dolphin

December 2012
© IPPR 2012

Institute for Public Policy Research

ABOUT THE AUTHOR

Tony Dophin is senior economist and associate director for economic policy at IPPR.

ACKNOWLEDGMENTS

I wish to thank Amna Silim and Esther Cowdery for research assistance on this project. Nick Pearce, David Nash, Will Straw, Eric Beinhocker and members of the panel that advises IPPR on its economic work commented on an earlier draft of this report and helped improve it, although they bear no responsibility for the final version – this lies with me alone.

Work on this project was funded by the Resolution Trust and would not have been possible without their support, for which I am very grateful.

ABOUT IPPR

IPPR, the Institute for Public Policy Research, is the UK's leading progressive thinktank. We produce rigorous research and innovative policy ideas for a fair, democratic and sustainable world.

We are open and independent in how we work, and with offices in London and the North of England, IPPR spans a full range of local and national policy debates. Our international partnerships extend IPPR's influence and reputation across the world.

IPPR
4th Floor
14 Buckingham Street
London WC2N 6DF
T: +44 (0)20 7470 6100
E: info@ippr.org
www.ippr.org
Registered charity no. 800065

This paper was first published in December 2012. © 2012
The contents and opinions expressed in this paper are those of the author(s) only.

NEW IDEAS
for CHANGE

CONTENTS

Executive summary 2

1. Introduction 5

2. Financialisation 8

Aspects of financialisation 8

Problems with financialisation 9

3. The UK financial sector: exploiting a comparative advantage? 13

Financial markets 13

Gross value added 14

Profits 18

Tax 19

Employment 21

Related activities 24

Trade 25

Exploiting a comparative advantage or financialisation? 26

4. The negative aspects of financialisation in the UK 29

Bailing out the banks 29

Regulatory failure and capture 30

Lower economic growth and increased instability 31

Crowding out manufacturing 35

Taking the best graduates 36

Greater regional imbalances 39

Extractive elites and rent extraction 40

Unjustified levels of pay 42

Increased income inequalities 46

Too high a price to pay? 48

5. What might be done 50

Culture and moral capitalism in the financial sector 50

Retail and investment banking 52

Bank lending 55

Rent-seeking and pay 57

Financial transaction taxes 59

Rethinking economic policymaking 59

6. Conclusion 62

References 63

Appendix 1: Employment in financial services and insurance in 2010 67

Appendix 2: OLS regression results 68

EXECUTIVE SUMMARY

> **'We live in an economy that rewards someone who saves the lives of others on a battlefield with a medal, rewards a great teacher with thank-you notes from parents, but rewards those who can detect the mispricing of securities with sums reaching into the billions.'**
> Warren Buffett, quoted in Morgan 2012: 24

Warren Buffett is not the only one who wonders if the extraordinary levels of remuneration paid to those at the top of the financial industry tell us something is wrong in society today. Critics of the 'financialisation' of the UK economy argue it is responsible for many of the economic problems we face today. Yet its supporters respond that finance is one of the UK's most successful sectors, contributing hugely to the economy through employment, taxes paid and exports. Where does the truth lie? Without the answer to this question, it is not possible to develop sensible policies towards the financial sector. This report seeks to weigh up the pros and cons of the UK's large financial sector and provide some recommendations about future policy towards finance.

Since the 'Big Bang' in the City of London in 1986, there has been a large increase in the role of financial services in the UK economy. Lobbyists for the financial sector argue that Britain is good at finance and that we should exploit our comparative advantage in this area to the fullest extent. They point, for example, to London's role as a global financial centre and the UK's trade surplus in financial services and insurance (equivalent to over 3 per cent of GDP in 2011) as evidence of the key role that finance should play in the future fortunes of the UK economy.

Before 2007, this view attracted wide support. True, the financial sector had its detractors even then, but they struggled to be heard. The strength of the financial industry in the UK was seen as an important bulwark at a time when manufacturing was struggling to compete with low-cost production in emerging economies.

Today opinions are very different. The financial crisis of the last five years has revealed the significant risks associated with having a large financial sector. This has led to a more sympathetic hearing for those who criticise finance and financialisation: the increased role of financial institutions, markets and agents in the economy.

This report weighs up the arguments put forward by the financial sector's supporters and detractors and analyses its role in the economy. The results of this analysis have some important implications for current debates about the future of the financial sector.

The UK does indeed have a comparative advantage in many areas of financial services, but particularly in investment banking. This advantage has its roots in the long history of the City and survives because the infrastructure of financial markets and the support industries that surround them have been continually maintained and upgraded. The City is an important source of overseas earnings for the UK and of revenues for the Exchequer. Official statistics suggest it was also an important source of growth in output (though not employment) in the decade up to 2007.

However, this growth does not appear to have greatly benefited the rest of the economy. There is no evidence that a much bigger financial sector, relative to the rest of the economy, has led to an improvement in resource allocation or to better returns for savers and investors. If anything, the opposite appears to have been the case. The financial sector has grown because it is extracting larger rents from the rest of the economy. This is a cause for concern, not for celebration.

Financialisation has also been accompanied by – and almost certainly played a part in generating – an increase in economic instability: recessions tend to be deeper and longer (though less frequent). It has also led to some crowding out of other sectors of the economy. As a result, it has exacerbated regional imbalances.

Pay in the financial sector has increased to extraordinary levels, reflecting the excessive rents the industry extracts from the rest of the economy.[1] New analysis for this report shows workers in the financial industry, on average, earn around 25 per cent more than workers with similar characteristics – in terms of factors such as age, occupation, experience and education – in other industries.

These excess wages do not accrue to the average worker; they are concentrated among the highest earners in finance. The financial sector is responsible for much of the increase in income inequality in the UK over the last 25 years. This is largely the result of massive increases in income for those at the very top of the income scale – that is, the top 0.5 per cent, or even top 0.1 per cent. Much of these gains went to workers in the financial sector who can, in Warren Buffet's words, 'detect the mispricing of securities'. Pay inequality within financial services has increased, and on such a scale that it has affected pay inequality in the economy as a whole.

Since many of the massive rewards in finance are received for activities that can be judged 'socially useless', the strongest case for reducing the relative size of financial services in the economy is the elimination of such activities. But it is difficult to be prescriptive about the 'right size' of the sector, not least because there are many grey areas when it comes to what is and is not socially useful. However, as it is because of substantial increases in rents that the financial sector has grown so large, relative to the rest of the economy, in recent years, so the case for an attack on rent-seeking behaviour is compelling.

Regulation should not seek to reduce the size of the financial industry; but it should seek to reduce and eliminate opportunities for the sector to extract rents from the rest of the economy. This can best be done through a combination of increased transparency and increased competition. Transparency – maximising the information available to all participants – makes markets work better, but only if there is sufficient competition. Rent-seekers exploit monopoly and quasi-monopoly conditions; competition minimises their opportunities.

The level of incomes secured by the highest earners in finance strongly suggests large rents are being extracted, so the scope for enhanced competition to reduce rent-seeking is high. With this in mind, the recommendations of the Independent Banking Commission, and the government's response, are too timid. Ringfencing banks' retail activities will reduce the risk of future bail-outs by the taxpayer, but will do little to reduce rent extraction. Forcing a split of retail and investment banks would be better.

The best way to increase competition in the financial sector would be to break up the banks. This would serve more than one purpose. By ensuring that no bank is 'too big to fail' or 'too big to bail (out)', it would make the system safer, make it less likely that the taxpayer might have to pump funds into banks in the future to ensure the banking system continues to operate, and reduce the effective subsidy given by the taxpayer to the banking system. It would also reduce the costs of banking services to customers.

1 Economists define rents as excess returns that accrue as a result of positional advantage in a market, for example as a result of exploiting a monopoly, or patent rights, or information not available to other participants in the market.

Action is not just required by the authorities; customers of the financial services industry should act too. In some areas, quasi-monopoly conditions facilitate rent extraction; but in others this is not the case. The vast number of funds that are available to investors suggest the hedge fund industry, and asset management more generally, are not operating like a monopoly. Yet, investors pay substantial fees, including one-way performance fees (paid out when performance is good but delivering no rebate when it is bad) for what on aggregate can, by definition, only be average performance. Large institutional investors should simply stop paying these fees, if necessary by banding together to increase their power relative to that of fund managers.

After the events of the last five years, finance – and investment banking in particular – are held in very low esteem in the UK, but a modern economy cannot function without a healthy financial sector. For historical reasons, the UK has a larger financial sector than other similar economies and this can be a source of strength. But the financial industry is an asset that comes with associated costs. The challenge for policymakers and customers of the financial sector is to reduce these costs without damaging the asset. This will not be easy but many of the costs revolve around the sector's ability to extract rents from the rest of the economy, so the best place to start is by attacking rent-seeking behaviour.

We recommend the following steps should be taken.

- Retail and investment banking activities should be split into separate organisations.
- Competition in retail banking should be increased, for example by reducing barriers to entry.
- Risk-taking in investment banking should be reduced, for example by making senior directors and managers liable for financial loss when things go wrong.
- A British Investment Bank should be set up to fill the financing gaps left by commercial banks.
- Investors should stop paying extremely high fees for what can only – on average – be investment performance in line with the market.
- More should be done to make the case for wide-ranging financial transaction taxes and to explore ways to minimise avoidance of them.
- The overall level of credit in the economy – in particular speculative credit – should be controlled.

1. INTRODUCTION

'If you invest your tuppence
Wisely in the bank
Safe and sound
Soon that tuppence,
Safely invested in the bank,
Will compound
And you'll achieve that sense of conquest
As your affluence expands
In the hands of the directors
Who invest as propriety demands'

From 'Fidelity Fiduciary Bank', sung by Mr Banks in the film *Mary Poppins*

Banking in Britain in the 21st century is considerably more complex than was imagined in *Mary Poppins*, and not just because of the sums of money involved. It is now over a quarter of a century since the City of London's 'Big Bang'. On 27 October 1986, the UK government deregulated the London Stock Exchange to allow 100 per cent outside ownership of member firms with the aim of introducing greater competition and forcing down fees and commission. One eminent chronicler of the City's history David Kynaston, writing in the *Daily Telegraph*,[2] argues the chancellor at the time, Nigel Lawson, was aiming to do nothing less than create anew the City's golden age around the turn of the 20th century, a time when Britain was overwhelmingly dominant in the provision of financial services to the rest of the world.

If this was indeed Lawson's aim, for 20 years it seemed that it would be achieved. By 2006, the City had changed beyond recognition compared to the time of 'Big Bang'. The old broking and jobbing firms had been swallowed up by commercial banks and there had been an invasion of overseas investment banks, such as Goldman Sachs and Deutsche Bank. Even the centre of gravity of 'the City' had moved: from the City of London to the tower blocks of Canary Wharf. These changes seemed only to strengthen the City, making it by a wide margin the dominant financial centre in Europe and one matched only by New York in global terms (though Hong Kong, Singapore and Shanghai are all growing rapidly).

At the time, these developments were welcomed by economists and politicians alike. Economists identified financial services as an industry in which the UK had a 'comparative advantage'. When they did so, they were generally referring to those activities that could be, and were, marketed overseas as well as in the UK. Among others, this included most aspects of investment banking, asset management and some forms of insurance. It did not, in general, mean retail banking.

In a competitive global economy in which China and other emerging countries were increasingly dominant in manufacturing, the UK's advantage in these areas, it was believed, had to be exploited to the full. Politicians of all parties, sensing a rare British industrial success story, were eager to be associated with the City's achievements and to offer support for its continued development. In 2006, politicians on all sides favoured limited regulation to allow the City to fully capitalise on its position as a leading global financial centre.

Six years on, the perspective is very different. After the biggest financial crisis and deepest recession in the UK since the Great Depression of the 1930s, it is something of an

2 http://www.telegraph.co.uk/finance/financialcrisis/8850654/Was-the-Big-Bang-good-for-the-City-of-London-and-Britain.html

understatement to say the City is no longer held in the same esteem. The negative effects on the rest of the economy of having a large financial sector, which were largely ignored until 2007, now appear more obvious. Many economists and politicians think it would be better if the financial sector was less important in the UK economy. Once the talk was of how to exploit to the full a comparative advantage in financial services; now it is about how to rebalance the economy away from financial activities and towards other sectors, in particular manufacturing. In 2009, Peter Mandelson called for 'less financial engineering and a lot more real engineering';[3] a sentiment echoed by George Osborne in 2011 when he expressed his desire for a 'Britain carried aloft by the march of the makers'.[4]

This report seeks to strike a balance between the two extreme views: those of 2006 and 2012. In doing so, it addresses a number of questions. First, if the financial services industry is one in which the UK has a comparative advantage, can we afford not to support it to the full, given the economy's struggle to recover from recession? Second, how much does the financial sector actually contribute to the UK economy? Third, what are the negative 'externalities' from having a large financial sector – how does it impinge on the rest of the economy? Finally, how much do developments in the financial sector drive developments in the rest of the economy and does rebalancing, if it is desirable, require measures to 'tame' finance or simply measures to promote non-financial activities?

When addressing these questions, it is important to remember the financial services industry in the UK is not just 'the City' and not just 'get-rich-quick' investment bankers with huge bonuses. It is a diverse sector encompassing, among other things, retail banking, asset management and insurance. Many of these activities are essential to the operation of a modern-day economy (and it is for this reason that the government had to bail out the banking system in 2008). Finance is an essential part of modern economic life. Intermediating between lenders and borrowers, evaluating business proposals, managing people's assets, helping companies raise funds and directing resources to where returns are likely to be highest are all useful and productive activities. True, the industry sometimes makes colossal mistakes in carrying out these functions (RBS's purchase of ABN Amro before the crash being the most stunning recent example), but this is perhaps inevitable in any activity carried out by human beings.

It is less clear, however, that other activities of finance professionals, such as high-frequency trading, speculating on commodity prices or selling dubious financial products are productive or useful. Adair Turner, chairman of the Financial Services Authority, famously said in an interview for *Prospect* in August 2009:

> **'There clearly are bits of the financial system, and particularly the bits that relate to fixed income securities, trading, derivatives, hedging, but possibly also aspects of the asset management industry and equity trading, which have grown beyond a socially reasonable size.'**[5]

However, he went on to say that it is hard to distinguish socially valuable innovation in finance from socially useless innovation and even questioned whether credit default swaps (CDS), which were at the heart of the recent financial crisis, are always a bad thing. He was right. Not only is it hard to say what is socially useless, but without making sweeping assumptions – for example, that all hedge funds are socially useless but all traditional

3 In a speech to the Labour party conference: http://www.labour.org.uk/peter-mandelson-speech-conference
4 In his budget statement: http://www.hm-treasury.gov.uk/2011budget_speech.htm
5 http://www.prospectmagazine.co.uk/2009/08/how-to-tame-global-finance/

asset managers are not – it is impossible to gauge the scale of these activities. Investment banks trade derivatives on behalf of their clients; to hedge positions they acquire as a result of acting on their clients' behalf; and for purely speculative purposes. We might judge the first a useful activity; the second a necessity if the investment bank is to provide a full range of services to its clients; and the third of no value whatsoever. But we do not know how investment banks' trading breaks down between each of these operations.

Fortunately, this does not prevent a thorough examination of the place the financial services industry occupies in the UK economy. The rest of this report is organised as follows. Chapter 2 reviews the literature, mainly from the United States and mainly negative in tone, on 'financialisation': the growing influence of the financial sector in the economy and society, and its potential pitfalls. Chapter 3 assesses the extent of the UK's comparative advantage in financial services through an examination of data on the size of the financial sector in the UK and its growth, particularly over the last 20 to 25 years, covering among other things value-added, profits, taxes paid and collected, employment and trade. Chapter 4 analyses the 'negative externalities' that result from the presence in the UK of a large financial sector, focussing particularly on its effects on economic stability, regional and industrial imbalance and income distribution. Chapter 5 uses the preceding analysis to make some recommendations about how policymakers and customers of the financial services industry should react to reduce some of the disadvantages of financialisation without destroying an important sector in the economy.

2. FINANCIALISATION

> **‘Financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies.’**
> Epstein 2005: 3

The literature on ‘financialisation’ is little more than a decade old and in that time no universally agreed meaning of the term has emerged, but Gerald Epstein’s broad definition suits most purposes. It encompasses most of the aspects of financialisation that economists and other commentators have chosen to emphasise at various times over the last 10 years.

Aspects of financialisation

A particular focus for researchers (see for example Freeman 2010) has been the rapid growth in some countries of financial activities relative to the rest of the economy. As a result, the financial sector has come to represent an ever-increasing share of total output, or value-added, in the economy. This increase has been accompanied by an increase in its share of total profits and an increase in the proportion of total corporate tax revenues that it accounts for. Studies have argued that this increase in economic importance has been accompanied by an increase in political power, which has caused policymakers to give a disproportionate weight to the needs of the financial sector in their considerations, and so to an increase in political inequality (Palley 2007).

Some writers have focused more on financial markets than financial companies. For them, the main feature of financialisation is the rapid growth in capital markets, particularly over the last three decades, and the associated decline in bank lending. They contrast countries such as the US and the UK, where financialisation is advanced and large companies rely heavily on capital markets for funding, with countries like Germany where companies remain more reliant on bank lending. This reliance on capital markets, it is argued, is linked to an increased focus on shareholder value as the principal, or sole, aim of publicly listed companies. The growth of capital markets has also been associated with a surge in financial trading and in the types of financial instruments, particularly derivatives, available to trade. According to the Bank for International Settlements, daily average foreign exchange market turnover was $4 trillion in April 2010, 20 per cent higher than three years earlier despite the intervening global recession (King and Rime 2010) and the notional amount of over-the-counter derivatives outstanding in June 2011 was $707 trillion.[6]

Thomas Palley (2007: 6), one of the leading writers on financialisation in the US, thinks that increased debt is the ‘defining feature’ of financialisation. He details the enormous increases since 1973 in total credit market debt, and in the debt of US households in particular. Prior to 2007, this increase in debt was seen as beneficial to the economy: a consequence of the ‘Great Moderation’ that brought lower inflation, lower interest rates and allowed a greater proportion of the population access to credit. It is now seen in a more negative light: that is, as a major cause of asset bubbles and the financial crisis. This interpretation is important for the analysis of financialisation in the UK because household debt in the UK is higher – relative to disposable income – than in any other major advanced economy, and probably higher than anywhere else in the world. But, according to Palley (2012), financialisation is not the root cause of the crisis: he blames a structural shift in the (US) economy that weakened demand. Financialisation – rapid growth in credit – was an attempt, ultimately doomed, to maintain strong demand growth in the face of this structural shift.

6 Bank for International Settlements: http://www.bis.org/statistics/otcder/dt1920a.pdf

There is also an international aspect to financialisation. The gradual removal of restrictions on capital flows in the 1970s and 1980s, following the collapse of the Bretton Woods system of fixed exchange rates, was an important element of financial liberalisation and a key component of the so-called 'Washington Consensus' view of how the global economy should be run. Studies that focus on the effects of financialisation on emerging economies are most concerned with the role of the international capital flows enabled by this relaxation of capital controls. They find that a sudden halt to inflows has the potential to cause financial and economic havoc (O'Connell 2005, Barbosa-Filho 2005). But capital flows also had serious implications for the economies of advanced countries. Ben Bernanke, the chairman of the US Federal Reserve Bank, believes that a 'savings glut' – a flow of capital from China and oil-producing countries into the US between 2003 and 2007 – contributed enormously to the bubbles that preceded the recent financial crisis.

As a result, financialisation is seen as central to the neoliberal thinking that has dominated many western governments' approaches to economic policymaking for much of the last three decades. Higher real interest rates (to the benefit of lenders), an increased role for the financial sector in the economy and a focus on shareholder value as the primary, if not the sole, aim of companies are aspects of neoliberalism and examples of the way the economy is now run more for the benefit of finance than for the so-called 'real economy'.

Problems with financialisation

Epstein's definition of financialisation is a neutral one; it does not suggest it is either good or bad for the economy. However, such neutrality does not last far beyond the first few pages of most published analyses of financialisation. Unlike, for example, globalisation, which has its supporters and its detractors, financialisation is seen by almost all those writing about it as unwelcome.[7] In Epstein's words it leads to:

> **'Speculative and excessively liquid financial flows that create debt-laden balance sheets, overly short-term perspectives, volatility and mispricing of important asset prices, including exchange rates, and subsequent misallocation of resources and unstable economic growth.'**
>
> Epstein 2005: 12

The starting point for most studies of financialisation is the rapid growth of the financial sector in recent decades and the consequent increase in its share in national value-added, which leads to the most common critiques of financialisation: that this growth has come at the expense of the non-financial (or 'real') sector of the economy. In particular, manufacturing, which has seen its share in the US economy fall as the financial sector's share has increased, is thought to have suffered as a consequence of financialisation – and this is seen as undesirable. Economies that have experienced financialisation are often characterised as using fewer resources to make things (goods or services) that people want and more to move money from place to place (to the benefit only of those in the financial industry doing the moving).

David Harvey (2003), for example, believes the United States deliberately opted from the 1970s onwards for a policy choice that involved a bigger role for finance in the economy, at the expense of manufacturing, which was pushed out. This was a conscious decision

7 Robert Shiller's book *Finance and the Good Society*, published in 2012, may be the start of a new trend to emphasise the beneficial side of finance. Shiller, who also wrote *Irrational Exuberance* and was one of the few economists to highlight the unsustainability of US house prices before they crashed, appears to be an odd defender of finance but he is convinced that it has to be central to a prosperous modern society.

based on a view that as long as a country had financial power, it did not matter if it was no longer dominant in production industries. Importantly, this choice, according to Harvey, was made well before the emergence of large economies, like China, bent on increasing their share of global manufacturing activity.

There are two arguments here. First, rapid growth in the financial sector is not possible without sub-par growth in the rest of the economy. Second, an economy with a larger financial sector is intrinsically less desirable.

However, it could be that rapid growth in finance – and increases in its share of economic activity – reflects developments in the rest of the economy, rather than driving them. Thomas Philippon (2008) identifies three periods in the last 150 years when corporate finance's share in the US economy increased and two when it fell sharply. Each of the three periods of increase was associated with the development of a general purpose technology (GPT): railroads, electricity and information technology. Philippon's argument is that increases in finance's share in the economy came at a time when there were relatively large numbers of new firms in new industries, typically with low cash flows. These firms needed to raise funds to invest for growth, so finance had to play a bigger role in the economy. At other times, finance's share was lower because investment was being done mainly by established firms with strong cash flows.

Economic historian Carlota Perez (2011) reaches a similar conclusion. She has identified five technological upheavals since the industrial revolution and believes that, in each case, diffusion of the new technology occurred in two phases: installation followed by deployment (for example, railways first being built and then being used to transport goods and people). High levels of finance are needed in the installation phase because investment is high and concentrated while revenue flows are limited. Less finance is needed in the deployment phase when outgoings are reduced and income starts to flow in.

The UK data offers broad support for Philippon and Perez. It shows financial intermediation grew more rapidly than the overall economy in the period prior to the first world war, a little more slowly from 1914 to 1970 and then more rapidly again since 1971, when the latest GPT – the information technology revolution – was being installed. If Philippon and Perez are right, we may now be entering a period when financial intermediation does not need to expand more rapidly than the rest of the economy.

Table 2.1
Average annual growth rates of UK financial intermediation and the whole economy (%)

	Aggregate GVA	Financial intermediation GVA	Difference (pp)
1856–1913	2.0	7.6	5.6
1914–1970	1.9	1.5	-0.4
1971–2008	2.4	3.8	1.4
1856–2008	2.1	4.4	2.3

Source: Haldane et al 2010: 109

However, when Philippon tries to model the relationship between finance and the economy, his model breaks down in the 2000s. Having explained successfully the expansion and contraction of finance's share of the US economy up to the 1990s, it cannot explain why the sector became as large as it did in the decade before the financial crisis. Philippon suggests this may be due to US financial firms selling more of their services overseas, though this is not evident in the trade data, or selling more to households. But, he concludes, 'it could be that the financial sector is too large and should be reduced' (2008: 26).

Rapid growth in the financial sector may have other benign explanations. If it is the result of higher productivity growth, for example because financial firms can make better use of information technology than other sectors, then the financial sector can grow more rapidly without impinging on the rest of the economy. Overall, economy-wide activity would grow faster and the financial sector's share of the total would increase.

The second part of the argument of those critical of rapid growth in the financial sector is that an increased share of financial activity in the economy is unwelcome. On the face of it, this need not necessarily be the case. If productivity levels, and so real wages, are higher in the financial sector than in the rest of the economy, then an increase in the financial sector's share of the economy would, other things being equal, lift aggregate productivity and real wages. This would appear to be a good thing. However, the financial services sector is unlike other sectors of the economy. Many of its activities are intermediate: they facilitate the production of goods and services demanded by households and businesses. Higher real wages in the sector necessarily mean higher costs for other sectors reliant on finance.

Since the financial crisis and subsequent recession, a number of economists have argued that a large financial sector is a heavy burden on taxpayers. The enormous sums of taxpayers' money that have been pumped into banks to keep them afloat since 2007 are seen, with some justification, as showing that over the long-run a large banking sector is not a net positive for an economy. In the UK, the National Audit Office (2011: 4) estimates that at the end of March 2011, 'the total outstanding support explicitly pledged to the banks … is £456.33bn'. This is equivalent to 31 per cent of GDP.

The financial crisis has also shown how the financial sector facilitated the build-up of credit and asset price bubbles before 2007. The bursting of these bubbles triggered the crisis. In the era of financialisation – since the 1970s – such bubbles have been more frequent than in the preceding 25 years. Examples include the Latin American debt crisis and the US savings and loans crisis in the 1980s, the South East Asian crisis in the 1990s, the dot.com bubble and the recent US mortgage debt crisis. This historical experience runs counter to the argument of those who favoured financial liberalisation on the grounds that increased speculative flows would tend to be stabilising. These bubbles matter because the recessions that follow them have been deeper and longer than those experienced in the postwar period up to 1970 (Reinhart and Rogoff 2009). Financialisation may therefore be a cause of increased economic volatility.

Thomas Palley argued even before the financial crisis and recession that financialisation 'has been associated with tepid real economic growth and growth also appears to show a slowing trend' (2007: 3). More recently, he has developed this argument: the root cause of weaker growth was a change in the nature of the US business model resulting from a switch in policy focus away from achieving full employment in favour of targeting low inflation (Palley 2012: 34). This led to slower real wage growth with borrowing and asset price inflation becoming the main engines of growth.

There has also been criticism of the way finance has performed its primary role in the economy: allocating resources so that they are used in the most productive way. Critics suggest developments in the first decade of the 21st century show a larger financial sector has been doing the exact opposite (Freeman 2010: 165). Increased speculative financial flows can have negative economic impacts, in particular if they distort financial values for any length of time. For example, sustained strong speculative capital flows into a country

will cause its exchange rate to become overvalued. This could have a serious effect on its trade performance and lead to a global misallocation of resources. The economic theory that countries should exploit their comparative advantages is invalid if exchange rates are misaligned (Blecker 2005). Speculative capital flows into, and then out of, South East Asia were largely responsible for the region's economic crises in 1997 and 1998 and similar capital flows are playing a part in the sovereign debt crisis now gripping the eurozone.

Concern has been expressed that financialisation can become self-sustaining. Before the financial crisis, the rapid growth and profitability of the financial sector was seen in some quarters – including in high levels of government – as a sign that people in the sector were in some way more skilled and better informed than their counterparts in the non-financial sector. This led them to gain an undue level of influence with politicians; influence they could use to ensure policies and regulation were favourable to their sector. This would ensure that financialisation could maintain its momentum.

Given the fall from grace of banks in recent years, this line of argument has become less prominent, but there are those who argue that failure to introduce substantial reform of the financial sector despite the financial crisis – and the emergence of several scandals associated with the sector – is evidence of the bias of elite politicians in favour of finance. Froud et al (2011: 2) suggest crises tend to result in increased power for 'conservative, financial, bureaucratic and political elites'.

There is also a strong strand in the financialisation literature concerned with income inequalities. In many advanced economies, these have widened over the last 20 years (OECD 2011). There are good grounds for thinking financialisation played a part in this development. Inequalities have increased because of developments in the pay of those at the very top of the income scale and a disproportionate number of those people work in finance. This is not just the chief executives of large investment banks, whose pay packets are routinely exposed by the media as an example of the excesses of the sector; it is also leading hedge fund managers and traders who, because of huge increases in the sums of money they are managing and trading, are able in good years to make enormous amounts for their institutions, and are rewarded accordingly. Arithmetically, therefore, finance (if not financialisation) has undoubtedly contributed significantly to the increase in inequality.

Financialisation can generate inequality in other ways, too. James Crotty (2005) suggests the increased emphasis on shareholder value that has accompanied financialisation, and the pressures it has created on non-financial companies to maintain short-term profits, has led them to hold down wages and is, at least in part, responsible for the stagnation in real median incomes in the US since the 1970s. This stagnation in real median wages, at a time when real national income has continued to grow, has been accompanied by an increase in the share of profits in the economy and, of course, by large increases in pay at the very top of the income scale.

So, as this brief summary of the financialisation literature in the US shows, there are many potential drawbacks to the rapid growth in financial activity and the share of the financial sector in the economy over the last two or three decades. Chapter 4 looks in some detail at these negative aspects of financialisation in the UK. But financialisation is not all bad and chapter 3 documents how the role of finance in the UK has changed, in particular over the last 25 years or so, and assesses the benefits to the economy accruing as a result of the UK's comparative advantage in financial activities.

3. THE UK FINANCIAL SECTOR: EXPLOITING A COMPARATIVE ADVANTAGE?

'… the City elite [were] a sector, which was socially, structurally and geographically separated from industry, committed to and known for its cosmopolitan market interests, and had been the object of much resentment as its corporate and individual wealth had grown during the 'hard times' of the 1880s and 1890s.'
Green 1996: 221

This chapter analyses the role of the financial services industry in the UK economy. It sets out its size in relation to the overall economy and how it has changed over recent decades. It also looks at trends in key variables such as profits, tax, employment and trade. It confirms that the UK has a comparative advantage in many aspects of financial services.

The economic theory that countries should exploit their comparative advantages was developed by the British economist David Ricardo in the early 19th century. His basic proposition was that – subject to a number of assumptions about the way the global economy works – all countries gain if they focus their resources on the production of goods and services that they are relatively efficient at producing, leaving other goods and services to be produced by other countries.[8] Unlike many economic theories, the idea of comparative advantage is widely accepted by economists, though in the real world – as opposed to the two countries/two products example in the textbooks – identifying a country's comparative advantage is not always easy.

Financial markets

The most obvious sign that the UK has a comparative advantage in financial services is London's ranking as the world's number one financial centre by Long Finance – a research body established by the Z/Yen Group to monitor and analyse the development of global finance. This is a position the UK has held consistently throughout the last five years.[9]

Table 3.1
Global financial centres index, March 2012

Rank	Centre	Rating
1	London	781
2	New York	772
3	Hong Kong	754
4	Singapore	729
5	Tokyo	693
6	Zurich	689
7	Chicago	688
8	Shanghai	687
9	Seoul	686
10	Toronto	685

Source: Long Finance 2012

Also appearing in Long Finance's ratings are Jersey (21st), Guernsey (31st), Edinburgh (37th), Glasgow (41st) and the Isle of Man (44th).

8 The typical textbook example involves two countries and two goods and shows that each country should produce the good it is relatively more efficient at producing, even if one country is absolutely more efficient at producing both.

9 *The Banker* magazine also compiles a regular ranking of international financial centres, which New York and London consistently top, http://www.thebanker.com/Reports/Special-Reports/Ranking-Financial-Centres/New-York-and-London-hold-firm-as-world-s-top-IFCs.

London is regarded as the leading financial sector in every one of the five components of the financial centres index: people, business environment, market access, infrastructure and general competitiveness. In terms of the sub-sectors within the financial sector, London's strengths are judged to be in asset management, wealth management and private banking, professional services, and government and regulatory, in each of which it is ranked number one. In banking, London is ranked second (behind New York) and in insurance third (behind Hong Kong and New York).

Indices such as these are largely subjective, being based on the perceptions of people who work in the finance industry. But the consistent high rating accorded to London suggests the finance industry itself clearly regards London (and thereby the UK) as having a comparative advantage in this area. And the UK's comparative advantage in finance is clearly a broad one, spanning many aspects of financial activity.

This comparative advantage is also evident in the UK's share of international financial markets. The UK is the biggest centre in the world for cross-border bank lending, trading foreign exchange, over-the-counter (OTC) interest rate derivatives and marine insurance premium income. In many other markets, the UK is the second largest after the US.

Table 3.2
UK share of international financial markets (%)

Cross-border bank lending (Sept 2011)	19
Foreign exchange turnover (Oct 2011)	37
Exchange-traded derivatives turnover (2011)	6
Interest rates OTC derivatives turnover (April 2010)	46
Marine insurance net premium income (2010)	20
Fund management (as a source of funds, end 2010)	8
Hedge fund assets (end 2011)	18
Private equity – investment value (2010)	21
Securitisation – issuance (2010)	6

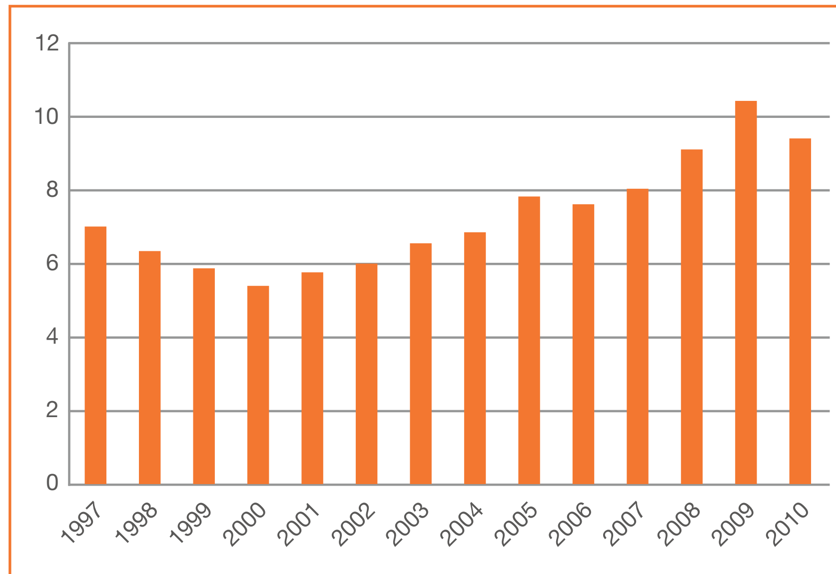
Source: TheCityUK 2012a

The UK's history and experience in financial services means that it is well placed to exploit new opportunities when they arise. One example is carbon finance. A 2011 study for the Department for Business, Innovation and Skills by Kmatrix found the UK has a share of 3 to 4 per cent of global sales in all low-carbon goods and services – about what would be expected given the size of the UK's economy (BIS 2011). There was one exception to this general rule: in carbon finance, which the report found was the fastest growing market at the global level, the UK has a 17 per cent share. This is an example of how the UK's existing comparative advantage in financial services can be used to build a large market share in new financial markets as they emerge.

Gross value added

The combination of London's leading role as a global financial centre and the growth of global finance in the decade up to 2007 led to a significant increase in the importance of financial services in the UK economy, according to the official statistics. Its share in UK gross value-added (GVA) fell from 7.0 per cent in 1997 to 5.4 per cent in 2000 before subsequently increasing to a peak of 10.4 per cent in 2009 and then falling back to 9.4 per cent in 2010.

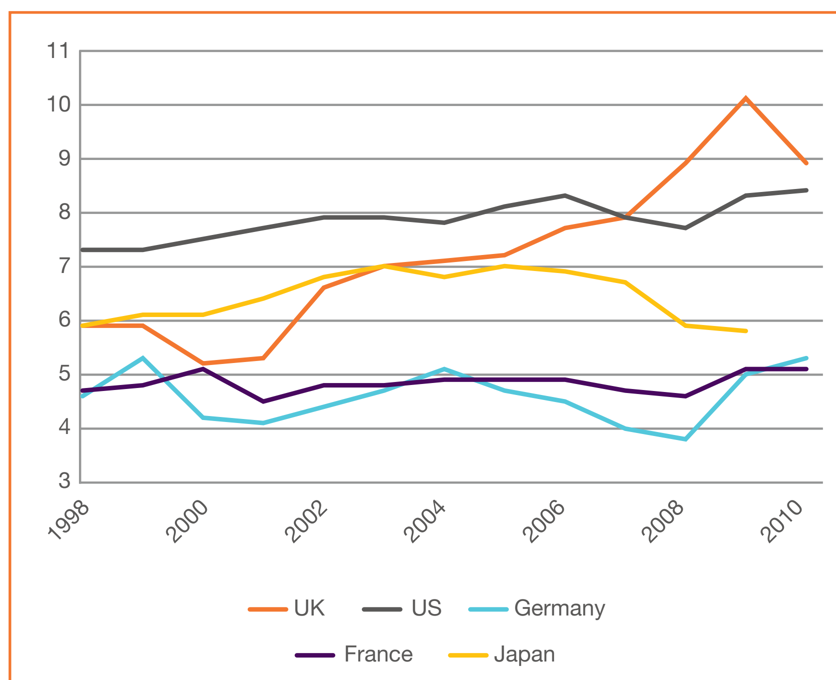
Figure 3.1
Share of finance and insurance activities in GVA (%)



Source: ONS 2012a and author's calculations

According to TheCityUK (2012b) – a lobby group for the financial services industries – the share of financial services in UK value-added in 2010 was higher than in the US (8.4 per cent), Japan (5.8 per cent), Germany (5.3 per cent) and France (5.1 per cent). The UK is the only one of the five largest economies where the financial industry increased significantly in size, relative to the rest of the economy, in the decade prior to the financial crisis.

Figure 3.2
Financial services share of GDP in five largest economies (%)



Source: TheCityUK 2012b

Economies should over time develop to reflect their comparative advantages, so the growth of the financial services industry in the UK since 2000 and its size relative to financial service industries in other major economies are indicators that the UK has managed to exploit a comparative advantage in financial services and insurance.

Between 1997 and 2010, the increase in the share of financial and insurance services in UK value-added was greater than the increase in the share of any other broad sector bar the government sector. However, there were also increases in the shares in value-added of most other service sectors, at the expense of manufacturing and distribution, transport and storage. Consequently, only part of the increase in the share of financial and insurance services in UK value-added can be validly described as the increased financialisation of the economy. It has also to be understood in the context of a continued decline in the importance of manufacturing: a phenomenon common to most advanced economies that is the result of globalisation and technological change.[10]

Table 3.3
Shares in UK value-added by sector (%)

	1997	2010	Change
Government, health and education	17.0	19.9	3.0
Financial and insurance	7.0	9.4	2.4
Professional	9.8	11.6	1.8
Information and communication	4.9	5.7	0.8
Construction	5.8	6.4	0.5
Real estate	7.5	8.0	0.5
Other services	3.0	3.4	0.4
Agriculture	1.4	0.6	-0.7
Distribution	20.1	18.9	-1.3
Production	23.4	16.1	-7.4

Source: ONS 2012a and author's calculations

The official data on GVA, therefore, shows financial activities have become more important in the UK economy (though not whether it is a good or a bad thing and what proportion of the additional output might be deemed socially useful).

However, not everyone accepts the official data represents a true picture of the growth in financial services, with the scale of the contribution of banking to the economy being questioned. Andrew Haldane, the executive director of the Bank of England responsible for financial stability, and his colleagues at the Bank (Haldane et al 2010) believe the way statisticians calculate the contribution of banking to the economy through the provision of financial intermediation services is wrong (see box). If their view is accepted, GDP growth in the decade to 2007 was overestimated by at least 0.05 per cent a year.

An overestimation of growth by 0.05 per cent a year is not very large, but it is only one aspect of the potential overestimation of the contribution of financial services to aggregate output growth. It focuses on just one activity of the financial sector: intermediation between savers and borrowers. It does not begin to address the question of what other activities within the financial sector might not add to output in any meaningful way – whether in Adair Turner's phraseology they are 'socially useful'. Data limitations and conceptual issues make it difficult to measure the scale of these activities.

10 However, as shown in the next chapter, the decline in manufacturing has been faster in the UK.

Financial Intermediation Services Indirectly Measured
Statisticians have developed the concept of 'Financial Intermediation Services Indirectly Measured' (FISIM) to assess the value of financial services embedded in interest rate margins. This assumes that when banks bear risk – whether it is credit risk as a result of lending to a company or liquidity risk when borrowing short term and lending longer term, they are engaged in a productive activity and generating value-added, or output. But, Haldane et al argue, households and companies bear similar risks all the time and they are not judged to be creating output when they do so. They believe the output of banks is the measurement and pricing of risk, not the bearing of risk. They quote OECD analysis which suggests a true measure of FISIM would be around 60 per cent of the current measured level. They also demonstrate how the apparent high returns to finance in the years leading up to the financial crisis – returns which boosted their measured contribution to growth in output and profits – were 'driven by banks assuming higher risk' not measuring and pricing more risk (Haldane et al 2010: 98). In other words, some of the growth in value-added in the financial sector – and some of the growth in the aggregate economy in the decade up to 2007 (and possibly earlier) – was not real growth at all but merely banks appearing to take on more risk.

We can get an idea of the scale of the possible overestimation of activity in the banking sector in the UK that results from the flaw in FISIM from the national accounts statistics in the annual *Blue Book* (ONS 2012a). This shows the impact of FISIM on GDP peaked in 2008 at 2.3 per cent. If the OECD is right and 'true FISIM' is 60 per cent of 'measured FISIM', then GDP was overestimated by 0.9 per cent.

Over the period from 1997 to 2007, the impact of FISIM grew at an annual rate of 6.5 per cent, compared to a 3.2 per cent increase in GDP itself. As a result, FISIM added, on average, 0.14 per cent a year to growth. Assuming the scale of overestimation was unchanged throughout this period and that the OECD analysis is correct, then GDP growth over this period will have been overestimated by around 0.05 per cent a year. This is a minimum estimate. Haldane et al argue that there was rapid growth in risk bearing by banks over this period. If this is the case, 'true FISIM' will have been closer to 'measured FISIM' in 1997 than in 2007 and a greater part of the contribution of FISIM to growth will not be true output growth.

These problems are clear from two examples. First, active asset management. Since fund managers, on average, cannot beat the market's returns (except perhaps by a small margin if they outperform individual investors), it could be argued that they do not in any sense produce output. And yet, pension funds, insurance funds and other investors pay them hefty fees – far more than they would have to pay for a fund that simply tracks the stock market – which suggests they believe they are receiving something of value. So is value being created or not? Second, credit default swaps (CDS). The original idea of CDS was as a form of insurance to entities that faced a credit risk through holding loans or bonds. The CDS ensured that lenders got their money back in the event of a default. Providers of CDS could therefore be said to be offering a service akin to that offered by service insurance companies to householders wishing to insure the contents of their homes. The fees they charged are, therefore, correctly represented as 'output'. But is the same true if the CDS is bought by an entity that does not own the loans or

bonds that are being insured (a so-called naked CDS)? In this case, the CDS is bought purely for speculative purposes. Does facilitating speculation represent creating output? And if it does, is it socially useful or not? And if not, then is the same true of high street bookmakers?

These conceptual problems – not to mention the data limitations – make it impossible to take a 'bottom-up' approach to measuring the scale of 'socially useless' activities within the financial sector. There is, however, plenty of circumstantial 'top-down' evidence that these activities exist and that they are getting bigger. Thomas Philippon (2012) has looked at the cost of financial intermediation in the US over the last 140 years and compared it with the production of assets and liquidity services. He concludes that the financial industry has become less efficient: the unit cost of intermediation is higher today than it was at the beginning of the 20th century, despite all the technological advances – computers replacing ledger books, for example – that have taken place in the intervening years. This can only be because US banks are undertaking much more activity that is of little social value.

The same is likely to be true in the UK. Much of the profitability of investment banks arises from their 'proprietary trading' (dealing in financial markets, mainly derivative markets, on their own accounts). Rather than making the underlying markets more efficient, it is likely that this activity simply serves to transfer resources from the rest of the economy to investment banks and their staff because for every pound of profit made by the trading activities of the banks someone else must be recording a trading loss.

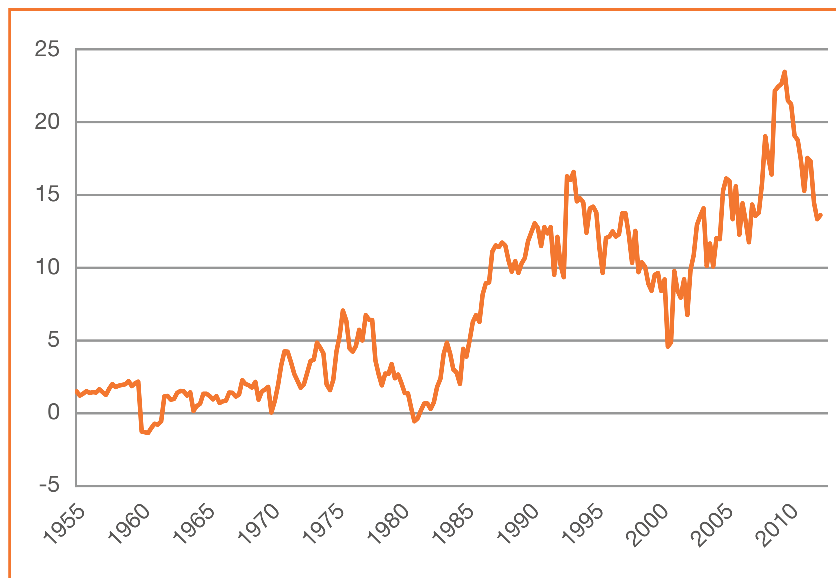
Therefore, while the size and growth of the financial sector in the UK strongly suggest the UK has a comparative advantage in financial activities and that this has been exploited, some of the apparent output (and growth) is not real and some of the activities being measured are not adding to general welfare. If defenders of the financial sector want to disagree with this conclusion, they have to explain why the UK and other advanced economies performed so well – in terms of enjoying high investment and saving rates and good growth in output, without financial crises – from 1945 to 1970, despite having much smaller, less complex and less innovative financial systems than they have today.

Profits

Unsurprisingly, the increase in the financial sector's share of aggregate output in the UK has been accompanied by an increase in the sector's share of total profits. This peaked at 22.5 per cent in 2009, having increased unevenly from 2 per cent or less throughout much of the 1950s and 1960s. At its peak, the gross operating surplus of financial firms in the UK was close to 5 per cent of GDP.

There is support here for those critics of financialisation who link it with the neoliberal revolution. Although the financial sector's share of profits in the economy went up a little in the 1970s, it leapt to new highs in the 1980s when real interest rates were increased as part of the anti-inflation strategy that was at the heart of early neoliberalism. It was sustained at these levels – apart from a period in the early 2000s after the dot.com bubble burst – until the onset of the financial crisis. Then, ironically, it rose further because profits in the rest of the economy were hit harder in the recession than the profits of financial companies.

Figure 3.3
Gross operating surplus of UK private financial corporations (% of total)



Source: Office for National Statistics (ONS) database[11] and author's calculations

The profit share of financial corporations is greater than the sector's share in national output. Critics of financialisation see this as evidence that the financial sector is, in some sense, taking income from other parts of the economy, though an increase in profit share does not, on its own, prove this to be the case.

Tax

The financial sector is keen to highlight tax payments made by financial services companies as evidence of their contribution to the wider UK economy. It argues financial companies make disproportionate tax payments relative to, for example, their share of total employment and that the Exchequer – and therefore society – would be worse off if the financial sector was less important in the overall economy.

For four of the last five years, the City of London Corporation has commissioned PricewaterhouseCoopers (PwC) to estimate the total tax contribution of financial services companies. Its latest report (PwC 2011), which covers tax paid by companies in their accounts for the financial year that ended in the tax year to 31 March 2011, finds the industry contributed £63 billion to the UK government, accounting for 12.1 per cent of the total UK tax take.[12] This was made up of taxes borne (such as corporation tax, employer's national insurance contributions (NICs) and irrecoverable VAT) of £27.6 billion and taxes collected (such as income tax under PAYE and employees' NICs) of £35.4 billion. This is significantly higher than in the previous year, but still below the level seen in 2007, ahead of the financial crisis and recession.

11 The data for this chart, and for other charts in this report that are sourced from the Office for National Statistics database, can be found on the ONS website: http://www.ons.gov.uk/ons/index.html

12 Extrapolated from data for 43 financial services companies accounting for 41.6 per cent of employees in the sector.

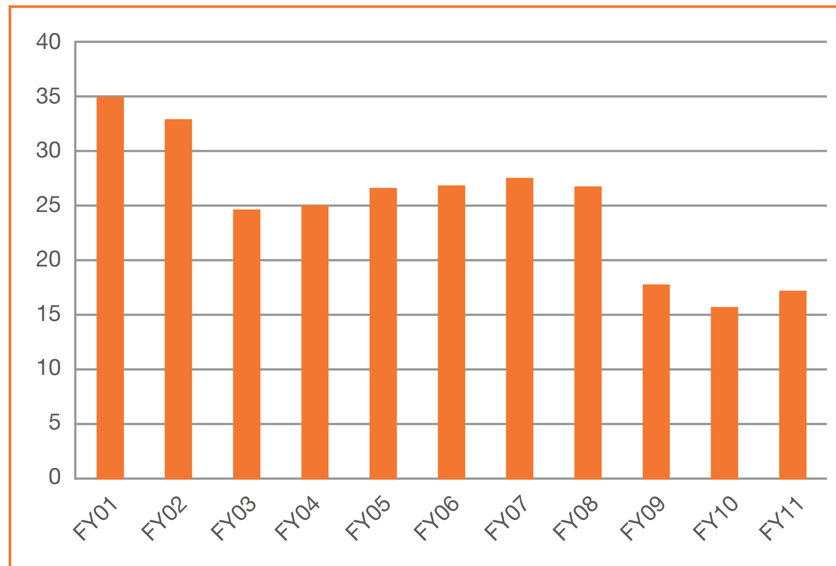
Table 3.4
Total tax contribution of the financial services sector

	£ billion
2007	67.8
2008	n/a
2009	61.4
2010	53.4
2011	63.0

Source: PwC 2011

Despite employing only around 4 per cent of the UK's workforce (1.1 million employees), PwC estimates that the sector accounted for over 12 per cent of all government employment tax receipts (employee PAYE, employee and employer NICs plus the bank payroll tax) in 2011. Official figures from HM Revenue and Customs show financial companies paid £7.2 billion in corporation tax in the fiscal year 2010/11, just over 17 per cent of total corporation tax receipts. This is a little higher than in the previous year, but well below the share of total corporation tax paid by financial companies between 2002/03 and 2007/08, which averaged 26 per cent.

Figure 3.4
Financial companies' share of corporation tax (%)



Source: HMRC 2012

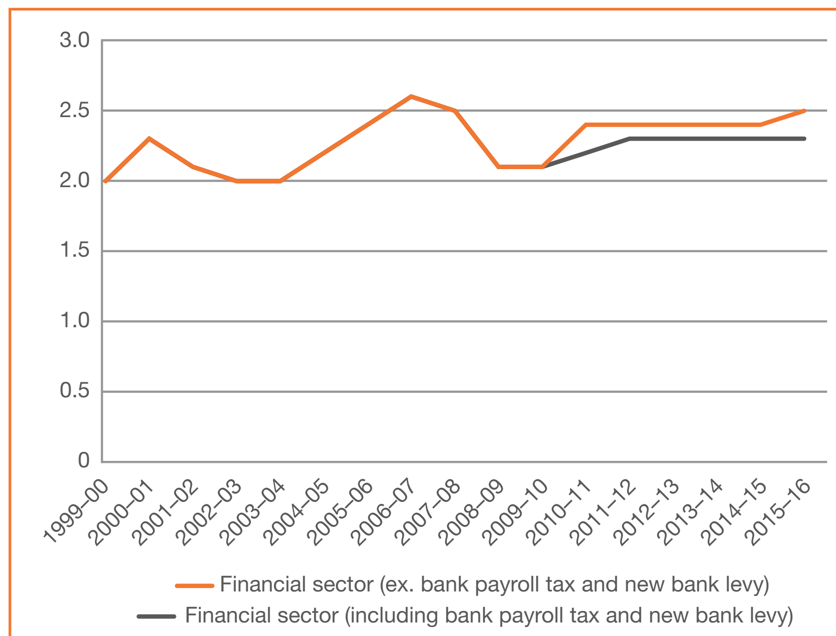
Analysis by the Office for Budget Responsibility (OBR) suggests the effective tax burden – income and corporate tax as a share of GVA – was higher for financial intermediaries in 2007/08 than for any other sector in the UK economy (2011: 89) (see figure 3.5). The OBR says this reflects primarily the relatively high profitability of the sector in that year, but it must also reflect the high average level of remuneration in the financial sector which means that a relatively high proportion of financial workers paid higher-rate income tax, and so have a higher average tax rate than workers in other industries.

The peak year for profitability in the financial sector was 2007/08, just ahead of the crisis and recession. In that year, taxes (such as PAYE, NICs and corporation tax) paid by the financial sector amounted to just over 2.5 per cent of GDP. Although this fell to just over 2 per cent in 2008/09 and 2009/10, projections by the OBR suggest that, thanks to a recovery in profitability in the sector and the bank payroll tax and bank levy, it was back close to 2.5 per cent in 2010/11 and 2011/12, and will stay around this level in the near future.

Figure 3.5
Effective tax burden by sector, income and corporate tax as a share of GVA, 2007/08

Source: OBR 2011

Figure 3.6
Financial sector receipts (% of GDP)



Source: OBR 2011

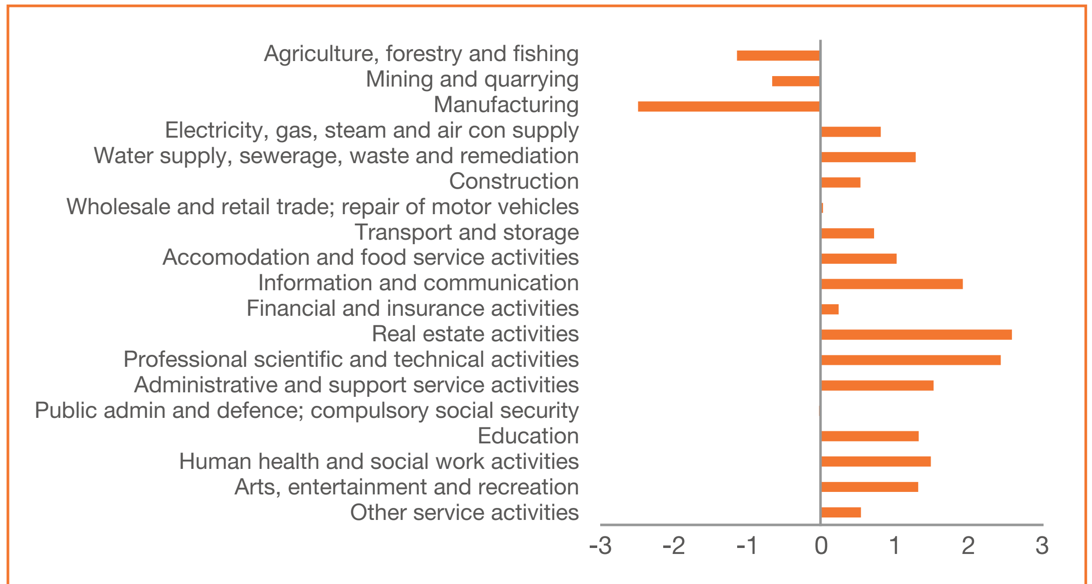
Employment

If the UK has a comparative advantage in financial services and it has increasingly exploited that advantage over the last 25 years, one disappointment is that this has not led to more jobs. Employment in financial and insurance activities in the UK peaked in 1990 at just over 1.2 million, having increased by 50 per cent over the preceding 12 years. Since then the number of jobs in finance and insurance has fluctuated between 1.1 and 1.2 million, and at the end of the second quarter of 2012 it was in the middle of this range at 1,144,000.[13] As a result, the financial industry is one of the parts of the

13 The latest employment data from the ONS is available at http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/september-2012/statistical-bulletin.html

service sector that has seen the smallest increase in employment over the last 20 years as part of the general trend in the labour markets of most advanced economies away from jobs in primary production and manufacturing and towards services.

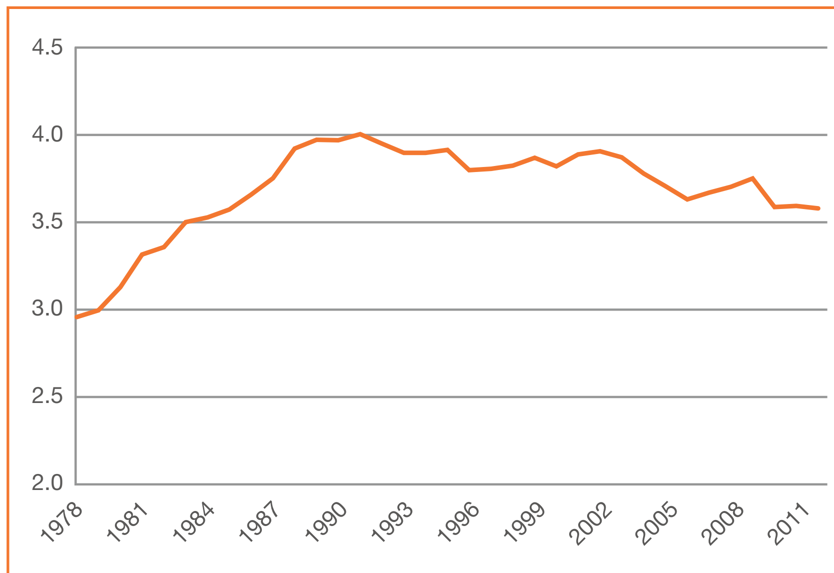
Figure 3.7
Growth in workforce jobs, 1992–2012, annual rate (%)



Source: ONS database and author's calculations
Note: Based on 2007 standard industrial classification sections, as currently used by the ONS when reporting labour force survey data.

The net result is that the share of financial and insurance jobs in the economy has declined from a peak of 4.0 per cent in 1991 to 3.6 per cent today.

Figure 3.8
Workforce jobs in finance and insurance activities (% of total)



Source: ONS database and author's calculations

If the employment and GVA data are correct, strong growth in GVA in finance and insurance has been achieved with little increase in the workforce; suggesting, in other words, that there has been phenomenal growth in productivity in the financial sector. In the 10 years up to 2007 when GVA increased by 76 per cent, the size of the workforce expanded by just 7 per cent. This implies productivity growth of a little over 5 per cent a year over this period. In some parts of the industry, productivity growth probably was this strong: the financial sector has exploited new technology, for example in the 'back offices' of insurance funds. But doubts about the scale of the overall gains provide circumstantial evidence that Haldane et al are right in suggesting the increase in GVA has been exaggerated.

The last 20 years have also seen a significant shift in the composition of the workforce in the financial sector. As in other parts of the economy, technological change and globalisation have meant the loss of many low-skilled and semi-skilled jobs and the creation of more high-skilled positions. Consistent data on occupation by industry is available only from 2004 to 2011, and then only for the broad sector that includes real estate activities and other professional and technical activities as well as finance and insurance. But even over this short period, a strong trend away from low-skilled to high-skilled jobs is apparent. The number of jobs described as managers, directors, professional or associate professional, and technical increased by 563,000; the number of jobs that are administrative and secretarial fell by 142,000.

In recent years, there has also been a shift in the composition of jobs within finance and insurance (see appendix 1 for the latest data). The number of jobs described as being in 'activities auxiliary to financial services and insurance activities' (including fund managers, hedge funds and financial advisers) has increased, while the numbers directly employed in banking and insurance and pensions has declined. In aggregate, the number of employees in the financial and insurance sector has not increased in the last 15 years – at a time when the total number of employees in the UK was up by around 3 million, or 13 per cent. The finance and insurance sector may be a source of income for the economy, but it is not a source of jobs.

Even the strength of the City as a global financial market does not bring with it an employment boost to the UK economy. Apart from in 2006 and 2007 – at the peak of the unsustainable boom – the number of jobs in the City showed no sign of trending higher before the crisis (see table 3.5). And it has subsequently fallen sharply. Since 2007 there has been a 28 per cent decline in the number of people working in 'City-type' jobs, according to the Centre for Economics and Business Research (CEBR).[14] Its projections show that even by 2016 there will be 18 per cent fewer City jobs than there were in 2000.

Within financial services, banking is the largest employer (with over half a million people working in the sector) followed by insurance (which employs 300,000 people). There are also large numbers working in areas such as management consultancy and legal services, which are often described as 'associated professional services' by those seeking to emphasise the importance of financial services for the economy, though it is not clear how many of the jobs in these areas are dependent on the financial services industry, as opposed to other parts of the economy.

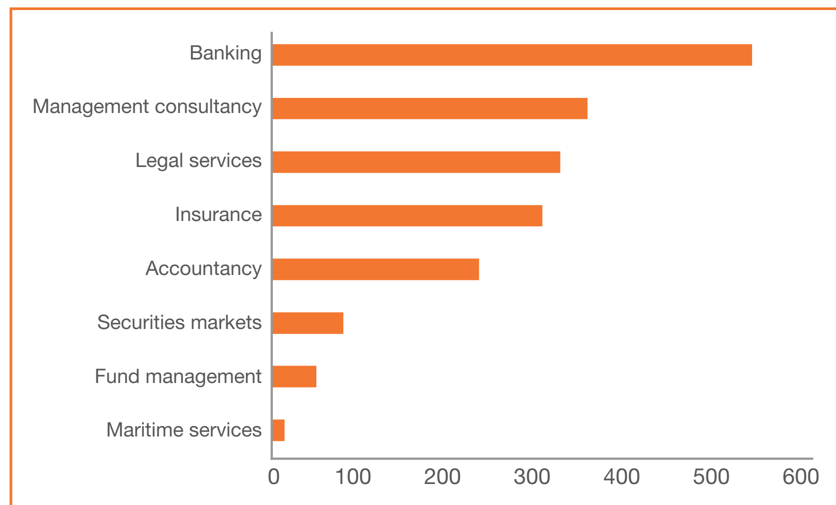
14 http://www.cebr.com/wp-content/uploads/City-Jobs-Press-Release-May-2012-v2.pdf

Table 3.5
Financial services employment in central London ('000s)

	City of London		Canary Wharf		London
	Financial	Total	Financial	Total	'City-type'
2000	158	330	-	-	325
2001	134	309	-	-	312
2002	143	312	-	-	305
2003	145	311	29	91	317
2004	125	290	44	110	316
2005	135	306	51	118	327
2006	131	303	59	129	343
2007	135	312	62	137	354
2008	146	328	62	140	324
2009	137	317	52	133	305
2010	152	339	48	134	315
2011	-	-	-	-	288
2012*					255

Source: TheCityUK 2012c and CEBR
* CEBR forecast

Figure 3.9
Numbers employed in the main UK financial and associated professional services in 2010 ('000s)



Source: City of London Corporation 2011: 9

So, whether the growth in the share of financial services in the economy is described as financialisation or the exploitation of a comparative advantage, it has not been accompanied by net job creation. There are fewer jobs in financial services overall now than there were in 1990 and fewer jobs in the City than there were in 2000.

Related activities

One of the advantages of the City, it is argued, is the large number of jobs that it creates in related activities. This argument comes in two forms. First, there are a range of other industries that operate alongside the City. And second, the spending of high-paid City workers trickles down into the rest of the economy. There is more to the first line of reasoning than the second.

One reason the City has been able to maintain its place as one the world's leading financial sectors is the infrastructure that has developed around it. Just as manufacturing companies have their supply chains, so the financial services industry requires the input

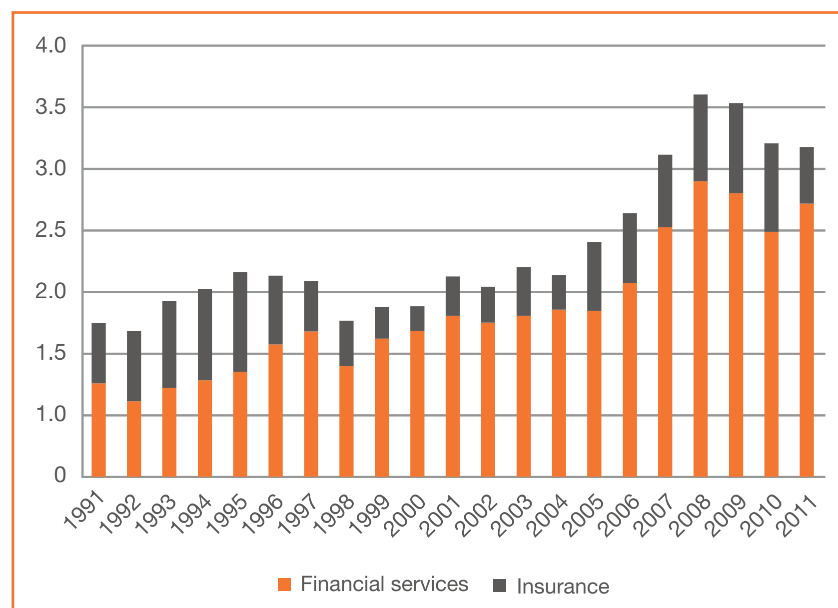
of corporate lawyers, accountants and others to do its business. Some of these functions are performed in-house, but some are out-sourced. To the extent that they are out-sourced, they could reasonably be included when analysing the scale of financial activities. That said, not all management consultants, corporate lawyers and accountants work for – or with – financial firms. It would be wrong, therefore, to lump together the whole of the 'business services' sector with the financial sector.

The 'trickle-down' argument is harder to sustain. No doubt well-paid City workers spend money in restaurants, bars and coffee shops and employ cleaners, nannies and au pairs. But this does not mean some of the jobs in these areas can be treated as part of finance, or even reliant on the presence of finance in the UK. The activities of all parts of the economy are interrelated. Just as purchases of coffee by bank workers create employment in coffee shops, so the banking activities of coffee shop workers create jobs in banks. Ultimately, except in specific cases involving supply chains, it is not helpful to think of jobs in one sector relying on activities in another.

Trade

More than anything else, the trade figures strongly suggest finance is an area where the UK has a comparative advantage. The UK's world-leading position in financial services is reflected in a trade surplus in insurance and financial services that has steadily increased over much of the last 20 years. From around 1.5 per cent of GDP in the early 1990s, this trade surplus increased to reach a peak in excess of 3.5 per cent in 2008. It has subsequently fallen back a little, but in 2011 it was still 3.0 per cent of GDP.

Figure 3.10
UK trade balance in insurance and financial services (% of GDP)



Source: ONS database and author's calculations

This is a clear demonstration of the UK's comparative advantage in these industries. The *Economist* has argued: 'An industrial cluster that can generate foreign earnings on such a scale is enviable. No other country, not even America, comes close to matching Britain's trade balance in finance.'[15]

15 *Economist*, 7 January 2012: http://www.economist.com/node/21542417

The trade surplus on insurance and financial services should also be seen in the context of the UK's overall current account balance. This has been in deficit in every year since 1983, necessitating a steady flow of capital into the UK from overseas to make the balance of payments balance. Supporters of the financial sector argue the UK would have had difficulty attracting the amounts of capital necessary to fund the larger current account deficit that would have resulted had it not been for the contribution of financial services. This may be true, though in this scenario sterling's exchange rate would presumably have been lower, enabling a greater trade contribution from other sectors. An alternative interpretation, explored in the next chapter, is that financial services crowded out activity in other sectors.

Although the UK is reckoned to have a comparative advantage across a range of financial activities, including fund management and insurance, the bulk of the trade surplus is accounted for by monetary financial institutions (the statisticians' term for banks). This will include some (perhaps much) 'socially useless' activity. It is an interesting moral question whether, from a UK perspective, these activities should be discouraged as much when they are sold overseas, so helping the trade picture, as when they are sold in the UK.

Table 3.6
Trade balance of UK financial services (£bn)

	2009	2010	2011
Monetary financial institutions	26,922	23,336	29,000
Fund managers	2,901	3,520	3,322
Securities dealers	7,102	4,866	5,514
Baltic Exchange	714	746	840
Other financial institutions	-679	922	-13
FISIM	5,813	4,755	5,797
Insurance	11,776	12,075	8,013
Total	**48,736**	**45,465**	**46,676**

Source: ONS 2012b

The trade data, therefore, is the clearest evidence of the UK's comparative advantage in financial activities, particularly banking. The country has the largest trade surplus in financial services of any country in the world and has seen that surplus increase over the last 20 years.

Exploiting a comparative advantage or financialisation?

The City defends itself against criticism by arguing that it is one of the few remaining competitive sectors of the British economy. There is little doubt that the UK has a comparative advantage in a range of financial service industries, in particular banking. London is one of the three top financial markets in the world (along with New York and Hong Kong); finance and banking have grown faster than other sectors of the economy and now account for a larger proportion of UK GDP than for other major economies; and the UK runs a persistent trade surplus in insurance and financial services.

The nature of the UK's comparative advantage in financial services is complex. In the traditional textbook analysis of comparative advantage, based on goods rather than services, countries have comparative advantages because of the existence of raw materials, skills in the workforce and technology. As such, a country might have a comparative advantage in manufacturing steel because it has ready access to supplies of coal, iron ore and limestone, people capable of operating a steel mill and access to the latest technology of steel making.

The nature of comparative advantage for a service industry, such as finance, is different. There are no raw materials to worry about. Finance is a 'people business' and having a comparative advantage in financial services means having the right people – at all levels – to work in banking, insurance, asset management and other activities. But there is nothing inherent in British people that make them uniquely well-placed at birth to work in finance. Nor is there anything special about the UK education system that makes it particularly suited to producing financial workers, as the City's eagerness to recruit workers from outside the UK makes clear.

Other factors often cited as giving the UK a comparative advantage in finance can also be dismissed as of minor importance. One is the UK's time zone – meaning UK financial markets open and UK business begins while Asian businesses are still at work, and they are still open and operating when US businesses start work. This might or might not be an advantage, but if it is it is one that is shared with the whole of Europe, which has a time difference of only one hour to the UK. It is hard, therefore, to argue that it is a comparative advantage. Another is the use of English as the universal language. This might have been an advantage historically, but the growing importance of Asian money in the global economy makes it a diminishing one. In the past, not being an English-speaking country did not stop Switzerland developing a large financial industry. Taxation is another factor that has had less influence than widely believed. While insiders claim higher rates of personal taxation would lead to an exodus of jobs (and possibly firms) from the City to other countries, there is very little evidence to suggest this is in fact the case. And even if it were true, it does not follow that low levels of tax have been important in the development – over many years – of the UK's comparative advantage in financial activities.

Institutions do, though, matter. Finance requires a certain level of legal certainty when it comes to the enforceability of contracts and the UK's common law legal system probably played a large part in the initial development of the financial industry.[16] And the UK's comparative advantage in financial services is largely the result of history and the nature of virtuous circles. Building on a base of marine insurance and trade credit in the 19th century, which itself reflected Britain's earlier role in financing trade with the Americas, the City has been able to capture a large share of providing, trading and marketing new financial products as they have developed because its very existence and the liquidity of its markets made it the obvious place to go. Over time, this has resulted in the development in and around the City of the infrastructure essential for undertaking financial activities: clearing houses, accountancy firms and corporate lawyers specialising in finance for example. This is a real advantage; if it was not, then the foreign firms that dominate investment banking (Goldman Sachs, Deutsche Bank, UBS and Standard Chartered to name four) would not be here.

However, the fact that investment banking in the UK is dominated by foreign firms also reveals an uncomfortable truth. Despite a long history of exploiting an apparent comparative advantage in financial services, the UK remains reliant on foreign capital to maintain that advantage. This introduces an unwelcome degree of uncertainty about the future. One day this capital might go home.

Recent scandals – in particular the rigging of Libor rates by leading banks – further complicate the picture. The days when banking was done on the basis of 'my word is my bond' and a British banker's integrity was considered unquestionable – and thereby a major source of the UK's comparative advantage in financial services – have long passed.

16 Thanks are due to John Cullinane for pointing this out.

International finance is a hard-edged business driven by the desire to maximise individual remuneration and company profits. But reputations remain important and there can be little doubt that London's standing has suffered a serious blow. The effects may not be immediately apparent, but in the longer term the chances of Asian financial centres growing at London's expense have increased.

Even so, when – over four years after the last recession began – real GDP is still around 3 per cent lower than at its peak, it might be thought that everything possible should be done to exploit the UK's comparative advantage in finance. Yet there is a reluctance to do so. In part, this is due to the role of financial services in causing the recession; a role that has led to calls to rebalance the economy away from financial services and towards other sectors, including manufacturing. It may also be because, even when it was growing strongly, the financial sector did not create any extra jobs (except at the unsustainable peak of the bubble), and the current high level of unemployment calls for a jobs-rich recovery. More generally, scandals such as the mis-selling of payment protection insurance (PPI) and the false reporting of Libor rates make it hard for the industry to find supporters.

There is also increasing concern that the growing dominance of financial services in the UK economy is not necessarily beneficial. The financialisation of the economy has been accompanied by higher levels of debt, greater economic instability, a concentration of growth in London and the south east and increased income inequalities. It is less than five years since large parts of the financial industry were on the point of collapse and banks had to be nationalised or taken into part state ownership – at substantial cost to taxpayers. Understandably, people want to know whether – despite our comparative advantage – the UK would be better off without such a large financial sector. This is the focus of the next chapter.

4. THE NEGATIVE ASPECTS OF FINANCIALISATION IN THE UK

> **'We are throwing more and more of our resources, including the cream of our youth, into financial activities remote from the production of goods and services, into activities that generate high private rewards disproportionate to their social productivity.'**
> Tobin 1984

Banking, insurance, asset management and other financial services are a cluster of industries in which the UK has a comparative advantage. At a time when the pressures of globalisation are forcing countries to focus ever more on what they do well and when the UK economy is struggling to emerge from recession, it would seem natural that the UK should exploit its leadership in these areas to the full. However, it is not that simple. First, if the financial sector is operating with an implicit subsidy from the UK taxpayer, it is necessary to ask whether the benefits of having a large financial sector are sufficient to offset the cost of the subsidy. Second, if the presence of a large financial sector in the UK is creating other problems – instability and inequality, for example – and if these problems are large enough, they may tip the balance against support for a large financial sector.

Bailing out the banks

When people reflect on the negative aspects of a large financial sector in the UK, they think first about the cost of bailing out parts of the banking system in 2007 and 2008. The National Audit Office (2012) has estimated that the bail-out of Northern Rock could ultimately cost taxpayers £2 billion, but there is, as yet, no definitive estimate of the overall bail-out cost. Andrew Haldane, who as executive director of the Bank of England responsible for financial stability is in a better position than most to hazard a guess, offered some estimates in a speech made in March 2010. He put the direct fiscal cost of the crisis in the UK – the wealth transfer from the taxpayer to the banks as a result of the bail-out – at less than £20 billion, or around 1 per cent of GDP.

However, he went on to estimate the indirect cost, in terms of the present value of the permanent loss of GDP that will result from the crisis, would be somewhere between £1.8 trillion and £7.4 trillion and pointed out that, assuming a crisis occurs every 20 years, and that banks are deemed (somewhat unreasonably perhaps) 100 per cent responsible for all crises, then the systematic levy needed to recoup the costs of crises would be greater than the total market capitalisation of the largest banks. In other words, if the banks were forced to pay an insurance premium to indemnify themselves against the costs of a future crisis, they would be put out of business, or as Haldane put it the banks would be 'on the same trajectory as the dinosaurs' (Haldane 2010: 4).

This is a very speculative calculation, as Haldane admits. A better estimate of the social cost of banks might be based on the implicit fiscal subsidy provided by the state's guarantee of financial stability. This can be calculated using the ratings agencies' separate credit ratings for banks based on whether they have 'support' or are 'standalone'. Haldane concluded that the average annual subsidy for the top five banks in the UK between 2007 and 2009 was over £50 billion – about the same level as their annual profits prior to the crisis. This is still high enough to suggest their business models were unsustainable without an implicit state subsidy.

Britain's large trade surplus in financial services suggests it is good at banking. But banking may not be so good for Britain. There are functions of banking – particularly maintaining payment mechanisms and intermediating between savers and borrowers – that are essential elements of the modern economy and there is a strong case for a fiscal

subsidy to support these activities. But only very badly run banks go broke as a result of these activities. The implicit subsidy is so large because many banks engage in much riskier behaviour – behaviour that is less obviously socially useful. The case for taxpayers subsidising these activities is less apparent. If Haldane's calculations are right, UK taxpayers are paying dearly for the presence of a large banking sector in the UK. It is not such a good thing to be good at banking if this can only be achieved with a state subsidy.

Regulatory failure and capture

The failure of national and international regulators to adequately monitor and control the activities of the financial sector contributed to its crises in 2007 and 2008: 'regulatory bodies did not set appropriate capital and reporting requirements; failed to monitor "shadow banking" activities that raised leverage … and failed to respond to information suggesting that something was seriously awry in finance' (Freeman 2010: 177). In the UK context, John Kay (2009: 21–2) has argued that 'the knowledge that large financial services companies have direct and strong political connections, and use them, has been and continues to be a significant influence in regulatory activity'. The failure to prevent mortgage providers offering mortgages that were larger than the value of the property they were secured against and to understand the potential implications of Northern Rock's business model prior to 2007 are just two of the more apparent failings of regulation.

Although similar failings can be found in other countries (most notably the US) ahead of the recent crisis, and ahead of similar, though less geographically wide, crises in the past, the structure of regulation in the UK has been blamed – notably by the current chancellor of the exchequer, George Osborne – for contributing to the recent UK financial crisis. Specifically, he has criticised the tripartite arrangements under which regulatory power was shared between the Financial Services Authority (FSA),[17] HM Treasury and the Bank of England because it meant that no single institution had the power or the responsibility to oversee the financial system as a whole (in future this will be the responsibility of the Bank of England).[18]

Regulatory failure can be seen as an exogenous factor contributing to the events that made the crisis possible – perhaps even inevitable – either because the system of regulation was flawed, the regulators were incompetent or because they lacked the skills to keep up with innovation in the financial sector. But an alternative and more convincing interpretation is that regulation is endogenous to the financial system and the crisis was, in part, the result of regulatory capture. Efforts by financial firms and lobby groups representing their interests to influence government policy, the interchange of staff between financial firms, regulators and government (in all directions) contributed significantly to less onerous and therefore inadequate regulation of finance. As financial firms grew in size, this problem was exacerbated. A firm that is 'too big to fail' is in a powerful position to dictate its terms to regulators and government.

A related problem is the tendency of politicians to listen to people who have massive incomes or who generate massive profits in the belief that they have some special knowledge or talent. If this is simply a talent for rent extraction and the opportunity is used to lobby for changes that will widen the scope for such behaviour then the outcome is likely to be far from optimal for society.

17 Between 1997 (when the name of the Securities and Investment Board was changed to the Financial Services Authority) and 2005, the FSA acquired responsibility for supervision of first banking and then other aspects of the financial industry.

18 See, for example, the chancellor's Mansion House speech in June 2010: http://www.hm-treasury.gov.uk/speech_chx_160610.htm

The problems of regulatory failure and capture are not easy to circumvent. As financial activities have become more complex and opaque, only people with extensive experience in the industry are likely to have the knowledge needed to regulate it. So, when Alistair Darling, then chancellor of the exchequer, wanted someone to head a review of the role of financial services in the UK economy in 2009, he turned to Sir Win Bischoff, the chairman of Citigroup (and now the chairman of Lloyds Banking Group) – hardly a disinterested party. Furthermore, while it will always be possible to attract a leading City figure to head a review or commission, getting them to work full-time as a regulator is likely to prove much more difficult given the scale of rewards available in finance. Arguably, even if they could be attracted into regulation, the problems would not be solved. As the events of 2007 and 2008 showed – and as the recent $5.8 billion trading loss at JP Morgan has illustrated yet again[19] – leading figures in the banking industry do not always have a complete grasp on the risks their firms and their employees are taking.

Similarly, there is no easy solution to the problems created by the need for the Bank of England – and ultimately the government – to stand behind the banking system and support it during times of distress. Central banks have acted as 'lenders of last resort' since the 19th century because it is recognised that the rest of the economy could not function without commercial banking. And, in recent crises, policymakers have given banks a helping hand to repair their balance sheets and rebuild their capital bases by cutting interest rates to extremely low levels, enabling them to raise funds cheaply and invest in high-yielding assets, including government bonds. At a time when government borrowing is high and the government is issuing lots of bonds, this deepens the relationship between government and the banks.

Lower economic growth and increased instability

Financialisation has been a major factor behind a shift in the distribution of income in the UK away from median earners and towards high earners (this is discussed in detail later in this chapter). This has, according to Stewart Lansley (2011), led to lower levels of demand and output in the economy.[20] He has calculated that 'wage-earners' would have extra incomes amounting to roughly £100 billion, or 7 per cent of GDP (and 'business and mega-earners' would have so much less) if the income distribution in the UK now was the same as in the 1970s (see also Reed and Himmelweit 2012). This, he argues, would lead to higher consumer spending, because median earners have a higher propensity to spend than high earners (and than companies), which would in turn provide a boost to output, employment and companies' willingness to invest. However, Paolo Lucchino and Salvatore Morelli (2012) find that marginal propensities to consume in the UK do not differ across the income distribution.

Lansley also believes the shift in income inequality associated with the financialisation of the economy, has helped to create asset bubbles. His argument is that weak real income growth for the bulk of the workforce leads to a 'demand gap', which is filled by higher household debt: borrowing to keep up with the Joneses and with people's own rising aspirations. This surge in debt helps to generate asset bubbles, most obviously in housing, but potentially also in equity and other financial markets. For a while, these support economic activity and mask the underlying weakness of demand and growth. But when the bubbles burst, deep recessions follow, and it becomes apparent that trend growth is lower than previously thought. Raghuram Rajan (2010) makes a similar

19 http://www.bbc.co.uk/news/business-18829551

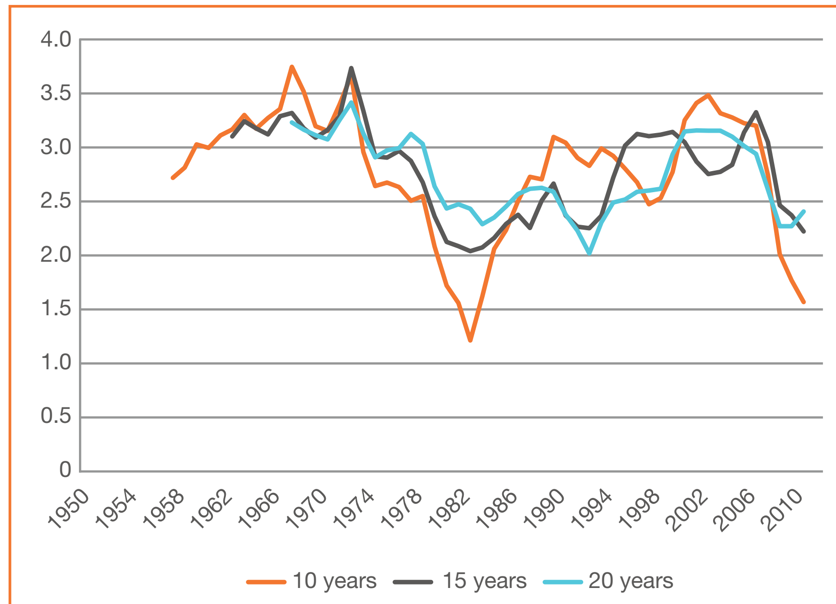
20 Palley (2007) also argues that financialisation has been associated with weak economic growth and a trend to lower growth in many advanced economies.

argument, suggesting that inequality was a prime cause of the US debt crisis because it led politicians to support the easier availability of mortgage credit. And Michael Kumhof and Romain Rancière from the IMF (2010) have developed a formal model to show how inequality can lead to households taking on excessive levels of debt in an attempt to maintain what they regard as acceptable growth in their spending.

Financialisation could also lower the economy's trend rate of growth through other means. In particular, an increase in the profit share, stagnant real incomes for median workers and lower retained profits for non-financial companies could reduce long-run growth, depending on the elasticity of investment with respect to profits and of consumption with respect to income.

Lansley's arguments appear to have some support from the data. Looking at the long-run averages, growth in the UK was stronger in the 1950s and 1960s – prior to any financialisation of the economy – and weaker in the 1980s and 1990s, suggesting financialisation may have damaged the economy. However, the direction of causation (if any) needs to be proven. Furthermore, given the steady rise in inflation in the 1960s and the decline in inflation in the 1980s, it could also be argued that growth in the former period was above trend and growth in the latter period below it. In other words, the trend rate of growth in the UK may not have fluctuated far from 2.4 per cent throughout the whole postwar period. Alan Taylor (2012: 5) makes the additional point that we do not have a counterfactual. Perhaps growth would have followed the same path without financialisation.

Figure 4.1
Long-run trends in UK real GDP growth (%)



Source: ONS database and author's calculations

However, if the trend rate of growth of the economy has fallen, it will only become apparent over the next decade. Growth up to 2007 was supported by a massive increase in household debt; growth over the next five to 10 years will be significantly lower as that debt burden is reduced. The Office for Budget Responsibility (2012) believes the economy will grow at an average rate of 2.2 per cent over the next five years. If they are right, the 15-year average growth rate will drop to a postwar low of 1.7 per cent. It will then be possible to argue convincingly that trend growth has fallen.

If the trend rate of growth has declined, it might not be entirely due to increased income inequality and financialisation. There have been other important trends in the economy in recent years that could also have played a part: namely, globalisation and technological change. These have caused substantial structural shifts in the UK economy, which have affected its underlying growth rate. Globalisation and technological change have led to the UK losing huge numbers of jobs in occupations such as machine operatives and clerical staff over the last two decades and, while conventional economic models suggest the economy will adapt to these changes and quickly return to equilibrium, this has not happened. Workers with skills that are no longer in demand find it harder to obtain new jobs after being made redundant, particularly in localities where they are competing with many others in the same situation.

There is also evidence that globalisation and technological change have led to increased income inequality (Michaels 2010). Better-paid non-manual jobs are strongly complementary with technology, so there are now more of them proportionally, whereas routine manual and non-manual jobs tend to be substituted by technology and their numbers are reducing. Meanwhile, there is little effect on non-routine jobs. The result is an increased polarisation of the workforce into high-skilled and low-skilled jobs – and hence greater income inequality.

Other factors have also contributed to the increase in inequality in the UK over the last few decades, including tax changes in the 1980s and the decline in union power in the private sector. If financialisation has reduced the trend growth rate of the economy as a result of greater income inequality and thereby lower consumer demand, it has done so in conjunction with all these other factors.

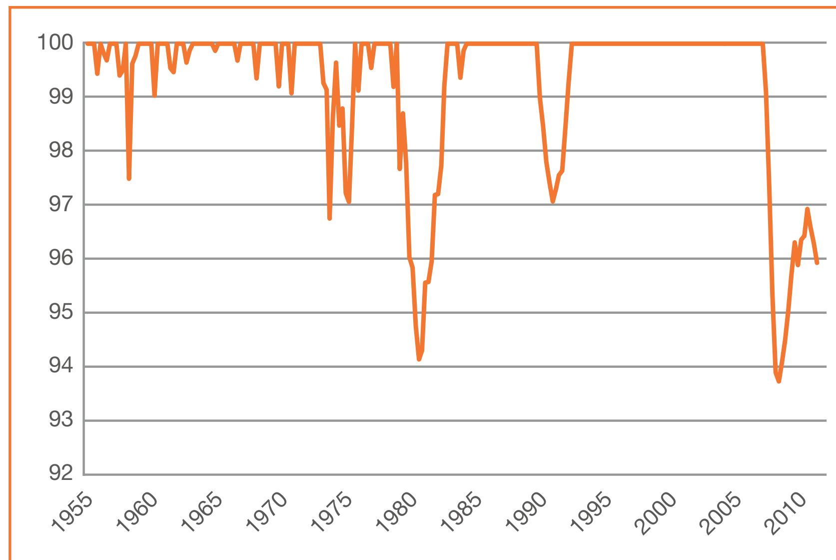
Lansley is on stronger ground when he argues the economy has become more prone to asset bubbles in the era of financialisation, and that swings in economic growth have become larger as a result, because there are grounds for believing there is a causal relationship between financialisation and instability.

There have been three major house price bubbles in the UK in the last 60 years. The first, in the early 1970s, came before the era of financialisation (though after a major liberalisation of the mortgage market by the Conservative government); but the second (in the late 1980s) and the third (in the mid-2000s) were clearly associated with very rapid growth in household debt (Dolphin and Griffith 2011).[21] Both of these house price bubbles saw increased equity withdrawal from the housing market, a fall in the household saving ratio and strong consumer spending. Each was associated with a boom and bust in the economy (ibid: 7–10).

In the 1950s and 1960s, falls in real GDP, compared to its previous peak, were relatively common – but they were also short-lived and modest in scale. Since 1970, however, there have been four recessions and each has been deeper and longer than anything experienced in the preceding 25 years, culminating in the most recent recession which was the deepest since the 1930s (in terms of the peak-to-trough decline in real GDP) and is set to be the longest on record, in terms of the time it takes before real GDP returns to its previous peak.

21 In the UK, the price elasticity of housing supply is very low, unlike in other countries such as the US, Ireland and Spain, so a lack of housing supply helped fuel house price bubbles.

Figure 4.2
UK real GDP relative to its previous peak (%)



Source: ONS database and author's calculations

These large swings suggest the existence of a 'financial accelerator': financialisation makes asset price bubbles larger. Rising asset prices increase the amount of collateral available to borrow against, so leading to more borrowing and, in the short term, to stronger growth. But, when asset prices eventually fall, balance sheets deteriorate and spending is cut back sharply, plunging the economy into a deep recession. In the UK, one of the principal routes through which the financial accelerator has worked in the last two economic cycles has been mortgage equity withdrawal – borrowing more against inflated house valuations. Herman Minsky (2008) adds subjective psychological forces to the mix, arguing stability in the economy and financial system will inevitably lead to increased risk-taking and speculation, creating and inflating asset price bubbles and ultimately generating greater instability.

Business cycles prior to the 1970s were driven by wages, productivity and employment growth. Overheating occurred when demand for goods and services or for labour exceeded supply causing inflation to rise. A tightening of policy reduced demand, so creating spare capacity and allowing inflation to fall. Since the 1970s, cycles have been driven by debt and asset prices. Overheating occurs when the easy availability of credit leads to asset price inflation. Eventually, the asset price bubble bursts and the risk is then debt deflation (Palley 2007: 24–5).

Financialisation – in the sense of greater availability of credit and so larger asset bubbles and busts – has changed the nature of the economic cycle in the UK. Recessions are less frequent but also more devastating. Taylor presents empirical evidence to show that recessions are more painful when they are combined with financial crises and he concludes 'a credit boom and a financial crisis together appear to be a very potent mix that correlate with abnormally severe downward pressure on growth, inflation, credit and investment for long periods' (2012: 32). The depth of the recession in the UK in 2008–09 would have been shallower if the role of finance in the UK economy had been smaller in 2007, while the recovery would also have been stronger than it has been.

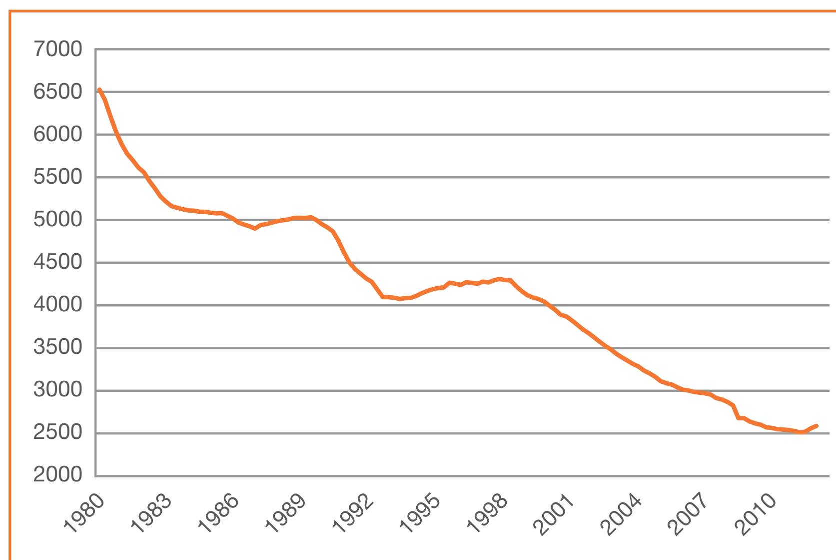
Crowding out manufacturing

In addition to affecting the growth and stability of the economy, financialisation has also affected its structure. Manufacturing has been in decline in the UK – in terms of its share of total output and the numbers employed in the sector – for several decades. But this decline has accelerated over the last 15 years and it is probable that the financialisation of the economy is, at least in part, to blame.

It is important to understand that any shift in the structure of the economy from manufacturing to financial services will not be the result of shifting consumer preferences or of differing rates of productivity growth because finance is an intermediate good, not something that is ultimately consumed. As Philippon (2008: 9) puts it, 'financial services do not enter directly into the utility function of agents; they enter the budget constraint'. A shift to financial services comes about largely because finance is better able to increase its rent extraction from the rest of the economy.

The two main underlying factors behind the long-term decline in employment in manufacturing in the UK are globalisation and technological change. Globalisation has seen low value-added manufacturing production migrate from high-wage, advanced economies to low-wage emerging economies over many years, and the pace of this process increased after the Asian financial crisis of 1997 and 1998 and China's accession into the World Trade Organisation in 2001. Meanwhile, faster technological progress has boosted productivity levels in high value-added manufacturing industries, meaning fewer people are needed to produce more output. The result in the UK has been the loss of 1.8 million jobs in manufacturing since the beginning of 1998 (a rate of decline of 3.8 per cent a year over 14 years).

Figure 4.3
UK manufacturing jobs ('000s)



Source: ONS database

Most other advanced countries have seen a decline in manufacturing employment over this period, but the fall in the UK has been proportionately the greatest among the major economies. OECD figures show employment in industry (excluding construction) fell at an annual rate of 3.8 per cent between 2001 and 2011 in the UK. Among the G7 countries, the next biggest drop was 2.3 per cent in Italy. In Germany, employment in industry fell by just 0.4 per cent a year.

Table 4.1
Employment in industry excluding construction (annual percentage change, 2001–2011)

Country	Change
United Kingdom	-3.8
Japan	-2.3
United States	-2.2
France	-2.0
Canada	-1.5
Italy	-0.6
Germany	-0.4

Source: OECD online statistics: http://www.oecd.org/statistics/

Unsurprisingly, the most rapid falls in manufacturing employment in the UK over the last 30 years occurred during recessions: in the early 1980s and the early 1990s (but note that the most recent recession saw only a continuation of the downward trend). However, there is also a correlation between the exchange rate and the pace of decline. In particular, sterling's exchange rate, measured against a basket of other currencies, was very high in the 1980s – when the government's experiment with monetarism saw interest rates reach record levels – and this was the period when employment in manufacturing fell at its fastest pace. More recently, sterling's value fell by almost 20 per cent after it was ejected from the European exchange rate mechanism (ERM) in September 1992 and this was followed by four years when employment in manufacturing increased. But in 1996 and 1997, sterling appreciated by almost 25 per cent – lifting its effective rate to a higher level than it had been when sterling was in the ERM. Sterling stayed at this elevated level for over a decade, and the decline in manufacturing employment picked up pace at the same time. Only in 2008, when the scale of the financial crisis and the depth of the recession became apparent, did sterling fall again: by around 20 per cent and eventually to a new low. This fall helps explain why manufacturing employment did not fall at a faster pace in the recession.

If the link between sterling and manufacturing activity is apparent, that between the financialisation of the UK economy and an overvaluation of sterling is harder to prove. There is no generally agreed definition of what constitutes 'fair value' for a currency and exchange rates are determined by many factors, the relative importance of which varies over time. But one of the main reasons for sterling's high value from 1997 to 2007 was strong capital flows into the UK (offsetting a persistent current account deficit). The financial sector received a substantial proportion of these inflows. As a result, by 2010 the financial sector accounted for 25 per cent of the stock of net foreign investment in the UK (see figure 4.4).

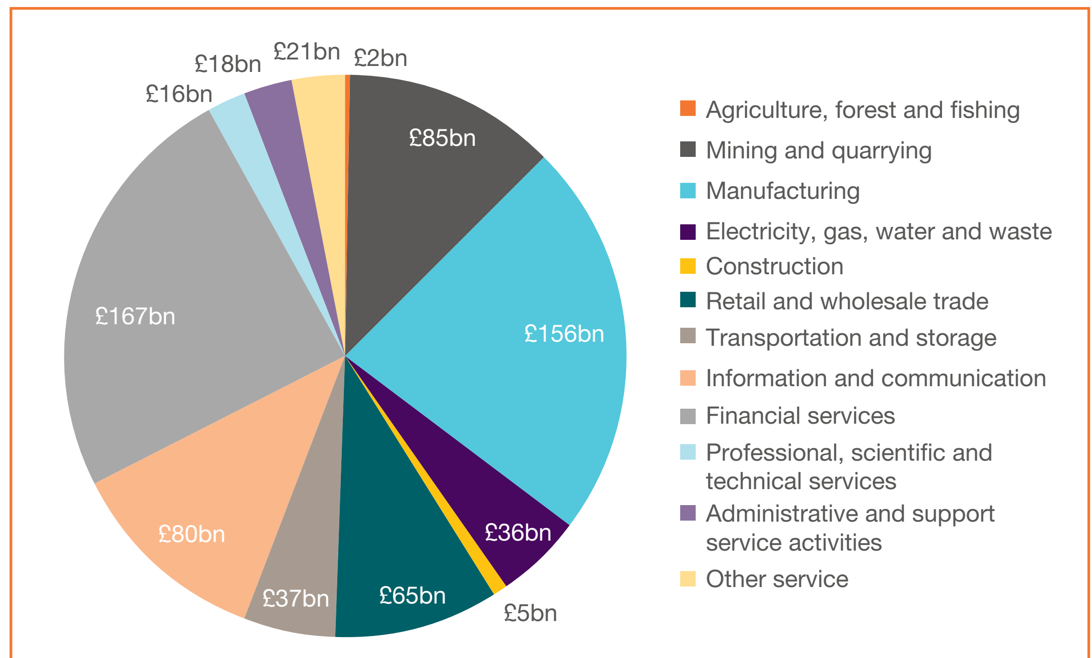
There is, therefore, strong circumstantial evidence to suggest that the financialisation of the UK economy has contributed to the relatively rapid pace of decline in manufacturing. This is a form of what economists call 'Dutch disease'.[22] Financialisation has been accompanied by strong capital inflows into the UK financial sector; these capital inflows helped push sterling's exchange rate to a higher level than it would otherwise have been; and the overvaluation of sterling resulted in a significant loss of competitiveness for UK manufacturing.

Taking the best graduates

The rise of finance, as well as specifically hurting manufacturing through a higher exchange rate, could have had a negative effect on the rest of the economy if finance has attracted resources, particularly human capital, away from those sectors.

22 Dutch disease usually refers to the situation when the discovery of a natural resource (such as the large natural gas field found in the Netherlands in the 1960s) leads to a stronger exchange rate, which is detrimental to manufacturing. Financialisation can be seen as analogous to exploiting a natural resource.

Figure 4.4
Net foreign direct investment position in the UK in 2010 (£ billion)



Source: ONS 2012c

One reason it might be able to do so is because it pays much higher salaries. In the case of graduates, a survey of starting salaries at 100 of the UK's largest and best-known employers shows that pay in investment banking is significantly higher than in other sectors – many of which are still well paid by comparison to the national average wage.

Table 4.2
Starting salaries of new graduates in 2012 (£)

Investment banking	45,000
Law	38,000
Oil and energy	32,500
Consulting	31,500
Banking and finance	30,000
IT and telecommunications	30,000
Armed forces	29,500
Consumer goods	28,500
Accounting and professional services	28,000
Chemical and pharmaceutical	27,500
Engineering and industrial	26,500
Retail	24,000
Public sector	23,000

Source: High Fliers Research 2012: 21

There has been particular concern that the financial sector has employed a disproportionate number of graduates in STEM subjects (science, technology, engineering and mathematics). This might be seen as doubly worrying because, the proportion of students studying in these areas has been on the decline since the 1990s.

In fact, the evidence does not support this conclusion and it may be that anecdotal evidence is creating a misleading impression. The Department for Business, Innovation and Skills commissioned a report to examine the evidence on STEM graduates in non-

STEM jobs (Mellors-Bourne et al 2011). It found that around half of STEM graduates work in STEM-related occupations, with another 10 per cent teaching STEM subjects. Depending on precise definitions, 4 to 8 per cent of STEM graduates work in finance, which is roughly what might be expected, given that financial services account for 5 to 6 per cent of total non-STEM jobs. It also found that STEM graduates could expect to receive a wage premium if they worked in STEM jobs or in finance, but not if they worked in other occupations.

The research undertaken for the report did, however, unearth examples of some generalist employers that clearly place a premium on STEM graduates. A discussion group held among financial services organisations suggested between 20 to 25 per cent of their graduate intake might be STEM graduates. But targets ranged from 100 per cent in one firm to zero (that is no particular target) in others. It found a large business consultancy firm that took 200 STEM graduates in one year, a third of their total graduate intake; an investment bank that recruited 90 STEM graduates, which represented 40 to 50 per cent of their graduate recruitment; and a retail bank that wanted 80 per cent of the graduate intake to its technology division to be STEM graduates.

As this last example makes clear, some recruitment of STEM graduates into finance is to be expected, because they have specialist needs. Large banks and insurance companies have technology divisions where you would expect to find technology graduates. More generally, there are many jobs in finance where a mathematics degree would be judged an advantage by the employer. It is not surprising, therefore, that a far greater proportion of graduates of mathematics start their careers working in business and finance.

Table 4.3
Proportion of graduates in employment six months after graduating who are employed as business and financial professionals and associate professionals

Degree subject	%
Biology	4.7
Chemistry	9.7
Environmental, physical, geographical and earth sciences	9.4
Physics	16.2
Sports science	4.3
Mathematics	36.3
Computer science and IT	4.9
Architecture and building	3.7
Civil engineering	4.6
Electrical and electronic engineering	3.0
Mechanical engineering	3.7

Source: Higher Education Careers Services Unit 2011

Three and a half years after graduating, the concentration of mathematics graduates in these areas is even greater. Of those mathematics graduates who completed a first degree in 2006–07 and were working in 2011, 22 per cent were employed in financial activities and 29 per cent in 'property development, renting, business and research activities' (HESA 2011). In addition, 10 per cent of graduates in computer science were employed in financial activities, but no more than 4 per cent of graduates in other STEM subjects.

The evidence, therefore, does not support the claim that finance (or more particularly the City) attracts a disproportionately large percentage of graduates in STEM subjects, thereby diverting them from employment in other sectors where they might have a larger effect on social welfare. The only exception to this conclusion is mathematics. Large

numbers of graduates in mathematics go into finance, but this is not surprising as the skills of mathematics graduates are clearly suited for many City jobs.

Greater regional imbalances

If financialisation has been responsible for the 'crowding out' by the financial sector of other industries, it will have added to disparities in economic performance across the regions of the UK. London and the south east have grown more rapidly than other parts of the UK over the last 15 to 20 years and finance, particularly the better remunerated activities like investment banking, hedge funds and asset management, are heavily concentrated in this region. Over half the contribution of financial services to UK gross domestic product comes from London and the south east (TheCityUK 2012b).

Table 4.4
Regional output of financial services, 2010

	Gross domestic product (£bn)	Share of national total (%)	Share in region's GDP (%)
London	51.9	45.1	18.7
Scotland	8.5	7.4	7.9
Yorkshire	6.5	5.6	7.0
South West	6.9	6.0	6.9
North West	8.1	7.0	6.5
South East	11.7	10.2	6.2
East	7.1	6.2	6.2
West Midlands	5.2	4.5	5.4
North East	2.1	1.8	4.9
East Midlands	3.8	3.3	4.6
Wales	2.2	1.9	4.6
Northern Ireland	1.3.	1.2	4.5
Total UK	**115.2**	**100.0**	**8.9**

Source: TheCityUK 2012b and author's calculations

Employment data reveals a similar picture. London's share of employment in the broad industry group of finance and insurance is, at almost 32 per cent, more than twice its share in overall UK employment. Every other region has a lower share of employment in finance and insurance than its share in total employment, apart from the south west, where the shares are equal.

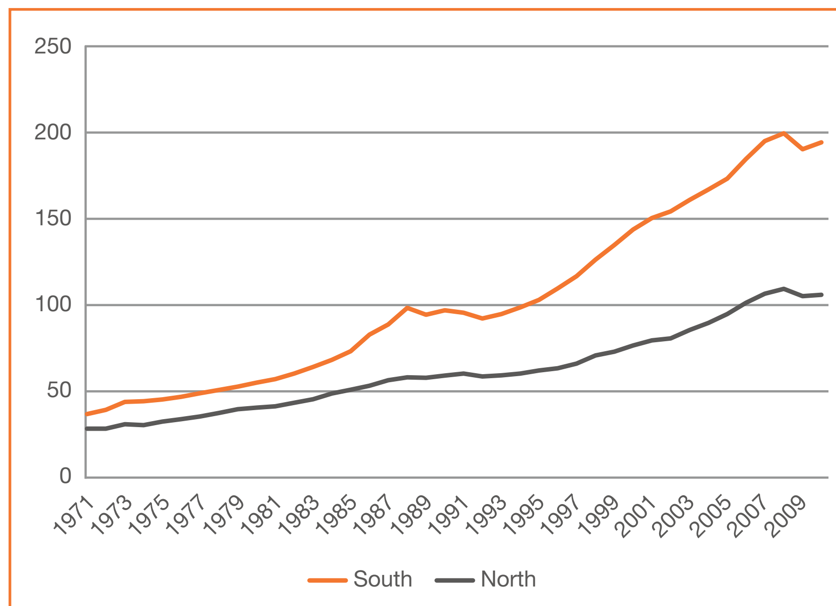
Table 4.5
Regional employment, 2010

	Share of employment in finance and insurance (%)	Share of total employment (%)
North East	2.2	3.7
North West	9.5	10.8
Yorkshire and Humber	7.3	8.0
East Midlands	3.3	7.0
West Midlands	7.1	8.5
East of England	6.0	8.8
London	31.6	15.2
South East	11.9	13.8
South West	8.6	8.6
Wales	2.6	4.4
Scotland	8.2	8.6
Northern Ireland	1.7	2.7
Total UK	**100.0**	**100.0**

Source: ONS database and author's calculations

Regional imbalances have not just been increased because financial services have grown faster than the rest of the economy. Gardiner et al (2012) show the growth of financial services in the south of the UK since 1971, and in particular since 'Big Bang' in 1986, has been far more rapid than in the rest of the country. As a result, the south's share of output in financial and business services increased from 56 per cent in 1971 to 67 per cent in 2008. This is not surprising, given the City's role as a major international financial sector and the growth of global finance over the last quarter of a century, but it does illustrate how 'if a nation becomes relatively sectorally unbalanced then this process will perhaps inevitably exacerbate its regional imbalance' (ibid: 24).

Figure 4.5
The south's dominance in the growth of financial and business services, 1971–2010



Source: Gardiner et al 2012

However, finance does not benefit the whole of the London region. Ertürk et al (2011: 11–12) argue that 'finance is London's *dividing sector* because it concentrates prosperity within London and then within a few small areas of London' (emphasis in the original).

No one would argue that all the regional disparities in the UK are the result of financialisation. Parts of the country where the financial sector is less important have suffered from the decline in manufacturing activity and employment that has resulted from globalisation and technological change. But financialisation has exacerbated the problem.

Extractive elites and rent extraction

Daron Acemoglu and James Robinson (2012) suggest in their recent book, *Why Nations Fail: The Origins of Power, Prosperity and Poverty*, that the economic performance of countries can be held back by economic institutions that extract resources from the many for the benefit of the few. These institutions become so powerful that they dominate the economic life of the nation. They refer to these institutions as 'extractive elites'.

The *Economist* has suggested that in countries like the UK, the financial sector, and the banking system in particular, might be seen as an extractive elite.[23] The size and wealth

23 http://www.economist.com/node/21552589

of the sector (and its contributions to political parties) give it a natural influence and high pay in finance could be the result of 'rent-seeking' – effectively a tax on the rest of the economy – rather than the provision of useful services.

Rentiers are 'those who benefit from control over assets that the economy needs to function and who, therefore, grow disproportionately rich as the economy develops' (Hudson and Bezemer 2012: 6). In agricultural societies, landowners were the rentiers; in modern financialised societies, that role has passed to bankers and other workers in the financial sector (though not all that they do is rent-seeking).

Financialisation will not be a net benefit to the UK if finance is extracting ever higher rents from the rest of the economy. Companies make money in one of two ways: either they produce a good or a service that a person or another company wants, or they extract value from people and other companies in the form of rents. The profitability of the financial sector in the UK and the huge salaries that it is able to pay its staff suggest financial service industries have quasi-monopoly powers, and this position can be used to extract large amounts of rent. Ian Mulheirn says this is the result of a lack of effective competition and he cites the equity underwriting market in particular.[24]

But rent-seeking is pervasive throughout the financial sector. Active asset managers, for example, cannot collectively outperform the market. Therefore, they deliver – in aggregate – little or no net benefit to their clients in the form of exceptional investment performance. The difference between the fees that active equity managers charge and those charged for tracking the market index can, therefore, be seen as extracting rents from their clients. The same is true of hedge funds and of the proprietary trading desks of investment banks, whose activity is a zero-sum game (Metz forthcoming). Those that perform well do so either at the expense of other hedge funds, or at the expense of other investors. But the managers and traders receive substantial rewards (rents) for activity that is of little or no social value.

The standard defence is that markets are deeper and more liquid as a result of these activities, but when high-frequency trading by computers is said to account for over half of all trading on US stock markets,[25] it is extremely unlikely that at the margin these gains are material. Furthermore, high-frequency trading strategies are designed to respond to movements in share prices and pay no regard to the future prospects of companies. From society's point of view, the stock market should allocate capital efficiently by rewarding the companies that have the best outlooks with higher share prices. High-frequency trading does nothing towards achieving this goal.

Rentier incomes are an indication of the spread of financialisation and Epstein and Jayadev (2005), looking at a number of countries including the UK, have analysed trends in these incomes, which they define as the return to holders of financial assets plus the return to owners of financial firms. They find there was a big increase in rentier income shares between the 1960s and the 1990s (their analysis does not go beyond 2000). They attribute this to higher real interest rates, financial liberalisation, greater economic openness and a weakening of the power of organised labour.

24 http://www.smf.co.uk/marketsquare/posts-by-ian-mulheirn/four-solutions-to-excessive-pay-and-only-one-of-them-will-work/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+SmfMarketSquare+%28SMF+Market+square%29

25 http://topics.nytimes.com/topics/reference/timestopics/subjects/h/high_frequency_algorithmic_trading/index.html

Table 4.6
Rentier share in the UK (%)

1960s	6.8
1970s	11.5
1980s	18.8
1990s	24.5

Source: Epstein and Jayadev 2005: 52

Unjustified levels of pay

An increase in rent extraction will manifest itself in higher profits for those firms extracting the rents leading to higher pay for their employees.

Contrary to popular belief, the finance and insurance industry is not the best paid in the UK, according to the Office for National Statistics (ONS). Average weekly earnings in finance and insurance in 2011 were £1,020, placing it second to mining and quarrying among the 24 industries identified in the official statistics. Regular earnings in finance (excluding bonuses and arrears) at £799 were also second highest, but bonuses, at £253 were higher than in any other sector. The importance of bonuses in total earnings for the finance and insurance sector is apparent from the fact that over the period from 2000 to 2011 they accounted for 24 per cent of total earnings; in no other sector over this period did bonuses amount to even 10 per cent of total pay.

Between 2000 and 2011 total pay in finance and insurance increased at an annual rate of 5.2 per cent, with regular pay up 4.6 per cent. The only sector in which earnings increased faster was mining and quarrying. In the whole economy, total pay increased by 3.5 per cent and regular pay by 3.4 per cent a year over this period.

High earnings in the finance and insurance industries are the result, in part, of the mix of occupations found in the sector. Data from the ONS (which also includes those involved in real estate activities) shows that in the twelve months to June 2011, 13 per cent of workers in these sectors were described as managers, directors and senior officials, 21 per cent as professionals and 23 per cent as working in associate professional and technical occupations (57 per cent in total). Comparable figures for the overall workforce were 10, 19 and 14 per cent (43 per cent in total). High earnings in finance are therefore justified to some degree by the occupational mix in the sector.

Detailed analysis of US data by Thomas Philippon and Ariell Reshef (2012) shows workers in financial services enjoyed a substantial wage premium over workers in the rest of the economy between 1909 and 1933. This premium shrank during the Great Depression and continued to decline up to around 1980; but subsequently the wage premium increased until it returned to its pre-1930 level. Their analysis shows this pattern can be explained, in part, by shifts in the skills demanded by financial companies. Prior to 1930 and after 1980, jobs in finance were more complex, relative to jobs in the rest of the economy, than was the case in the intervening years. In turn, the complexity of jobs in finance was negatively correlated with the level of regulation in the sector. Deregulation is associated with greater complexity and more demand for highly skilled workers.

Philippon and Reshef's model is able to explain shifts in the relative wage in financial services in the US up to the mid-1990s. But they find that compensation of employees in finance after that date is around 40 per cent higher than the model suggests it should be (which is an interesting conclusion when placed alongside Philippon's (2008) finding that the share of finance in GDP increased to a level that cannot be explained at the same time).

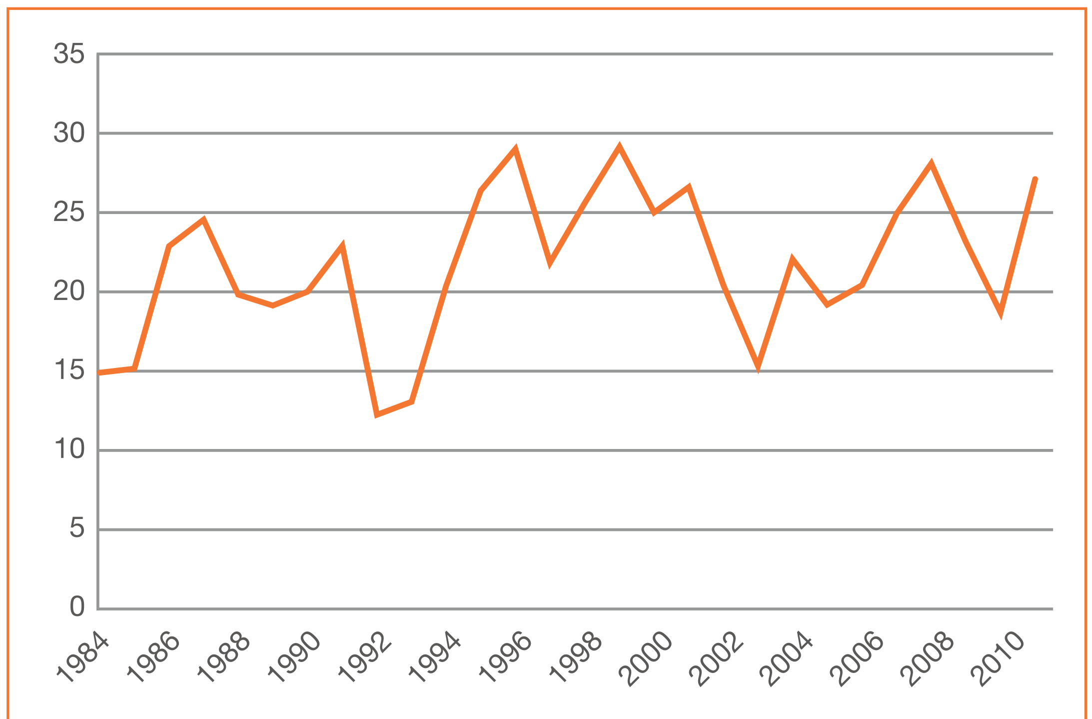
As part of their analysis, Philippon and Reshef calculate the excess wage paid in finance in the US, after controlling for the effects of other explanatory factors. We have replicated their methodology using data for the UK. The excess wage is defined as the difference between the wage paid to workers in finance and the wage paid to those with similar characteristics in the rest of the economy and we find a large differential has persisted over time.

The analysis involved estimating a series of cross-sectional regressions, one for each year beginning in 1984 and ending in 2010. Details of data sources are shown in the box below and the full results are set out in appendix 2. For each year we estimated an ordinary least squares (OLS) equation of the form:

$$\log(W_i) = \alpha + \beta X_i + \gamma F_i$$

where W is the hourly wage (including any additional payments such as bonuses), X is a vector of individual characteristics, including age, sex, marital status, qualifications and level of experience, and F is a dummy variable taking the value 1 if a person works in finance and 0 otherwise. The value of γ represents the excess wage paid in finance.

Figure 4.6
Excess wage in financial services (%)



Source: Author's calculations

Data used in regression analysis

Data used in the regression analysis comes from the General Household Survey (GHS) and the Labour Force Survey (LFS). In order to start the analysis in the 1980s, so as to see if the deregulation of London financial markets in the late 1980s had any effect, two sources had to be used. The LFS is the preferred data source, but it only began collecting income data in 1992, whereas the GHS was collecting income data in the 1980s. The regression analysis uses GHS data from 1984 to 1992 and LFS data from 1993 to 2010. There is therefore a potential break in the estimates of the excess wage between 1992 and 1993.

Data from the LFS is taken from the first quarter (January to March) of each year, with the exception of 1993 and 2001. In 1993, the first quarter data has insufficient information on educational attainment, while in 2001 the first quarter data omits weekly earnings. To get around these problems, second quarter data (April to June) is used for the years 1993 and 2001. The LFS data is limited to wave 5 responses in order to avoid double counting individuals.

The model's dependent variable, log weekly earnings, is derived from gross weekly earnings in order to include all additional payments such as bonus payments. Bonus payments are particularly relevant in the financial sector because they can account for a significant share of total pay. In 2010–11, they represented 25 per cent of total earnings in the sector, or an average bonus payment of £12,500 pounds per worker (Alander and Crane 2011). In the same year, finance and insurance industry bonuses amounted to £14 billion, or 40 per cent of all bonus payments made across all industries. In the GHS, the variable 'usual gross weekly earnings' is used; in the LFS, 'gross weekly pay from main job'. In both cases, the analysis is limited to full-time workers aged between 16 and 64 years old.

The finance dummy is constructed from industrial classification data. The GHS and LFS collect employment data on the industry people currently work in, including the financial sector. However, under the GHS industrial classification, the financial sector is part of a broader category – banking, finance, insurance, business services and leasing. In the LFS, the industrial classification used in this analysis is 'financial intermediation', a narrower category.

Other explanatory variables included in the regression analysis are: education, potential experience, region, age, sex and marital status. Education takes the value 1 if the individual has a degree, its equivalent, or any qualification higher than a degree and takes the value of 0 otherwise. Potential work experience is proxied by subtracting the age a person left full-time education from their current age.

All the estimates of the excess wage paid in finance are significantly different from zero, suggesting a persistent wage differential exists between the finance and non-finance sectors. Individuals in finance earn more than identical workers – that is, those with the same levels of education, experience and other characteristics – in the rest of the economy and have done so for at least the last 25 years. The excess wage has fluctuated between 12 and 29 per cent and there is a suggestion in the data that there is a trend for it to increase moderately over time. To the extent that the GHS and LFS do not pick up

the wages of those at the very top of the income scale – a group that is overrepresented in finance – these figures may underestimate the full extent of the wage premium.

The conclusion that the excess wage in finance in the UK has been high throughout the last 25 years and has only increased a little since the mid-1980s is in contrast to Philippon and Reshef's findings for the US. There, the excess wage was only 5 per cent in 1980 and increased steadily to 20 per cent by the turn of the century – a level at which it subsequently stayed.

Figures for average earnings hide as much as they reveal because there is such a wide range of incomes within the sector. Average earnings data for the finance and insurance industry encompasses everyone from the highest earning hedge fund managers and bank chief executives to staff in local bank branches and operatives in call centres. While pay for hedge fund managers, CEOs and those in investment banking in the City have soared, 'ordinary' workers in retail banking and other parts of the financial sector might not have fared any better than the national average.

In 1985, just over a year before 'Big Bang', Margaret Thatcher said on BBC *Newsnight* that 'Top salaries in the City fair make one gasp, they are so large' (quoted in Kynaston 2011: 571–2). One wonders what she would make of remuneration in the City today. Pay and other rewards for those at the top of the financial services industry have increased far more rapidly than pay and rewards in the rest of the economy. In 1989, the CEOs of the four largest banks in the UK earned, on average, £453,000: fifty times average household income; by 2007, CEO pay in banking had increased almost 10-fold to £4.3 million: 230 times average household income (Haldane 2012).

The High Pay Commission's final report (2011) included figures for pay at the very top of selected UK companies to illustrate the explosion in recent decades in the rewards of directors and chief executives, relative to the average worker. Two banks – Barclays and Lloyds – were included and the High Pay Commission's analysis shows the earnings increase for the leading executives in both was higher than in the other four companies they examined (Lonmin, BP, GKN and Reed Elsevier). Leading executives in these banks now earn 75 times the average pay of their employees.

Table 4.7
Company pay data in UK listed companies, 1979–2011

Company name	Director's pay 1979–1980	Lead executive actual total earnings 2009–2011	Total earnings increase 1980–2009/11	Top pay as multiple of average pay 1979–1980	Lead executive total earnings as multiple of average pay 2009–2011
Barclays	£87,323	£4,365,636	4899%	14.5	75.0
Lloyds Banking Group	£79,344	£2,572,000	3141%	13.6	75.0

Source: High Pay Commission 2011

One reason for extraordinarily high levels of remuneration at the top of the financial system is the use of stock options as a reward for performance. Aligning the reward of senior executives with the performance of the share price, it is argued, aligns their interests with those of the shareholders. The downside of doing so is that it reduces the weight of other stakeholders in senior executives' considerations. In finance, this has undoubtedly contributed to a shift in culture that has been detrimental to consumers. It has also led to an increased focus on short-term profitability rather than long-term sustainability and on 'socially useless' but highly profitable activities.

Increased income inequalities

Income inequality has increased in most high-income economies in recent decades. A recent report from the OECD (2011) shows how income inequality started to increase in the United States and the United Kingdom in the late 1970s and early 1980s and how, by the 2000s it was growing even in countries such as Germany, Denmark and Sweden, countries that have traditionally had low levels of inequality. Much of this increase is the result of rapid growth in incomes for those in the top decile of the income distribution and is the result of what Martin Wolf calls 'complex forces: globalisation, technological change, "winner-take-all" markets, the birth of new and dynamic industries, changes in social norms over pay, the rise of finance, and shifts in taxation'.[26]

In the United States, an analysis of tax return data has found that the percentage of taxpayers in the top 1 per cent of the income distribution who work in finance increased from 7.7 per cent in 1979 to 13.9 per cent in 2005, while comparable figures for the top 0.1 per cent of taxpayers are 11.0 per cent and 18.0 per cent (Bakija et al 2012: 33–5). This happened at a time when the share of total income going to the top 1 per cent of earners increased from 9.2 per cent in 1979 to 17.0 per cent in 2005 (and from 2.8 to 7.3 per cent for the top 0.1 per cent). It is reasonable to conclude, therefore, that the highest earning investment bankers, hedge fund managers and top executives in the financial industry have, in the United States, seen massive increases in their earnings and this has allowed them to replace executives from other industries at the top of the income ladder.

The same phenomenon has occurred in France – a less obvious candidate for a country that has experienced financialisation. Olivier Godechot (2011) has analysed changes in the wage distribution in France using social security data and he shows there has been a significant increase in the share of income going to the top 0.1 per cent of earners since the mid-1990s, at the expense of the bottom 90 per cent, and that this is largely due to the financial sector. Finance accounted for 24 per cent of the top 0.1 per cent of incomes in 2007, compared to just 6 per cent in 1976 and finance accounts for almost half of the increase between 1996 and 2007 in the share of income going to this group.

Increased inequality in the UK is also due primarily to the gains of those at the top of the income scale – and the further up the scale you go, the bigger the gains that have been secured. Between 1985 and 2009, the share of income going to those in the top 0.1 per cent of the income band almost trebled, while the share of those in the top 0.5 per cent more than doubled.

Table 4.8
Income shares (%)

	1985	2009	Change
Top 0.1 per cent	1.8	5.1	+3.3
Top 0.5 per cent	4.8	10.2	+5.4
Top 1 per cent	7.4	13.9	+6.5
Top 5 per cent	20.8	28.7	+7.9
Top 10 per cent	32.7	40.4	+7.7

Source: The World Top Incomes Database: http://g-mond.parisschoolofeconomics.eu/topincomes/#Home (accessed 26 June 2012)

Put another way, the share of those in the top 0.1 per cent increased by 3.3 percentage points, but the share of those in the band from 0.1 to 0.5 per cent (four times as large as the top 0.1 per cent) 'only' increased by 2.1 points. Similarly, the share of those in the band from 0.5 to 1 per cent increased by 1.1 points; the share of those in the band from

26 http://www.ft.com/cms/s/0/c80b0d2c-4377-11e1-8489-00144feab49a.html#axzz1l8JOqN3W

1 to 5 per cent increased by 1.4 points; and the share of those in the band from 5 to 10 per cent declined by 0.2 points. The top 0.1 per cent has done far better than any other group, including those just below them on the income ladder. In 2009, the average income of the top 0.1 per cent was £1,000,970 compared to £250,732 for those between 0.1 and 0.5 per cent. As the High Pay Commission has argued (2011: 11), this matters because escalating pay levels at the top of a company can damage 'productivity, employee engagement and trust in our businesses'. It also matters for society because once the gap between median pay and pay at the very top becomes too large, people cannot imagine breaching it. Social mobility is discouraged and there is a risk that those at the top form a group cut off from any understanding of the rest of society.

Analysis of earnings in the UK – rather than just wages so as to include bonuses and self-employment income (to capture workers paid as partners) – shows that increases in income inequality over the last 30 years, and particularly over the last 10, have been concentrated in the top few percentiles (Bell and Van Reenen 2010). About 60 per cent of the increase in the income share of the top decile (and also of the top 1 per cent) between 1998 and 2008 went to workers in the financial sector – and this was almost wholly in the form of bonuses. This result is confirmed by Stewart (2011), who shows that inequality between 1997 and 2008 grew faster in the financial sector than in other sectors of the economy and faster in London than in other regions. (These two developments are, of course, related.) Analysing the increase in income inequality in the UK between 1999 and 2008, Whittaker and Savage (2011: 34) find that income inequality, measured by the ratio of earnings at the 90th and 10th percentiles, increased most in the financial sector and that 'it was the finance sector above all others which drove the growth in between-sector inequality over the period'.

Over the decade or so before the financial crisis, the financial sector's share of gross national income (and of total UK profits) increased significantly, so it is unsurprising that workers in the financial sector did better than those in the rest of the economy. What is surprising, suggest Bell and Van Reenen, is that only finance workers at the top of the income scale benefited. Their hypothesis is that this is explained by the economic theory of superstars: that the most talented people can demand salaries that are many times higher than those of even the people who are just a bit less talented (footballers and movie actors are obvious examples of this phenomenon). There is probably some truth in this argument. But, if the superstar phenomenon was all that was at work, then the increases in incomes in finance would have come mainly in the form of salaries rather than bonuses. The fact that the opposite was the case suggests the workers being rewarded were generating ever greater income and profits for their firms.

This reflects increased levels of trading and other activities. Traders can deal in £5 million lots just as easily as in £1 million lots – and their profits are in proportion to the amounts they deal. If they generate profits five times larger than previously, they expect a share in the increase. The scalability of activities in the financial industry – and as such the scope for some individuals to earn enormous profits for their firms – makes it unusual and contributes to the very high remuneration earned by some.

The gains made by those at the very top of the income scale in finance are also a result of the structure of the industry. In areas such as hedge fund investing, people want to put their money where they have the best chance of making high returns, and this usually involves backing the form horse – the best performing fund managers in the recent past. So some firms or individual fund managers attract massive quantities of funds to manage, while others have to make do on scraps. While Wayne Rooney can play for only one

football club and earn one (enormous) salary, hedge fund managers, for example, can take on additional clients relatively easily. Just by charging the same fees as their competitors, successful firms and individuals earn vastly more. They are perceived to be the best, so they earn more not because their going rate is higher (unlike actors who charge more per film) but because they are taking the same proportionate slice of bigger sums. It is the scalability of activities in the financial sector which explains why those at the top captured all the income gains of the decade to 2008.

This affected income inequality in the UK because of the size of its financial sector – and its dominance in areas such as investment banking and hedge fund management, where the largest salaries and bonuses are found. It had much less impact on a country such as Germany, for example, that has a small financial sector. Those who believe the financial industry is a great asset to the UK would argue that if this investment banking and hedge fund activity did not take place in the UK, it would happen elsewhere (Switzerland or Hong Kong, for example) and that while income inequality in the UK might be less as a result, income inequality across the world would be unchanged. Critics of finance, therefore, have to make the case that lowering income inequality in the UK would have specific benefits. This is harder to do than making the simpler case that rent extraction is bad – wherever it is located – and that steps should be taken to minimise it.

Too high a price to pay?

The problems that accompany financialisation fall into five categories:

1. **Externalities:** Banks have become too big to fail, resulting in a socialisation of risk. In the good times, buoyant income results in high levels of remuneration and profits for the industry; but in the bad times, banks have to be bailed out by the taxpayer. Insiders can receive massive rewards without bearing proportionate risks.
2. **Detachment from customers:** Multiple evidence of mis-selling, the Libor scandal and the anecdotal evidence that large investment banks such as Goldman Sachs exist primarily to maximise the salaries, bonuses and share options of their staff rather than to deliver the best possible service to their customers (or rather 'counterparties')[27] are all signs that the culture of finance has changed for the worse.
3. **Macroeconomic volatility:** Asset bubbles have become more frequent and larger as the financial sector has grown and are often associated with deep and long recessions. There is some evidence to suggest trend growth might have fallen too.
4. **Inefficient capital allocation:** The financial sector's primary role should be to allocate capital in the most efficient manner but there are parts of the economy, such as small businesses, which are starved of the capital they need, while lending within finance has reached extraordinary levels.
5. **Rent extraction:** The existence of oligopolies, information asymmetries, lack of transparency on pay and fees and institutional distortions means the financial sector is able to extract rents from the rest of the economy on a very large scale.

Steps are being taken to address some of these problems. The Financial Services Authority is being split into the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Part of the FCA's remit will be to ensure that financial institutions treat their customers better than in the past (though its focus will be on retail customers, rather than institutional customers who will still have largely to look after themselves).

27 http://www.nytimes.com/2012/03/14/opinion/why-i-am-leaving-goldman-sachs.html?_r=0

Meanwhile, the PRA's objective will be to ensure that financial institutions – and the system as a whole – are safe and sound. The Basel 3 regulations and the recommendations of the Independent Banking Commission, which the government is – for the most part – adopting, are designed to reduce the socialisation of risk. Increased capital requirements and ringfencing investment banking operations will reduce the implicit state subsidy to banks, but the 'too big to fail' problem will remain.

The government is also establishing the Financial Policy Committee (FPC) within the Bank of England to identify, monitor and publicise risks to the stability of the financial system and with the macroprudential powers to tackle any excesses that build up. In part, this is aimed at reducing asset bubbles in the future, but the FPC will only be effective if it has the powers to restrict behaviour during future periods of irrational exuberance – including the ability to limit credit growth.

Less has been done to improve the allocation of capital. The government has come up with a number of schemes – Project Merlin, the National Loan Guarantee Scheme and Funding for Lending to increase the flow of credit from banks into the rest of the economy. Neither Project Merlin nor the Loan Guarantee Scheme were much of a success, but Funding for Lending looks to be better designed and could make some impact, though the early signs are that this will be mainly through increased mortgage lending. The government has also announced it plans to create a British Business Bank to increase long-term lending to small businesses, though this will not happen until 2014 at the earliest and initially it will be on a small scale. It falls some way short of the British Investment Bank that some have called for (Dolphin and Nash 2012).

The issue of rent extraction, however, has received little attention, despite the damage it does to welfare in the rest of the economy. While taking more actions to address the other problems caused by the financialisation of the economy, policymakers also need to devise a strategy for changing the culture of finance and rooting out rent-seeking behaviour.

5. WHAT MIGHT BE DONE

> **'Banks can't change their behaviour, so we have to do it for them.'**
> Lanchester 2009

Whether banks – and other parts of the financial system – can't or don't want to change their behaviour, they have not done so to any great extent over the last five years. The status quo is in their interests; more control and regulation is not. For the financial sector, financialisation is a positive development.

Financialisation is not a new phenomenon: 'Growth in financial sector value added [in the UK] has been more than double that of the economy as a whole since 1850' (Haldane et al 2010: 87). But following the financial crisis of 2007 and 2008 and recent scandals involving the sale of payment protection insurance (PPI) and the fixing of Libor, the role of the financial sector in the UK economy has been increasingly questioned.

When Lehman Brothers filed for Chapter 11 bankruptcy protection on 15 September 2008, it seemed likely that a major economic sea change was occurring; one that would include a reversal of financialisation. More than four years later, there has been less change than might reasonably have been expected. Policymakers have not been totally inactive in the UK: there have been taxes on bank bonuses, a bank levy and a plan to eventually ringfence the investment banking activities of universal banks. But there has been no rebalancing of the economy away from financial activities and no progress in tackling extraordinary pay levels in the financial sector. When Gordon Brown set out five tests to assess whether the UK should join the EU's economic and monetary union in 1997 (and again in 2003), one test referred specifically to the potential impact on the financial services industry (no other industry merited a special mention). In December 2011, when David Cameron vetoed a new EU Treaty, he argued it was to protect the well-being of the same financial services industry. Finance, it seems, still has policymakers in its grip.

The UK's financial industry is an asset, and this should not be ignored at a time when the economy's recovery has stalled. The UK's comparative advantage in other industries, ranging from advanced manufacturing to the creative industries, is celebrated; and clusters of companies, academics and researchers are encouraged. Finance is arguably the UK's biggest area of comparative advantage (generating an annual trade surplus equal to 3 per cent of GDP) and the City is a perfect example of an industrial cluster, but it is an asset with associated costs. Policymakers need to reduce these costs, without damaging the asset. This will not be easy.

Culture and moral capitalism in the financial sector

The financial sector in the UK has developed a flawed culture. No longer does it exist to support the rest of the economy. Instead, developments over the last 25 years have created a situation in which it gives the impression it believes the rest of the economy is there to support it. Clients are no longer put first; profits and bonuses have become the priority. This is very evident in the scandal of banks rigging the London interbank offer rate (Libor) market. Bob Diamond, then chief executive of Barclays, said those at the bank responsible for misreporting to the Libor committee the rates Barclays was paying were not behaving in line with Barclays' culture; but to the outsider it seems their behaviour was a reflection of that culture, a culture which centred on greed and hubris.

Cultural flaws are not confined to investment banks; retail banking has its problems too. The PPI scandal is a perfect illustration of how incentives to staff that are designed to increase sales and profitability can lead to a culture that allows – and even encourages – the sale of high margin products to people who do not need them.

In part, this is society's fault. Before the financial crisis, it was prepared to go along – to a large extent – with the idea that 'greed is good'. It was encouraged in this attitude by its leaders, in government and opposition, who were prepared to give finance a largely free rein. Following the crisis – and the emergence of a number of scandals – society has changed its view, but the financial sector has yet to respond.

Optimists believe the financial sector can be encouraged to work better for the rest of society. In June 2012, business secretary Vince Cable expressed the view on *Channel 4 News* that a new breed of 'decent' banker would emerge to reform the culture of banking. Robert Shiller (2012: xi) argues 'the best way to do this [reform banking] is to build good moral behavior into the culture of Wall Street through the creation and observance of best practices in its various professions – CEOs, traders, accountants, investment bankers, lawyers, philanthropists'. In the wake of the scandals in the UK surrounding the mis-selling of payment protection insurance, the false reporting of interbank lending rates and the mis-selling of interest rate swaps, this seems a rather naïve view. Although these all happened some time ago, four years on from the collapse of Lehman Brothers there is little to suggest the incumbents of Wall Street and the City have experienced a moral revolution. Nor is there any real reason to believe they will do so in the future. The culture of the City is so endemic that it changes the people who go to work there; they are unable – whatever their initial ideals – to change its culture. As John Lanchester says, we will have to do this for them.

In a recently published book, James Featherby, who worked in the City for over 30 years but confesses to a growing disillusionment with the way it operates, looks for a moral revolution in finance because 'positive values help to create positive institutions, and positive institutions help to foster positive values' (2012: 9). He offers four ideas that could form the basis of reform:

1. identifying a public purpose for large companies
2. significantly reducing levels of debt throughout the economy
3. challenging financial speculation for its own sake
4. encouraging firms to invest for social and environmental reasons, as well as for financial return.

One way to advance these ideas will be through increased regulation. The evidence of the last 30 years, and of the last five in particular, shows deregulating finance leads to greater instability in capital markets and in the economy without producing any benefit in the form of stronger growth in output, profits, employment or real earnings, except for the financial elite (Freeman 2010).

But more government regulation can only be part of the solution. Changing the culture of the City cannot be just about defining appropriate behaviour in a series of specific circumstances; it must be about ensuring that the correct behaviour is followed all the time. As Bob Diamond put it in 2011, it involves acting with 'trust and integrity' and ensuring that 'the interests of customers and clients are at the very heart of every decision' banks make.[28] Wonderful aspirations, but – beyond attempts by banks to teach their employees good citizenship – he had nothing to say about how this might be achieved.

28 In his Today Business Lecture: http://news.bbc.co.uk/today/hi/today/newsid_9630000/9630673.stm

A good place to start would be tackling high pay. Remuneration packages for the top earners in the City have reached extraordinary levels because they are set by a small group of people. Although most of the large financial companies operating in the UK are publicly quoted companies, they are not effectively controlled by their shareholders, but by their top executives and the like-mined people that sit on their boards. In part, this is due to an agency problem. Most shares in these companies are not owned directly by individuals but indirectly on their behalf by fund managers who act as their agents, looking after their pension, insurance and general savings. These fund managers are part of the City culture; they too are extremely well remunerated and have little interest in controlling pay in the sector.

What is required is a shift in power. The TUC, among others, has argued for worker representation on remuneration committees.[29] If this results in one worker on a board, it is hard to see how he or she could make a difference: they would be easy to out-vote and their presence is unlikely to embarrass the committee into opting for small remuneration packages. If it means a representation large enough to make a difference, then it calls into question the way companies are governed. Although representation on the remuneration committee need not necessarily mean a place on the board, the board will – with some justification perhaps – argue that the pay it can offer its senior employees cannot be divorced from the company strategy.

Retail and investment banking

The experience of the last five years has highlighted the potential for the financial sector to wreak havoc with the rest of the economy, with growth, jobs and people's livelihoods. The recession from which the UK is struggling to recover and the additional government debt accumulated in recent years are largely the result of excesses in the financial sector. Financiers were not alone in their culpability; people took on more debt than they could service, while governments, central bankers and regulators displayed what, with hindsight, was a remarkable degree of laxity. But when the activities of the financial sector can have such massive effects on the rest of the economy, there is a clear public interest case for government regulation.

The recommendations of the Vickers Commission (Independent Commission on Banking 2011), if implemented in full, will mark a significant change in the City. Although the commission drew back from proposing a complete separation of retail and investment banking activities into different institutions, it argued for the retail banking activities of UK banks to be 'ringfenced'. Retail activities – taking in deposits and lending money for mortgages or to businesses – will be backed by more capital than in the past and will be completely separate from other, riskier, activities. As a result, if these riskier activities 'blow up' at some time in the future, customers of the retail banking arms of banks would feel no impact. There would, therefore, in theory, be no need for government intervention to prevent a credit crunch. However, much would depend on how well the ringfencing worked and there are historical examples of supposed ringfencing that turned out to be less complete than imagined. Most recently, for example, the Libor scandal revealed traders at Barclays Bank (and almost certainly a number of other banks too) were aware of the data the bank was submitting to the British Bankers' Association regarding its own cost of finance.

Furthermore, the collapse of a bank's investment banking arm, even if its retailing banking activities are initially unaffected, could still create havoc in financial markets

29 http://www.tuc.org.uk/economy/tuc-20570-f0.cfm

and in the economy more widely. Lehman Brothers, after all, was an investment bank with no retail banking activity. So the Vickers Commission has also recommended that banks draw up 'living wills' for their investment banking activities. Should a bank fail, these would, in theory, enable bank supervisors to close down the bank's positions in an orderly manner, though it is unclear whether this would be possible in the case of multiple bank failures, or a series of failures that occur in a short space of time.

Paul Volcker, the former chairman of the US Federal Reserve, does not believe ringfencing can work. He told the UK parliamentary commission on banking standards that loopholes would exist from the start and be 'likely to get bigger over time'. He has proposed that US banks that take retail deposits would only be able to engage in limited investment banking activities (this idea is now referred to as the 'Volcker Rule'). In particular, they would not be allowed to undertake proprietary trading (trading on their own account), except when it is directly related to trading for clients or market-making, and they would not be allowed to own hedge funds or private equity funds. The common denominator in all these to-be-prohibited activities is leverage – borrowing to boost returns, but at the same time also increasing risk. The Volcker Rule amounts to an attempt to limit the leverage – and as a result the risk of failure – of investment banks owned by banks that also conduct retail activity. Initially, there seemed a good chance that the Volcker Rule would be implemented in the US, not least because it was proposed by someone as far from an archetypal 'bank basher' as could be imagined. But US banks have conducted a concerted campaign against it on various grounds, from its effect on their competitiveness, through the problems of defining proprietary trading to the practicalities of implementation.

In fact, the obvious solution is a complete separation of retail and investment banking activities. After the 1930s crash and depression, the Glass–Steagall Act was passed in the US to prevent financial institutions from carrying out both retail and investment banking. It was not repealed until 1999 and it is probably no coincidence that the US has since experienced a repeat of the events of the 1920s and early 1930s. The clear message from history is that the financial system is safer when retail and investment banking are separate. Governor of the Bank of England Mervyn King indicated in June 2012 that he is in favour of this solution: 'there is real merit in pursuing the separation of this utility-type banking from investment banking'.[30]

Separating retail and investment banking will not, however, be enough. It is not just the activities of investment banks that cause problems. While Lehman Brothers did not have a retail bank, the UK high street banks Northern Rock, HBOS, Bradford & Bingley and Alliance & Leicester did not have investment banks. They all got into trouble through too much leverage, meaning that when asset prices fell and bad debts increased, their capital bases were inadequate. Their problems were, for the most part, associated with mortgage lending so the solution to preventing similar episodes in the future is likely to include regulation to control such lending. This could involve setting maximum loan-to-value and loan-to-income ratios in an attempt to control the overall mortgage and housing markets, and specific monitoring of individual banks' leverage ratios, looking both for excessive degrees of leverage and large shifts too. The Bank of England's FPC should be particularly concerned about any institution that records a sharp increase in leverage, or in its share in the mortgage market. But concern alone will not be enough. It also needs the tools to act when leverage is excessive.

30 In evidence to the Treasury committee: http://www.publications.parliament.uk/pa/cm201213/cmselect/cmtreasy/407/120626.htm

In some cases, splitting a massive universal bank into a retail and an investment bank would simply create two very large institutions that might both be 'too big to fail'. Regulators also need to address this problem. The one time that a large bank – Lehman Brothers – was allowed to go bust, the global banking system was brought to the brink of collapse and the world economy experienced its worst recession for over 70 years. It seems reasonable to assume this is an experiment that will not be repeated any time soon. The alternatives are: to allow banks to do what they like and hope they have learned from the experience of the last decade, which would appear risky to say the least; to force a break-up of banks until they are *not* too big to fail, which would be hard to do in practice; to nationalise them, which has been done to a large extent in the UK but does not solve the problem of the UK operations of international banks; or to regulate much more closely their activities.

Closer regulation does not necessarily mean more detailed regulation. Andrew Haldane and Vasileios Madouros (2012) of the Bank of England argue in a recent paper that complex rules have led to increased costs of regulation and greater opacity as financial institutions have responded to new rules, without necessarily improving the safety of the financial system. A predator–prey mentality has developed that makes effective regulation harder. Instead, they propose simple rules for variables such as the leverage ratio and market-based measures of capital.

Regulation is not the only thing that needs to be made simpler. The difficulty politicians and regulators face when trying to devise a set of rules that allow investment banks to operate as they choose but also in a safe manner from the point of view of the rest of society suggests finance needs to be simplified too. One of the main lessons of the financial crisis is that bankers were able to keep one step ahead of the regulators. Either because they did not ask enough questions or because they did not ask the right ones, regulators failed to understand the scale of risk-taking that was occurring in banks. Whether this was due to a lack of technical ability and understanding on the part of the regulators or due to regulatory capture (the regulator becoming an advocate for the sector rather than an effective monitor of it) matters less than reducing the risk of a recurrence of the financial crisis. Until incentive structures are overhauled in the banking sector, the possibility banks will seek to get ahead of regulators remains and it is likely the regulators will once again be found wanting. The solution is to stop banks before they take on excessive risk, and this can best be done by limiting and simplifying their activities. At the very least, the burden of proof in future should rest with banks coming up with new products. They should have to demonstrate they are safe and socially useful, rather than regulators having to prove the opposite.

Another way to potentially reduce the risk of investment bank failures is to make top staff pay when things go wrong (this would also help to address concerns that workers in the financial sector do well in good times and then are bailed out by the state in bad times). Tim Morgan (2012) has put forward a suggestion of how this might work: the possibility of 'internal bankruptcy'. In short, his idea is to reduce excessive risk-taking by making the consequences of failure more severe. In a situation where the government is forced to bail out the investment banking division of a bank, senior management (and the board) of the parent bank and the investment bank should suffer the internal equivalent of bankruptcy. They would lose their jobs, together with any deferred bonuses and pension rights. In effect, this is an attempt to re-impose some of the constraints of the partnership model onto a sector that has largely abandoned it in favour of the relative security (for senior management) of the limited liability structure. This could operate in the context of a bank

that has retail and investment banking operations, or for an institution involved only in investment banking.

The government should also look at tax incentives that encourage risk-taking in the financial sector, and in particular by investment banks. Haldane (2011) has argued that the tax deductibility of debt interest, while dividend payments are subject to tax, encourages banks to use debt, rather than equity, financing. This leads to greater leverage, and consequently to greater instability in the banking sector. Former chancellor of the exchequer Nigel Lawson has a similar view. He believes 'the practice of basing bank bonuses on the (notional) return on a wholly inadequate equity base further exacerbates the quasi-Ponzi nature of the current banking culture'.[31] Making corporate debt interest no longer tax deductible would be the obvious way to restore the balance between equity and debt financing. The Mirrlees review of the UK's tax system has some alternative suggestions, based around changing the tax base for corporate taxes, for example to cash-flow taxes, or introducing an allowance for corporate equity (Mirrlees et al 2011: 418–26).

In summary, given the culture of the financial sector is unlikely to change without external influence, retail and investment banking activities should be split into separate institutions. The retail banking sector would provide intermediation services: a relatively simple process. Policymakers' aim for this sector would be to facilitate a high degree of competition to ensure the best possible outcome for customers (both depositors and lenders). Investment banking would be far more complex in nature and would require much stricter regulation designed to control risk-taking and minimise the risk of another financial crisis. This could include making senior managers and directors financially responsible when things go wrong.

Bank lending

In the late 19th century, according to EHH Green (1996: 221), 'the City became "the enemy within", an internal "other" whose non-productive interests [that is, rent-seeking] marked it out as different from and opposed to the interests of the national productive industrial base'. Little has changed in over 100 years. It is still widely believed, outside the financial sector, that banks are an enclave and are not helping the rest of the economy as they should.

The latest data suggests banks are not channelling credit to those who need it. Despite various government initiatives, bank lending to businesses is still contracting. It is impossible to say with absolute certainty whether this is a supply problem (banks are not making enough finance available to businesses) or a demand problem (businesses do not need more finance). But the anecdotal evidence, for example from business surveys and numerous reports that small and medium-sized businesses find banks have tightened the conditions around lending, suggest it is a supply problem. The circumstantial evidence supports this view. If demand was the problem, lending would have shrunk less in 2010, when the economy was staging a decent recovery, than in 2011 when growth slowed sharply. In fact, the reverse was true.

Banks have to improve their capital ratios in order to reduce the risk of a repeat of the financial crisis of 2007 and 2008, and they argue that this restricts their ability to increase lending. However, this does not square with banks' apparent ability to pay out huge sums in bonuses, or to massively increase salaries in lieu of bonuses.

31 http://www.ft.com/cms/s/0/b1eb10ca-4e65-11e1-aa0b-00144feabdc0.html#axzz1lakAw4tR

There have been a number of government efforts to get banks to lend more. Project Merlin – the now-expired government scheme under which the five largest banks agreed to meet targets for gross lending in 2011 – was flawed. In aggregate, the banks met their target for £190 billion of new lending to businesses (though lending to small businesses fell short of the benchmark), yet net lending contracted because more old loans were repaid than new loans made. Project Merlin was superseded by a National Loans Guarantee Scheme designed to reduce the cost of loans for small businesses, but it is judged unlikely to increase the quantity of lending. So the government and the Bank of England have together launched the Funding for Lending scheme, which aims to increase bank lending – to businesses and to households – by £80 billion over the period to January 2014. It does so by allowing commercial banks to borrow relatively cheaply from the Bank of England, on the condition that they pass on the benefit in the form of cheaper loans. The government is also planning to set up a British Business Bank to lend specifically to small businesses, though details are still hazy and it will not be operational until 2014 at the earliest. And at this stage, the government is planning only a one-off injection of £1 billion of capital into the bank.

A more ambitious option would be to establish a full-fledged British Investment Bank (BIB).[32] The BIB would be 100 per cent state owned. It would be profit-making – though not necessarily profit-maximising – but it would not pay a dividend. Profits would be ploughed back into the bank to allow it to further increase its lending. The remit of the BIB would be to tackle two long-standing problems faced by the British economy: a tendency to invest less in infrastructure (as a share of GDP) than comparable countries and a shortage of financing, particularly long-term financing, for small and medium-sized businesses. The government would have to provide the BIB with its initial capital. One option would be to instruct the Bank of England to do another round of quantitative easing specifically for this purpose. Alternatively, the funds would have to be found by cutting other spending, increased taxation, the sale of government assets or extra borrowing. The BIB might have an initial capital injection of £40 billion, spread over four years (£10 billion a year is a little less than the amount the Coalition has cut its capital expenditure by in the current spending round). If the BIB was allowed to raise £2.50 on the financial markets for every £1 capital, this would mean it could have a balance sheet of £140 billion after four years. This is equivalent to around 9 per cent of UK GDP – and roughly one-third of the size of the European Investment Bank's balance sheet.

A British Investment Bank would be complemented by a restructuring of the banking system. It is hard to see how the large banks that now dominate banking in the UK can go back to the simple model of taking in deposits and lending to households and businesses that need funds to buy a house, finance expansion through innovation and investment or to tide them over a rough patch. What is needed is a more diverse banking system, such as can be found in the United States and Germany for example, where small local or regional banks provide credit where it is needed, based on their knowledge of local circumstances and a proper assessment of the credit-worthiness of borrowers. Challenger banks could represent a small step in this direction, but it is hard to see how they can break the dominance of the 'big five' banks.

32 See Dolphin and Nash 2012 for more details

Rent-seeking and pay

The causes and effects of high pay in the financial sector need to be better understood. Remuneration across many parts of the financial sector has recovered strongly since the crisis because financial companies are once again making vast sums of money. Pay in the sector is high because banks and other financial institutions are able to extract enormous rents from the rest of the economy – effectively taking money from the rest of society, rather than earning it through the provision of services. Ultimately, the way to tackle high pay is to address the level of these rents. This will require addressing the balance of power between the financial system and its clients – that is, the rest of the economy.

Eliminating rent-seeking is never easy; there is always a plentiful supply of businesses and individuals seeking to extract value from other businesses and individuals rather than to create new value. And this behaviour seems more pervasive in the financial sector than in other parts of the economy. Shiller (2012: 33) reports the view of one leading US financial figure, John C Bogle, that 'many in the financial community are milking society based on their false hopes of extraordinary profits'.

The solution is a combination of competition and transparency. Rent-seekers exploit monopoly or oligopoly conditions and the fact that rents in the financial sector are large and have increased over the last 25 years suggests competition has been low. One problem is barriers to entry so anything that serves to increase competition and makes it harder for monopolies to operate will tend to reduce rent-seeking.

In an attempt to increase competition in the retail banking sector in the UK, the government has sold Northern Rock to Virgin Money, forced Lloyds to sell 632 branches to the Co-operative Bank and encouraged the development of challenger banks. The aim appears to be not only to bring new players into the market but also to increase the diversity of ownership models and in particular models that create different incentives and cultures. At the margin, this could change the allocation of capital in the economy. But even after these initiatives, retail banking is still dominated by five large firms.[33] The new Financial Conduct Authority has a remit to promote effective competition in the interests of consumers and it has a lot of work to do in this area.

In other areas of the financial services industry, however, there are large numbers of firms, but the level of salaries and fees suggests the level of competition is still low. Investment funds are, perhaps, the most obvious example. There are hundreds, if not thousands, of funds to choose from in the UK alone – a level of competition that it might be thought would bring down fees and costs. Yet salaries in the fund management industry suggest this has not happened.

Transparency might be an important weapon against rent-seeking in this area. This would include transparency about charging and fund performance, but also about the remuneration of fund managers.

In some circumstances, transparency – because it shows senior executives what their contemporaries are earning – might lead to a ratcheting up of salaries. But if there is sufficient competition, the more information that is available to participants, the better markets will operate and the greater the likelihood that rents are reduced. At a minimum, regulations should be put in place to force disclosure of remuneration packages, including the criteria used to determine bonuses for all employees earning above a certain threshold. This should not just apply to the financial sector and not just to senior

33 Barclays, HSBC, Lloyds, Nationwide and RBS

executives and board members, but to anyone whose remuneration package exceeds the threshold. Given the current distribution of earnings, however, the biggest impact would be seen in the financial sector.

Attacking rent-seeking behaviour is not just about pay in the financial sector, it is also about some of the activities that are undertaken. Speculative trading, for example, is often defended by its practitioners as helping to boost liquidity in markets. This is only true to a limited extent. It is not at all clear, for example, who outside the financial sector benefits from high-frequency trading conducted by computers running pre-programmed algorithms. And it comes with a cost. Financial firms conduct speculative trading because it is profitable for them – probably because they have superior market knowledge.[34] But, since every deal has a buyer and a seller and every trade results in a loss for one party and a gain for the other, if speculative trading is profitable for financial firms, then ultimately it must result in losses for ordinary savers and investors: 'competitive agents, such as financial traders, are able to extract progressively higher rents from increasingly complex arrangements [such as speculative trades]' (Featherby 2012: 47).

There is a widespread perception that the financial sector has used its influence over government to boost its wealth. This is only partially true. The financial sector has increased its wealth by extracting more and more rents from the rest of the economy. The government may have been complicit in this, but it is not alone. Any individual, company or pension fund that makes use of the financial sector's services and does not seek out the best deal is helping to boost the wealth of financial interests.

Hedge funds typically charge their clients '2 plus 20': that is, an annual fee of 2 per cent of assets under management plus a 20 per cent share of any gains (usually above a certain watermark). There are plenty of hedge funds around so competition is not an issue and the fees are transparent so the client knows what will be paid. Yet, it is hard to believe that the hedge fund industry as a whole can produce investment performance to justify this level of charging. Perhaps end investors are being duped by the industry and their advisers. If so, greater transparency might once again be the answer. Hedge funds, for example, should report returns that are money-weighted to prove that their strategies work after they become large; otherwise customers might be investing in an approach that will not work once their money is invested in it.

Asset managers should be forced to provide more information to their customers about investment strategies, turnover, fees, and so on. Pension and insurance funds should be wary about paying performance fees and prefer low-cost investments, such as tracker funds, rather than seek out the possibility of potentially higher returns in complex products that involve high fees and commissions. And if they do want to invest in more exotic funds, which typically have higher fees, they should explore how to do so collectively. US pension funds get better deals than their British counterparts from hedge funds and private equity firms because of their size. Unless smaller funds in the UK are prepared to merge, the only way they can emulate US funds is through joining together to negotiate lower fees.

But individuals, companies and pension funds can only do so much to make the financial sector change. The government has to do the heavy lifting through regulation and through encouraging greater competition to reduce the opportunities for finance to extract rents from the rest of the economy.

34 An example of what economists call asymmetric information.

Financial transaction taxes

One way of reducing rent extraction and excessive pay in the financial sector would be to reduce its size; another would be to increase competition. A third option would be to tax pre-remuneration profits in the sector at a higher rate than in other sectors. This could be done through a financial transaction tax.

Economists who favour market-based solutions to economic problems have argued in the past that increased speculation helps to ensure financial markets tend towards equilibrium and that capital is allocated efficiently. In fact, the opposite has turned out to be true. More speculation has led to greater instability and, as the financial crisis made painfully clear, has caused capital to be allocated less efficiently. Outlawing some of the activities that have contributed to this outcome – high-frequency trading, hedge funds and proprietary trading – is not an attractive option. But making them less rewarding through the implementation of financial transaction taxes makes sense.

Financial transaction taxes (FTTs), as originally proposed by James Tobin, would lead to decreased speculation and, therefore, result in greater stability and a more efficient allocation of capital. The proceeds from such taxes could also be used to build up a fund to meet the cost of any future bail-out of the financial system (though hopefully other changes will reduce the chances of such a necessity). Since the burden of FTTs falls primarily on the financial sector, this would be the rough equivalent of finance paying an insurance premium to cover the possibility of a future crisis; a vast improvement on the current situation where the financial industry takes all the profits in the good times and the taxpayer has to come to its aid during the bad times.

Several countries in Europe (including Germany and France) are pushing for the introduction of a financial transaction tax, possibly from as early as in 2013. Policymakers in the UK are reluctant to follow suit, fearing that much of the business now done in the City would migrate to other financial centres, particularly New York. However, much depends on the design of the tax. The UK already has a financial transaction tax – the stamp duty paid on share transactions. It has not caused a loss of business for the City because it has to be paid to register the new holder of UK shares that are bought and sold, irrespective of where the deal is done. If the tax is not paid, the new owner will have no right to the shares. Extending this principle to other assets should be possible.

Policymakers in the UK should be supporting the efforts of other European countries to design financial transaction taxes that are hard to avoid, and they should be seeking actively to convert policymakers in the United States and in other key financial centres to the idea of such taxes. While they do not do so, they can be accused of paying lip-service to the idea of financial transaction taxes when they say they support them but cannot implement them unless they are introduced worldwide. This might be taken as a sign that the financial industry still wields undue influence over policymakers in the UK (and in the US too).

Rethinking economic policymaking

The financial crisis and Great Recession, as it is known in the United States, has led – with some justification – to criticism of economics, and macroeconomic thinking in particular. Why, people want to know, did economists and policymakers in government, HM Treasury and the Bank of England not predict the crisis and act to prevent it?

One of the main reasons macroeconomists failed to foresee the events of the last five years was that their models – including the model used by the Bank of England – do not

include the financial sector. Given the centrality of finance in the modern economy, this is a startling omission. Any reasonable description of events leading up to the crisis puts credit created by the financial sector at the heart of events. Credit creation led to asset price inflation, and to rising levels of debt payments; eventually asset prices became overvalued and debt payments became a burden on debtors; as a result asset prices fell, leading to debt default and debt deflation (Hudson and Bezemer 2012). Since the 1970s, following a period of financial liberalisation, banks are no longer reliant mainly on monetary funding (deposits), but instead raise most of their funds in the wholesale markets. The result is that credit has decoupled from money. Money is no longer a reliable indicator of what is going on in the economy and financial markets, but credit still is. We live in 'the Age of Credit' (Taylor 2012: 10).

There are three types of credit creation: credit for investment in the real economy, which leads to growth; credit for consumption, which leads to inflation; and credit for finance, which leads to asset price bubbles (Werner 2005). The most recent financial crisis was associated with the last type.

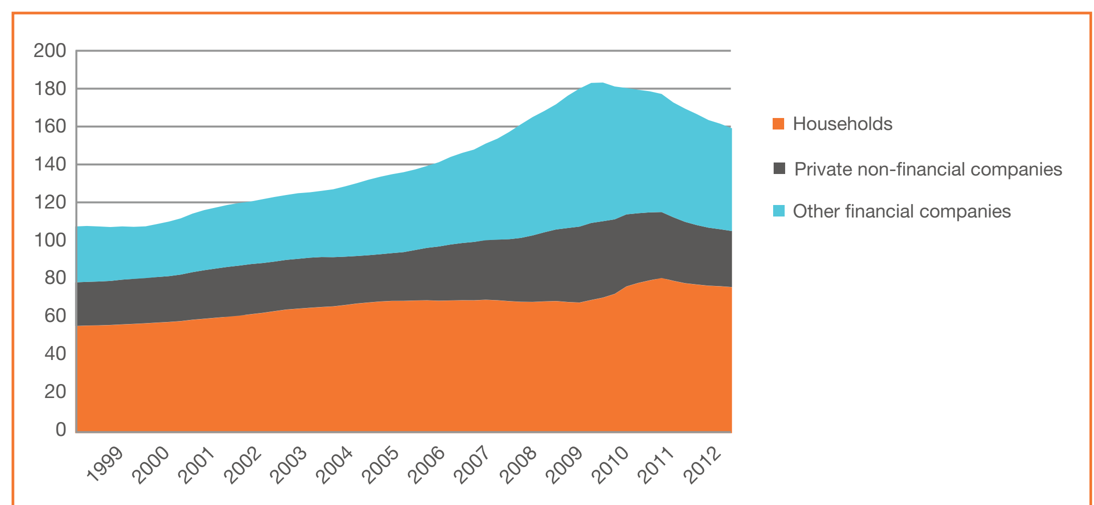
Table 5.1
Increase in major UK banks' assets, 2002–2007 (£bn)

	2002	2007	Change
Lending to UK real economy	682	1141	459
Total assets	1994	5511	3518

Source: King 2012
Note: The banks included are Alliance & Leicester, Barclays, Bradford & Bingley, HBOS, HSBC, Lloyds TSB, Northern Rock and RBS.

In fact, the last four recessions in the UK have all been associated with excessive credit creation in finance, large increases in mortgage lending and rapid residential property price inflation, followed by a credit squeeze and falling house prices. Arcand et al (2012) show empirically that finance starts to have a negative effect on output growth when credit to the private sector reaches 100 per cent of GDP. On their measure, in 2006 credit to the private sector in the UK was in excess of 150 per cent of GDP. Official figures show it increased further in the next few years.

Figure 5.2
Monetary financial institutions' loans outstanding (% of GDP)



Source: Bank of England database and ONS database

The answer is to rethink macroeconomic policymaking. The current approach to controlling the economic cycle is for the Bank of England to set interest rates at the level it believes will result in consumer price inflation of 2 per cent in two years' time, largely based on an assessment of the amount of spare capacity in the economy and the prospects for output growth over the next two years. Finance and credit creation only enter its thinking peripherally. This approach relies heavily on the ability of the Bank to accurately forecast inflation; and the relationship between interest rates, output growth, spare capacity and inflation. Traditional economics suggests this is possible. However, in the real world, where many of the assumptions of traditional economics do not hold, experience suggests this is not the case. The economy does not tend to equilibrium; it is a complex adaptive evolutionary system that is hard – perhaps impossible – to predict (see Dolphin 2012 for an elaboration of this argument).

The Bank of England should instead target credit growth – both in terms of the overall amount and the type of credit – through direct guidance or control. Given the role that house prices have played in past UK economic booms and busts, this might be combined with direct measures to control mortgage lending, in the form of limits on loan-to-value and loan-to-income ratios.

These might seem like draconian moves, particularly in comparison with the laissez-faire approach that has dominated for over 30 years in the UK. But over this period evidence has accumulated that financial markets and banks do not ensure an efficient allocation of credit. Too much credit has been created for the financial sector to use for its own purposes (largely speculation) and for the household sector to use to bid up house prices to the point where young people now find it very difficult to purchase a first home. Not enough has been created for use by the productive sector. There is, therefore, a social welfare case for policymakers to step in and correct the market.

Another way to secure a better allocation of credit creation in the UK, compared to the outcome of the last 30 years, would be to change the structure of the banking system so that it is dominated by banks that have no interest in speculative credit creation. This would necessitate the creation of numerous small, local banks that were simply in the business of taking in deposits and lending to businesses and households. This type of bank exists in Germany in the form of the Sparkassen (local commercial savings banks), but to develop such a structure in the UK would clearly take many years. In the interim, credit controls offer the best hope of dampening future economic booms and busts.

6. CONCLUSION

What is the finance industry for? It should intermediate between savers and borrowers, providing savers and investors with competitive returns and allocating the economy's capital in the most efficient manner. It should also provide insurance against unwelcome events. Much of what the financial sector does is indeed directed at these aims; but some of what it does is not and is rightly described as 'socially useless'. However, we do not know how much falls into this category, so we cannot say the share of finance in GDP ought to be reduced a given percentage, or to the level it was at some point in history, or to the level in other countries. Policymakers in their efforts to rebalance the UK economy should not go down the route of setting a specific target for the size of the financial sector.

However, some activities of the financial sector add little or nothing to society's welfare; they are simply rent extraction from the rest of the economy. And these activities have grown: finance represents a much bigger share of the economy in the UK today than it did before 'Big Bang'. But the public have not benefited from this expansion. There is no evidence that capital is being allocated more efficiently or that investment returns are higher. It is perfectly valid therefore for policymakers, regulators and the customers of the financial industry to identify rent-seeking behaviour and to seek to eliminate it. And if doing so leads to finance's share in the economy shrinking, then so be it.

A number of steps could be taken.

- Retail and investment banking activities should be split into separate organisations.
- Competition in retail banking should be increased, for example by reducing barriers to entry.
- Risk-taking in investment banking should be reduced, for example by making senior directors and managers liable for financial loss when things go wrong.
- A British Investment Bank should be set up to fill the financing gaps left by commercial banks.
- Investors should stop paying extremely high fees for what can only – on average – be investment performance in line with the market.
- More should be done to make the case for wide-ranging financial transaction taxes and to explore ways to minimise avoidance of them.
- The overall level of credit in the economy – in particular speculative credit – should be controlled.

References

Acemoglu D and Robinson J (2012) *Why nations fail: The origins of power, prosperity and poverty*, London: Profile Books

Alander A and Crane E (2011) *Bonus payments in 2010-11*, London: Office for National Statistics

Arcand, J-L, Berkes E and Panizza U (2012) 'Too much finance?', working paper WP/12/161, Washington DC: International Monetary Fund

Bakija J, Cole A and Heim B (2012) 'Jobs and income growth of top earners and the causes of changing income inequality: evidence from U.S. tax return data', http://web.williams.edu/Economics/wp/BakijaColeHeimJobsIncomeGrowthTopEarners.pdf

Barbosa-Filho N (2005) 'International liquidity and growth fluctuations in Brazil' in Epstein G (ed), *Financialization and the world economy*, Cheltenham: Edward Elgar Publishing: 314–33

Bell B and Van Reenen J (2010) 'Bankers' pay and extreme wage inequality in the UK', Centre for Economic Performance, London School of Economics, http://eprints.lse.ac.uk/28780/1/cepsp21.pdf

Blecker R (2005) 'Financial globalization, exchange rates and international trade' in Epstein G (ed), *Financialization and the world economy*, Cheltenham: Edward Elgar Publishing: 183–209

City of London Corporation (2011) *An indispensable industry: financial services in the UK*, London

Crotty J (2005) 'The neoliberal paradox: the impact of destructive product market competition and "modern" financial markets on nonfinancial corporation performance in the neoliberal era' in Epstein G (ed), *Financialization and the world economy*, Cheltenham: Edward Elgar Publishing: 77–110

Department for Business, Innovation and Skills [BIS] (2011) *Low carbon and environmental goods and services: report for 2009/10*, London

Dolphin T (2012) 'Macroeconomic policy in a complex world' in Dolphin T and Nash D, *Complex new world: translating new economic thinking into public policy*, London: IPPR

Dolphin T and Griffith M (2011) *Forever blowing bubbles? Housing's role in the UK economy*, London: IPPR

Dolphin T and Nash D (2012) *Investing for the future: why we need a British Investment Bank*, London: IPPR

Epstein G (ed) (2005) *Financialization and the world economy*, Cheltenham: Edward Elgar Publishing

Epstein G and Jayadev A (2005) 'The rise of rentier incomes in OECD countries: financialisation, central bank policy and labor solidarity' in Epstein G (ed), *Financialization and the world economy*, Cheltenham: Edward Elgar Publishing: 46–76

Ertürk I, Froud J, Johal S, Leaver A, Moran M and Williams K (2011) 'City state against national settlement: UK economic policy and politics after the financial crisis', working paper no 101, Manchester: Centre for Research on Socio-Cultural Change

Featherby J (2012) *Of markets and men*, London: The Centre for Tomorrow's Company

FINNOV (2012) 'Financing innovation and growth: reforming a dysfunctional system', *European Policy Brief*, European Commission, http://www.finnov-fp7.eu/sites/default/files/FINNOV_Policy_Brief.pdf

Freeman R (2010) 'It's financialisation!', *International Labour Review*, 149 (2)

Froud J, Johal S, Leaver A, Moran M and Williams K (2011) *Groundhog day: elite power, democratic disconnects and the failure of financial reform in the UK*, working paper no 108, Manchester: Centre for Research on Socio-Cultural Change

Gardiner B, Martin R and Tyler P (2012) 'Spatially unbalanced growth in the British economy', unpublished paper

Godechot O (2011) 'Finance, an inequality factor', books&ideas.net, 15 April 2011

Green EHH (1996) *The crisis of conservatism: the politics, economics and ideology of the British Conservative party, 1880-1914*, London: Routledge

Haldane A (2012) 'The doom loop', *London Review of Books*, 34 (2): 21–2

Haldane A (2011) 'Control rights (and wrongs)', http://www.bankofengland.co.uk/publications/speeches/2011/speech525.pdf

Haldane A (2010) 'The $100 billion question', http://www.bankofengland.co.uk/publications/speeches/2010/speech433.pdf

Haldane A and Madouros V (2012) 'The dog and the frisbee', paper given at the Federal Reserve Bank of Kansas City's 36th economic policy symposium, http://www.bankofengland.co.uk/publications/Documents/speeches/2012/speech596.pdf

Haldane A, Brennan S and Madouros V (2010) 'The contribution of the financial sector – miracle or mirage' in *The future of finance: the LSE report*, London: London School of Economics

Harvey D (2003) *The New Imperialism*, Oxford: Oxford University Press

High Fliers Research (2012) 'The graduate market in 2012', http://www.highfliers.co.uk/download/GMReport12.pdf

High Pay Commission (2011) 'Cheques with balances: why tackling high pay is in the national interest', London: High Pay Centre. http://www.highpaycentre.org/

Higher Education Careers Services Unit (2011) 'What do graduates do?', http://www.hecsu.ac.uk/assets/assets/documents/WDGD_Nov_2011.pdf

Higher Education Statistics Authority [HESA] (2011) 'Destinations of leavers from higher education institutions longitudinal survey', http://www.hesa.ac.uk/component/option,com_pubs/Itemid,351/index.php?option=com_pubs&task=show_pub_detail&pubid=1714&Itemid=286

HM Revenue and Customs [HMRC] (2012) 'National Statistics, Corporation Tax – Table T11.1A' at http://www.hmrc.gov.uk/stats/corporate_tax/table11-1a.pdf

Hudson M and Bezemer D (2012) 'Incorporating the *rentier* sectors into a financial model', *World Economic Review*, 1: 1–12

Independent Commission on Banking (2011) *Final report*, London: Dorman Group

Kay J (2009) 'Narrow banking: the reform of banking regulation', http://www.johnkay.com/wp-content/uploads/2009/12/JK-Narrow-Banking.pdf

King M (2012) 'Twenty years of inflation targeting', speech given at the Stamp Memorial Lecture, London School of Economics, http://www.bankofengland.co.uk/publications/Pages/speeches/2012/606.aspx

King M and Rime D (2010) 'The $4 trillion question: what explains FX growth since the 2007 survey?', *BIS Quarterly Review*, December

Kumhof M and Rancière R (2010) 'Leveraging inequality', *Finance & Development*, December

Kynaston D (2011) *City of London: the history*, London: Chatto & Windus

Lansley S (2011) *The cost of inequality: three decades of the super-rich and the economy*, London: Gibson Square

Lanchester J (2009) 'It's finished', *London Review of Books*, 31(10): 3–13

London School of Economics and Political Science (2010) *The future of finance: the LSE report*, London: London School of Economics

Long Finance (2012) *The global financial centres index 11, March 2012*, Z/Yen Group, http://www.longfinance.net/Publications/GFCI%2011.pdf

Lucchino P and Morelli S (2012) *Inequality, debt and growth*, London: Resolution Foundation

Mellors-Bourne R, Connor H and Jackson C (2011) 'STEM graduates in non-STEM jobs', research paper no 30, London: Department for Business, Innovation and Skills, http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/s/11-771-stem-graduates-in-non-stem-jobs.pdf

Metz D (forthcoming) 'Reducing income inequalities by better regulating financial services'

Michaels G (2010) 'The shrinking middle: how new technologies are polarising the labour market', *Centrepiece,* Autumn

Minsky H (2008) [1986] *Stabilising an unstable economy*, New York: McGraw-Hill Professional

Mirrlees J, Adam S, Besley T, Blundell R, Bond S, Chote R, Gammie M, Johnson P, Myles G and Poterba J (2011) *Tax by design*, Oxford: Oxford University Press

Morgan T (2012) 'Where angels fear to tread: the quest for real and responsible capitalism', Tullett Prebon strategy notes, issue 35

National Audit Office [NAO] (2012) 'The creation and sale of Northern Rock plc', http://www.nao.org.uk/publications/1213/northern_rock.aspx

National Audit Office [NAO] (2011) 'The financial stability interventions', http://www.nao.org.uk/publications/1012/hmt_accounts_2010-2011.aspx

O'Connell A (2005) 'The recent crisis – and recovery – of the Argentine economy: some elements and background' in Epstein G (ed.), *Financialization and the world economy*, Cheltenham: Edward Elgar Publishing: 289–313

Organisation for Economic Co-operation and Development [OECD] (2011) *Divided we stand: why inequality keeps rising*, Paris

Office for Budget Responsibility [OBR] (2012) *Economic and fiscal outlook: December 2012*, Norwich: The Stationery Office

Office for Budget Responsibility [OBR] (2011) *Fiscal sustainability report*: *July 2011*, Norwich: The Stationery Office

Office for National Statistics [ONS] (2012a) *United Kingdom National Accounts: The Blue Book 2012*, http://www.ons.gov.uk/ons/rel/naa1-rd/united-kingdom-national-accounts/the-blue-book--2012-edition/index.html

Office for National Statistics [ONS] (2012b) *United Kingdom Balance of Payments: The Pink Book 2012*, http://www.ons.gov.uk/ons/rel/bop/united-kingdom-balance-of-payments/2012/index.html

Office for National Statistics [ONS] (2012c) *Business Monitor MA4: Foreign direct investment involving UK companies: 2010*, London

Palley T (2012) *From financial crisis to stagnation*, New York: Cambridge University Press

Palley T (2007) 'Financialization: what it is and why it matters', working paper no 525, New York: Levy Economics Institute, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1077923

Perez C (2004) 'Finance and technical change: a long-term view', *African Journal of Science, Technology, Innovation and Development*, 3(1): 10–35

Philippon T (2012) 'Has the US finance industry become less efficient?', http://pages.stern.nyu.edu/~tphilipp/papers/Finance_Efficiency.pdf

Philippon T (2008) 'The evolution of the US financial industry from 1860 to 2007: theory and evidence', http://economics.stanford.edu/files/Philippon5_20.pdf

Phillipon T and Reshef A (2012) 'Wages and human capital in the US finance industry: 1909–2006', *Quarterly Journal of Economics*, 127(4): 1–59

PricewaterhouseCoopers [PwC] (2011) *The total tax contribution of UK financial services*, London: The City of London

Rajan R (2010) *Fault lines*, Princeton: Princeton University Press

Reed H and Himmelweit JM (2012) *Where have all the wages gone? Lost pay and profits outside financial services*, London: TUC

Reinhart C and Rogoff K (2009) *This time is different: eight centuries of financial folly*, Princeton: Princeton University Press

Stewart M (2011) 'The changing picture of earnings inequality in Britain and the role of regional and sectoral differences', *National Institute Economic Review*, 218, October

Shiller R (2012) *Finance and the good society*, Princeton: Princeton University Press

Taylor A (2012) 'The great leveraging', working paper no 18290, Cambridge, MA: National Bureau of Economic Research, http://www.bis.org/events/conf120621/taylor.pdf

TheCityUK (2012a) 'Key facts about UK financial and professional services', http://www.thecityuk.com/research/our-work/reports-list/key-facts-about-uk-financial-and-professional-services/

TheCityUK (2012b) 'Economic contribution of UK financial and professional services', http://www.thecityuk.com/assets/Uploads/Econ-contribn-of-UK-fin-and-prof-services-2011-F.pdf

TheCityUK (2012c) Trends in UK financial and professional services', http://www.thecityuk.com/research/our-work/reports-list/trends-in-uk-financial-and-professional-services/

Tobin J (1984) 'On the efficiency of the financial system', *Lloyds Bank Review*, 153: 1–15

Werner R (2005) *New paradigm in macroeconomics*, Basingstoke: Palgrave Macmillan

Whittaker M and Savage L (2011) *Missing out: why ordinary workers are experiencing growth without gain*, London: Resolution Foundation

APPENDIX 1
EMPLOYMENT IN FINANCIAL SERVICES AND INSURANCE IN 2010

There were 1,044,000 people employed in financial and insurance activities in 2010. Of these, almost two-fifths (39 per cent) worked in banks, 12 per cent were employed in other forms of financial intermediation, 12 per cent in insurance and pension funding and 38 per cent in 'auxiliary activities', such as insurance brokers, administration and fund management. As a result of the government taking majority stakes in Royal Bank of Scotland, Lloyds and (at the time) Northern Rock, 20 per cent of employment in the sector was classified as being in the public sector. (All employment numbers are given in '000s.)

	Public	Private	Total
Total	217.8	826.3	1,044.2

Total employment

Sector	Public	Private	Total
Financial service activities, except insurance and pension funding	180.0	348.3	528.3
Insurance, reinsurance and pension funding, except compulsory social security	7.3	112.9	120.2
Activities auxiliary to financial services and insurance activities	30.5	365.1	395.7

Financial service activities, except insurance and pension funding

Sub-sector	Public	Private	Total
Monetary intermediation	174.7	269.6	444.4
Activities of holding companies	*	*	7.0
Trusts, funds and similar financial entities	*	*	10.4
Other financial service activities, except insurance and pension funding	5.1	61.3	66.4

Insurance, reinsurance and pension funding, except compulsory social security

Sub-sector	Public	Private	Total
Insurance	7.3	111.7	119.0
Reinsurance	-	1.2	1.2
Pension funding	-	-	-

Activities auxiliary to financial services and insurance activities

Sub-sector	Public	Private	Total
Activities auxiliary to financial services, except insurance and pension funding	8.3	132.8	141.1
Activities auxiliary to insurance and pension funding	19.4	199.7	219.1
Fund management activities	2.8	32.7	35.5

Source: ONS database
* = disclosive data that cannot be published
- = zero or less than 50

APPENDIX 2
OLS REGRESSION RESULTS

The following tables show the main parameters of the results of the cross-sectional OLS regressions on the finance wage premium, run on data from 1984 to 2011.

	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
	1984		1985		1986		1987		1988		1989		1990	
Race	0.12*	0.03	0.13*	0.03	0.17*	0.03	0.17*	0.03	0.12*	0.04	0.19*	0.03	0.20*	0.03
Sex	0.35*	0.01	0.35*	0.01	0.36*	0.01	0.35*	0.01	-0.35*	0.01	0.36*	0.01	0.36*	0.01
Age	0.03*	0.00	0.03*	0.00	0.03*	0.00	0.03*	0.00	0.03*	0.00	0.02*	0.00	0.03*	0.00
Finance	0.14*	0.02	0.14*	0.02	0.21*	0.03	0.22*	0.02	0.18*	0.02	0.18*	0.02	0.18*	0.02
Married	0.12*	0.01	0.11*	0.01	0.11*	0.01	0.13*	0.01	0.12*	0.02	0.13*	0.01	0.12*	0.01
Pot. Exp	0.01*	0.00	0.02*	0.00	0.02*	0.00	0.02*	0.00	0.01*	0.00	0.02*	0.00	0.02*	0.00
London	0.25*	0.02	0.21*	0.02	0.21*	0.02	0.26*	0.02	0.23*	0.03	0.30*	0.02	0.27*	0.02
North	0.01	0.02	-0.01	0.02	-0.01	0.02	0.02	0.02	0.03	0.02	0.01	0.02	0.02	0.02
South	0.07*	0.02	0.08*	0.02	0.10*	0.02	0.09*	0.03	0.10*	0.02	0.14*	0.02	0.14*	0.02
Wales	-0.02	0.03	-0.04	0.03	-0.04	0.03	-0.11	0.02	0.15*	0.03	-0.00	0.03	-0.06***	0.03
Scotland	0.06*	0.02	0.04***	0.02	0.05**	0.02	0.03	0.03	-0.00	0.03	0.02	0.02	0.03	0.03
East of Eng	-0.03	0.03	0.04	0.03	-0.02	0.03	0.03*	0.0	0.02*	0.04	0.05	0.03	0.01	0.03
N Ireland	n/a		n/a		n/a		n/a		n/a		n/a		n/a	
Education	0.36*	0.02	0.34*	0.02	0.33*	0.02	0.36*	0.02	0.34*	0.03	0.38*	0.02	0.39*	0.02
Pot. Exp^2	-0.00*	0.00	-0.00*	0.00	-0.00*	0.00	-0.00	0.00	-0.00	0.00	-0.00*	0.00	-0.00*	0.00
Constant	3.34*	0.05	3.48*	0.05	3.44*	0.05	3.45*	0.05	4.35*	0.06	3.89*	0.05	3.88*	0.05
R-squared	0.37		0.35		0.37		0.38		0.35		0.34		0.32	
N	6,567		6,948		7,181		7,466		5,329		7,291		6,665	

* p<0.01; ** p<0.05; *** p<0.10

	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
	1991		1992		1993		1994		1995		1996		1997	
Race	0.16*	0.03	0.19*	0.04	0.16*	0.04	0.24*	0.04	0.21*	0.04	0.15*	0.03	0.19*	0.03
Sex	0.31*	0.01	0.32*	0.02	0.30*	0.01	0.28*	0.01	0.29*	0.01	0.31*	0.01	0.29*	0.01
Age	0.03*	0.00	0.02*	0.00	0.05*	0.00	0.07*	0.00	0.06*	0.00	0.08*	0.00	0.07*	0.00
Finance	0.21*	0.02	0.12*	0.02	0.12*	0.02	0.19*	0.03	0.23*	0.03	0.25*	0.03	0.20*	0.02
Married	0.10*	0.01	0.11*	0.02	0.13*	0.02	0.13*	0.02	0.11*	0.02	0.09*	0.01	0.07*	0.01
Pot. Exp	0.01*	0.00	0.01*	0.00	-0.00	0.00	-0.01*	0.00	-0.01**	0.00	-0.02*	0.00	-0.01**	0.00
London	0.26*	0.02	0.24*	0.03	0.26*	0.02	0.22*	0.02	0.25*	0.03	0.24*	0.02	0.17*	0.02
North	-0.01	0.02	-0.06	0.02	0.01	0.02	-0.05*	0.02	0.04***	0.02	-0.01	0.02	-0.02	0.02
South	0.10*	0.02	0.07*	0.02	0.12*	0.02	0.06*	0.02	0.11*	0.02	0.07*	0.02	0.10*	0.02
Wales	-0.07**	0.03	-0.07**	0.04	-0.05	0.03	-0.12*	0.03	-0.04	0.04	-0.07**	0.03	-0.04	0.03
Scotland	-0.04	0.03	-0.01	0.03	0.05*	0.03	0.00	0.03	0.04	0.03	0.01	0.02	0.02	0.02
East of Eng	-0.04	0.03	0.05	0.04	0.12*	0.03	0.08*	0.02	0.08*	0.03	0.11*	0.02	0.08*	0.02
N Ireland	n/a		n/a		n/a		n/a		n/a		-0.13*	0.04	-0.23*	0.04
Education	0.38*	0.02	0.38*	0.02	0.29*	0.02	0.24*	0.02	0.25*	0.03	0.15*	0.02	0.27*	0.02
Pot. Exp^2	-0.00*	0.00	-0.06*	0.00	-0.00*	0.00	0.00*	0.00	0.00*	0.00	0.00*	0.00	0.00*	0.00
Constant	3.97*	0.05	4.10*	0.06	3.45*	0.08	3.26*	0.08	3.36*	0.09	3.18*	0.07	3.29*	0.07
R-squared	0.31		0.22		0.34		0.35		0.36		0.33		0.38	
N	6,841		6,838		6,449		6,180		4,438		7,025		6,880	

	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
	1998		1999		2000		2001		2002		2003		2004	
Race	0.23*	0.03	0.20*	0.03	0.21*	0.03	0.20*	0.03	0.21*	0.03	0.16*	0.03	0.16*	0.03
Sex	0.28*	0.01	0.30*	0.01	0.26*	0.01	0.29*	0.01	0.26*	0.01	0.25*	0.01	0.27*	0.01
Age	0.06*	0.00	0.06*	0.00	0.07*	0.00	0.07*	0.00	0.05*	0.00	0.06*	0.00	0.06*	0.00
Finance	0.23*	0.03	0.26*	0.02	0.22*	0.03	0.24*	0.03	0.19*	0.03	0.14*	0.03	0.20*	0.03
Married	0.08*	0.01	0.07*	0.01	0.07*	0.01	0.05*	0.01	0.07*	0.01	0.06*	0.01	0.09*	0.01
Pot. Exp	-0.01***	0.00	-0.01*	0.00	-0.01*	0.00	-0.01*	0.00	-0.01	0.00	-0.01*	0.00	-0.01*	0.00
London	0.20*	0.02	0.22*	0.02	0.24*	0.02	0.23*	0.03	0.25*	0.02	0.24*	0.03	0.23*	0.03
North	-0.04**	0.02	-0.02	0.02	-0.01	0.02	-0.06*	0.02	-0.02	0.02	-0.01	0.02	0.00	0.02
South	0.06*	0.02	0.08*	0.01	0.01*	0.02	0.04**	0.02	0.13*	0.02	0.12*	0.02	0.09*	0.02
Wales	-0.08**	0.03	-0.04	0.03	-0.04	0.03	-0.09*	0.03	-0.09*	0.03	-0.03	0.03	-0.05***	0.03
Scotland	-0.05**	0.03	-0.03	0.02	-0.00	0.02	-0.05***	0.03	-0.02	0.02	-0.01	0.02	0.01	0.02
East of Eng	0.10*	0.02	0.12*	0.02	0.11*	0.02	0.13*	0.02	0.16*	0.02	0.10*	0.02	0.15*	0.02
N Ireland	-0.18*	0.04	-0.12*	0.04	-0.15*	0.04	-0.18*	0.04	-0.09**	0.04	-0.11*	0.04	-0.05	0.04
Education	0.29*	0.02	0.28*	0.02	0.26*	0.02	0.23*	0.02	0.31*	0.02	0.30*	0.02	0.30*	0.02
Pot. Exp^2	0.00*	0.00	-0.00*	0.00	-0.00*	0.00	-0.00*	0.00	-0.00*	0.00	-0.00*	0.00	0.00*	0.00
Constant	3.41*	0.08	3.52*	0.07	3.53*	0.07	3.60*	0.07	3.88*	0.07	3.89*	0.07	3.89*	0.07
R-squared	0.33		0.37		0.37		0.37		0.36		0.37		0.38	
N	6,943		6,911		6,420		5,913		5,808		5,687		5,166	

* p<0.01; ** p<0.05; *** p<0.10

	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
	2005		2006		2007		2008		2009		2010		2011	
Race	0.19*	0.03	0.15*	0.03	-0.22*	0.03	0.14*	0.03	0.16*	0.03	0.14*	0.03	-0.22*	0.04
Sex	0.25*	0.01	0.24*	0.01	-0.24*	0.01	0.22*	0.01	0.24*	0.02	0.24*	0.02	-0.26*	0.02
Age	0.07*	0.00	0.06*	0.00	0.05*	0.00	0.05*	0.00	0.05*	0.00	0.05*	0.00	0.04*	0.00
Finance	0.18*	0.03	0.19*	0.03	0.22*	0.03	0.25*	0.03	0.21*	0.04	0.17*	0.03	0.24*	0.04
Married	0.08*	0.01	0.13*	0.02	0.07*	0.02	0.07*	0.02	0.12*	0.02	0.08*	0.02	0.09*	0.02
Pot. Exp	-0.02*	0.00	-0.01*	0.00	0.00	0.00	0.00	0.00	-0.0	0.00	0.00	0.00	0.01	0.01
London	0.22*	0.03	0.17*	0.03	0.26*	0.03	0.20*	0.03	0.27*	0.03	0.23*	0.03	0.25*	0.04
North	-0.03	0.02	-0.01	0.02	0.01	0.02	-0.01	0.02	-0.02	0.03	0.00	0.02	0.00	0.03
South	0.09*	0.02	0.06*	0.02	0.11*	0.02	0.08*	0.02	0.09*	0.03	0.09*	0.02	0.07*	0.03
Wales	-0.01	0.03	-0.06	0.04	-0.01	0.04	-0.11*	0.04	-0.05	0.04	-0.07	0.04	-0.01	0.05
Scotland	0.02	0.03	-0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.03	-0.02	0.03	0.05	0.04
East of Eng	0.11*	0.03	0.05	0.03	0.09*	0.03	0.13*	0.03	0.09*	0.03	0.09*	0.03	0.09*	0.03
N Ireland	-0.12*	0.05	-0.12*	0.05	-0.13*	0.05	-0.15*	0.05	-0.08	0.06	-0.12**	0.06	0.01	0.07
Education	0.25*	0.02	0.26*	0.02	0.32*	0.02	0.33*	0.02	0.32*	0.02	0.32*	0.02	0.37*	0.02
Pot. Exp^2	0.00*	0.00	0.00*	0.00	0.00*	0.00	0.00*	0.00	-0.00*	0	-0.00*	0.00	-0.00*	0.00
Constant	3.76*	0.07	4.02*	0.08	4.72*	0.07	4.22*	0.08	4.25*	0.08	4.25*	0.09	5.05*	0.09
R-squared	0.36		0.34		0.35		0.33		0.33		0.34		0.33	
N	4,871		4,087		4,488		4,450		4,125		3,883		3,144	

* p<0.01; ** p<0.05; *** p<0.10