

## COMMENTARY: GROWTH PROSPECTS AND FINANCIAL SERVICES

**Martin Weale\***

### Introduction

Over the past twenty years the expansion of the British economy has been supported by growth in the financial services industry. With the onset of the financial crisis it seems most unlikely that the financial services industry can, in the future, act as the sort of motor of growth that it had done in the past. This commentary provides an overview of the role of the financial services sector in the economy over the past twenty years and assesses likely developments in the future. It first assesses the contribution of the sector to the economy and then considers the issues surrounding its likely shape in the future.

The sector has fulfilled two interrelated functions over the past few years. First of all it has done what it always does, intermediated between borrowers and lenders, so that lenders can earn good returns on their savings without the risk of having all their eggs in one basket. It has also, of course, been providing insurance, an activity which, with the exception of the AIG bail-out, seems to have so far been little affected by the crisis. But it has additionally created credit on a large scale. Credit creation has driven up asset prices and land prices in particular, while at the same time charges associated with the extra credit provided have been a source of steady income. More generally, rises in asset prices have created an opportunity for developing new products (e.g. through securitisation) which have charges and commissions associated with them. Thus a significant but indeterminate part of the industry's value added has arisen on income which exists only because of the capital gains resulting from credit creation internationally.

### Financial services in the UK economy 1987–2007

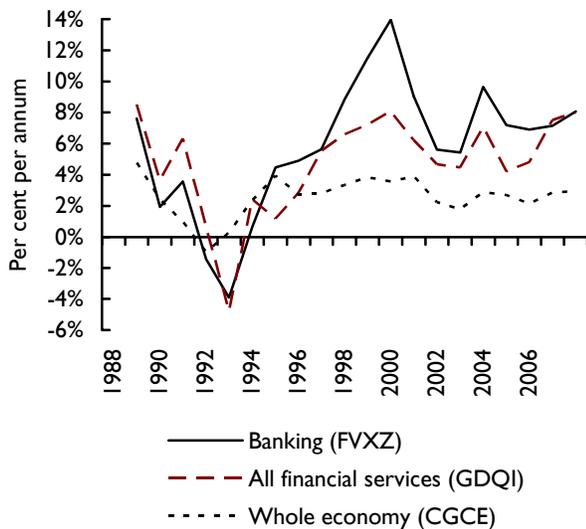
In examining the role of financial services in the UK economy, mention needs to be made of the distinction between financial corporations and the financial intermediation industry. The two do not match exactly

because corporations are classified by the main activity of businesses taken as a whole, while individual establishments form the basis of the industry classification. In the analysis presented here, references to volume growth relate to the industry while discussion of its role in data at current prices is based on data for financial corporations. However, the difference between the two is small. Similarly, when we look at the subset of the overall financial sector classified as the monetary sector, there is not an exact match between the output of the institutions classified to the monetary sector and the volume index for the output of monetary intermediation which we refer to as banking.

As always there are a number of different ways of looking at the data which describe the sector and the economy. The most common one is to look at the growth rate of output. Over the period 1987–2007 the financial services sector has grown at 4.7 per cent per annum while the UK economy as a whole has grown at 2.6 per cent per annum. With financial services taking an average share of 6.6 per cent in gross value added, the growth rate of the rest of the economy has been 2.4 per cent per annum. Without the 'excess' growth of financial services, the growth rate over this period would have been reduced by 0.2 per cent per annum.

However, within the general financial services sector the volume of intermediation services (SIC 65) has expanded faster than the volume of insurance and pension provision (SIC 66). The former, which is largely comprised of the monetary sector, has grown at an average rate of 5.8 per cent per annum between 1987 and 2007. Since 2000 it has grown more or less in line with the rest of the financial sector, at 8 per cent per annum. Figures kindly provided by the ONS indicate that the component measured by margins on loans and deposits of the banks has grown less rapidly than the rest of banking and intermediation activity. This probably reflects the general point that banks' income from interest margins has not grown as rapidly as they

Figure 1. Output growth in the financial services sector



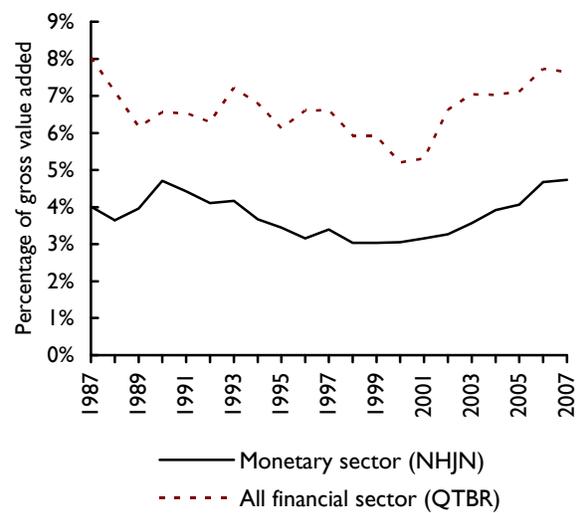
Source: ONS Database – codes shown.

wanted and that they have tended to rely increasingly on fees and capital gains. Annual growth rates are shown in figure 1 for the combined financial services sector (Sector J), for banking (SIC65) and for the economy as a whole.

But the output of the financial services sector is notoriously difficult to measure. While there are good output indicators for many service industries, such as transport and communication, it is difficult to provide a quantitative answer to the question, what does the financial sector do? An alternative view of its importance can be gained by looking at its share in gross value added – which is a reasonable indication of its contribution to the economy over the period – where a rather different period emerges. We can see in figure 1 that the share of the financial sector in total value added was lower in 2007 than in 1987. On the other hand it fell sharply in 1988 and then declined further to the end of the century. Since 2000 it has recovered sharply. The share of monetary sector institutions (banking) in overall value added fell from 4 per cent in 1987 to 3.1 per cent in 2000, but has since recovered to 4.7 per cent in 2007. These data are shown in figure 2.

A third way of looking at the contribution of financial services to the economy is to examine its value added measured in terms of consumption goods, i.e. deflated by the price index of final consumption (taking public and private goods together). This indicates its contribution to

Figure 2. The share of financial services in the economy

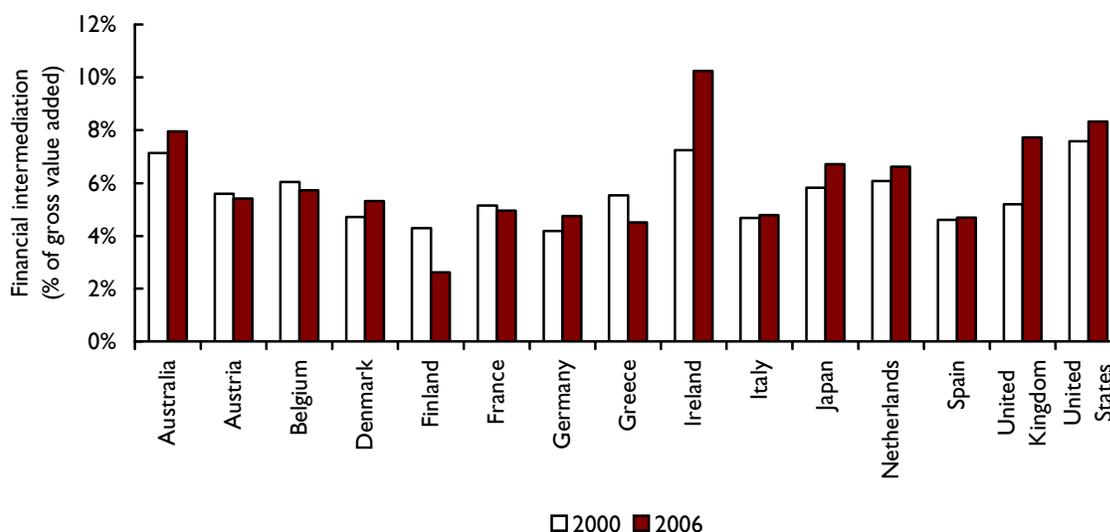


Source: ONS Database – codes shown.

the growth of real gross income, and shows a figure of 2.2 per cent per annum, while total real domestic gross income grew at 2.5 per cent per annum over 1987–2007. Thus, seen in these terms, the financial sector acted as a drag on the economy rather than a powerful motor taking the past twenty years as a whole. On the other hand, looking at the shorter period since 2000 the impression is very different. The contribution of the financial sector grew by 5.8 per cent per annum while average gross real domestic income grew by 2.7 per cent per annum and national income excluding financial services grew by 2.3 per cent per annum. While financial services have not contributed disproportionately to income growth over the past twenty years, they have done so since 2000. This is obviously a counterpart to the way in which the share of financial services in value added has risen over the same period.

How can these numbers be reconciled? Over the twenty-year period, the implication is that the price of the output of financial services has fallen fairly rapidly, so that the industry measured in terms of the quantity of what it produces has expanded more than its contribution to income. There are obvious questions how the price of the output of sector is measured, or indeed can be measured, and one can therefore argue that the measure deflated by consumption is the better guide to the growth of the sector. But since 2000 the real income measure has grown at 8.5 per cent per annum while the volume measure has expanded at only 5.8 per cent per annum, pointing to relatively rising costs but

Figure 3. The importance of financial intermediation in advanced economies



Source: OECD Database.

with either measure pointing to a phenomenal expansion of the sector in the current century.

Figure 3 shows the share of financial services in the major economies for 2000 and 2006, since 2007 data are not yet fully available. The small banking states (Switzerland and Luxemburg) have larger shares (12.5 per cent for Switzerland and 28.8 per cent for Luxemburg in 2006). Otherwise we can see the English-speaking countries (Australia, Ireland, United Kingdom and United States) have larger shares than the other countries and also that the expansion of the sector in the United Kingdom has no parallel except in Ireland.

### What is output?

As the discussion in the Appendix makes clear, the approach adopted by the Office for National Statistics when measuring the volume of the output of the sector is chosen to pragmatically; there is no solid basis of theory on which to draw. However, there are also questions concerning measurement of current operating surplus and thus value added.

In most industries gross operating surplus is calculated gross of inventory appreciation as:

$$\text{Sales-purchases} + \text{closing inventories} - \text{opening inventories.}$$

The capital gains on inventories embedded in sales prices are then subtracted to provide the measure of operating surplus for use in national accounts. Addition of employment compensation delivers gross value added.

It is not easy to fit financial services into this framework. There are two problems. One is that many of the fees they charge are concealed in margins on lending and borrowing rates. The national accounts now identify how far these margins represent the sale of products to final demand (see Begg, Bournay, Weale and Wright, 1996; Humphries, 2008).

Secondly, many financial institutions are in the business of trading in securities, hoping to make gains on these as a part of their normal business activities and included as operating income in financial statements. In general capital gains have no place in measures of income (Sefton and Weale, 2006). Logically, since we correctly leave out capital gains on shares, property and other assets from household income, we would not want to include them if these gains were instead realised by financial institutions. But national accountants have the problem of separating normal trading capital gains from other gains. We can be reasonably sure that nominal income originating in the financial services sector was overstated during the boom years and so too was the true growth in the nominal and real income created by the sector. But we cannot expect ever to be able to say how

large were the reported profits directly associated with those activities which have resulted in subsequent losses. Even with the benefit of hindsight it is not clear how large that overstatement was.

### Financial institutions' losses in perspective

The Bank of England estimated the losses of UK banks in the current crisis at £123bn in October (Bank of England, 2008). These figures are based on marking to market so some recovery is obviously possible. But more probably there have been further losses since then. The total value added by the banks was just under £300bn over the period 2001–7; losses of £150bn would imply that half of the reported value added was illusory. In terms of the economy as a whole, the reported growth rate of GDP since 2000 has been 2.5 per cent per annum. But if losses of £150bn, which arose mainly on non-UK assets, are deducted from income over this period, then the growth rate of the economy would have been only 2.1 per cent. Thus, seen in these terms, the consequence of having a banking sector which behaved as it did was that the overall performance of the economy was substantially overstated. Whether it would have been possible to have the rest of the economy function in the way that it did without having banks which were able to incur losses on this scale is, of course, a question which bank regulators are now addressing.

These losses can be put in perspective by looking at the magnitude of the UK property boom. Between 2000 and 2007 (end-year) the value of land in the UK rose from £1202bn to £3080bn, a capital gain of £1878bn. Currently, the Department of Communities and Local Government (DCLG) shows house prices falling by 8.3 per cent between end-2007 and November 2008. The index tends to lag those such as the Land Registry index with its fall of 13 per cent from end-2007 to end-2008. If the fall of the DCLG index is entirely attributed to land prices, the value of the nation's land has fallen by £255bn to November 2008. If the total fall of house prices extends to 30 per cent from the December 2007 figure by December 2010, then the total fall of land prices will amount to just under £1300bn, with the value of the national plot falling to £1786bn. These numbers are not included in the figures for the UK banking sector but do serve to demonstrate that the UK household sector faces losses larger than those of the banks. Even a collapse of this magnitude would still leave land prices nearly 50 per cent higher than they had been in 2000 – an increase of 4 per cent per annum making housing quite a good long-term investment. But banks' gains and

losses were the result of an activity, financial intermediation which contributes to GDP, and indeed many of the gains, had they materialised, might have found their way into GDP. Conversely, their losses so far seem to have arisen largely on speculation in overseas assets such as sub-prime mortgages. These amount to loans abroad which will not be repaid and thus result in a loss in the nation's wealth. The same cannot be said of household gains and losses; furthermore movements in the price of domestic land have no direct effect on the subsequent level of national income.

### Growth prospects and the financial sector

Had the economy grown at only 2.1 per cent per annum between 2000 and 2007 output would have been lower by 3.4 per cent in 2007. But this overstates the extent to which measured real GDP would have been lower if the speculation and resulting financial crisis had not taken place and also the likely impact on the economy of shrinkage of the sector.

Looking ahead, we can see three effects. First of all, if losses amount to £150bn or 10 per cent of GDP which has effectively been transferred abroad (assuming the losses have been incurred on investments abroad), then, assuming a permanent return of 5 per cent per annum, this is equivalent to a permanent reduction in income of 0.5 per cent of GDP.<sup>1</sup> Secondly, it is likely that the share of the financial sector in the economy will shrink, both because value added per unit of output is likely to fall and because resources are likely to be transferred from there to the rest of the economy.

The Office for National Statistics' experimental measure of average earnings shows that earnings per person employed in the financial sector were 2.1 times those in the economy as a whole in 2007, as compared to 1.8 times in 2000; hours worked were much like those in the rest of the economy.<sup>2</sup> Value added per employee was 1.8 times that in the rest of the economy in 2007 as compared to 1.9 times in 2000. Employment in the financial sector as shown in the Annual Survey of Hours and Employment rose from 664,000 in 2000 to 1,177,000 in 2007.

Suppose that the share of value added in the financial sector falls back to its level in 2000 which, as we noted, was a low point for the past twenty years, but that value added per person employed retains its current relationship to the rest of the economy. In that case the rebalancing of resources in the economy would have the

effect of reducing both the volume and the value measures of GDP by 1.9 per cent (although, if the average educational attainment of people currently working in financial services is higher than in the rest of the economy, the loss in value added in allocating them to the rest of the economy will be mitigated). The overall effect of the crisis is therefore the sum of the impact arising from banks' losses and the effect of rebalancing the economy, giving a total reduction in real gross national income of 2.4 per cent. This is over and above any effects which might arise because of increased charges for risk (Barrell and Kirby, 2008) and will be increased further if the shrinkage of the financial services sector leads to emigration of guest workers instead of their redeployment elsewhere in the economy.

Of course these numbers do not mean that everyone in the economy finds their living standards reduced by 2.4 per cent and in that sense a focus on aggregates is not very helpful. People who have recently worked in the financial sector but no longer do so will, on average, find that their income is reduced to less than half what it was in the financial sector. People who have saved for their retirement will, because of the banks' losses, find that their retirement income is reduced, or that they have to save more to deliver a target retirement income. But for the part of the population which has not yet saved for retirement and does not work in the financial sector, the main impact will come as a result of the reduction in public sector revenue associated with the fall in output. With an average tax rate of about 40 per cent in the economy, this points to a fall of government revenue of 1 per cent of GDP as a result of the shrinkage of the financial services bubble. This is equivalent to an increase in the standard rate of income tax of 3–4p.

## Conclusion

Over the period since 2000 the expansion of the financial sector was a significant influence on the growth rate of the economy overall. The expansion of the banking sector was a dominant influence on growth in current price terms, while the volume measures show more even expansion across the sector. While it is not possible to quantify how far the sector was useful and how far its activity was simply underpinning the

speculation of the past few years, it seems likely that the recent growth of the sector will be reversed. If the sector returns to the importance it had in 2000, GDP is likely to be reduced permanently by about 1.9 per cent. The country will suffer a further loss of income as a result of the losses banks have made, giving a total fall in national income of about 2.4 per cent, reducing government revenue by about 1 per cent of GDP.

Perhaps as a footnote to the crisis we observe that losses remove about half of the value added of the banking sector. Pay in the sector was about double that in the economy as a whole. So, if pay and profit margins had been about average for the economy, the sector would have earned its keep.

## NOTES

- 1 Some of the losses of UK banks are of course experienced by foreign shareholders. But UK investors have to carry the same sorts of losses on their investments in foreign banks, so this is unlikely to distort the overall argument.
- 2 The Annual Survey of Hours and Employment (ASHE) reports an average working week in financial services of 34 hours compared to 33.9 in the economy as a whole. For male full-time workers the average week is 36.3 hours as compared to 40.7 in the economy as a whole. Thus the sector does not appear to work longer hours than the rest of the economy.
- 3 See <http://www.ons.gov.uk/about-statistics/user-guidance/ios-methodology/source-data/index.html>

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## Appendix. Output of the financial sector

Financial intermediation is identified as sector J in the Standard Industrial Classification (SIC). In the base year of the national accounts, 2003) it accounted for 7.04 per cent of gross value added. It comprises three two-digit industries. Financial intermediation excluding insurance and pensions (SIC 65) amounts to 4.36 per cent of total gross value added. Insurance and pension funding (SIC 66) is 1.63 per cent of gross value added and activities auxiliary to financial intermediation (SIC 67) are 1.05 per cent of gross value added.

SIC 65 is further subdivided into monetary intermediation (SIC 651) at 3.78 per cent of gross value added and other financial intermediation (SIC 652) at 0.58 per cent of gross value added. Thus monetary intermediation accounts for just over half of the gross value added of the sector. Its output is produced from two indicators, fee and commission revenue deflated by the average earnings index for the financial services sector with a weight of 1.2 per cent and a weighted average of loan and deposit totals outstanding deflated by the GDP deflator, with a weight of 2.58 per cent. We refer to this sector as banking.

The outputs of the other components are measured<sup>3</sup> using indicators related to the value of business deflated, for the most part by the average earnings index for sector J. However, for activities concerned with portfolio management, indicators of the amount of funds under management are deflated by the FTSE All-share Index.