Questions in advance of Treasury Committee hearing

Martin Weale

15 October 2013

1. Do you have any business or financial connections or other commitments which might give rise to a conflict of interest in continuing to carry out your duties as a member of the MPC?

No

2. Do you intend to serve out the full term for which you have been appointed?

Yes

3. Why have you decided to stay on for a second term? What have you learned from your experience of being on the MPC so far? Do you plan on doing anything differently during your second term?

I have found my work on the MPC extremely interesting and I believe I have done it effectively. With the benefit of hindsight I do not think the judgements I have made were wrong. I have explained my analysis to a wide range of audiences and have made my views clear on the boundaries of monetary policy and thus of the Committee's responsibilities. I was therefore glad to have the opportunity to continue in this role. At the start of my first term I found there was plenty to learn - in broad terms - because many of the MPCs' discussions take place with reference to the history of previous discussions and assumptions about, for example, the structure of the economy. To be fully effective it is necessary to have an understanding of the background, and inevitably I did not learn that immediately. I should qualify this, however, by saying that the development of the Bank's new modelling framework has made the historical assumptions built into our analysis much more transparent and, I think, much more accessible.

The three years in which I have been on the MPC have been without any parallel in Britain's experience. There have, of course, been recessions before but these have been followed by economic recovery rather than three years of near stagnation. So my time on the Committee has been one of continuing questioning and trying to understand the disparate indicators of the state of the economy. I have learned that it is important for monetary policy-making to be conducted on a flexible evidence-driven basis and that past assumptions and relationships always need to be open to review. While the economy may now be returning to something closer to normal economic growth, I do not intend to abandon this approach in my second term.

4. Which of your papers or publications are of most relevance to your future work on the MPC?

"Qualitative Business Surveys: Signal or Noise?". ***Journal of the Royal Statistical Society***. Series A. Vol 174. pp 327-348. 2011. With Silvia Lui and James Mitchell.

"The choice between rebalancing and living off the future." Doncaster Chamber of Commerce. Doncaster. 25 August 2011

"The Utility of Expectational Data: Firm-level Evidence using Matched Qualitative-quantitative UK Surveys". ***International Journal of Forecasting***. Vol 27. Pp. 1128-1146. With Silvia Lui and James MItchell.

"From retailers' paradise to shoppers' strike: what lies behind the weakness in consumption?" Cass Business School. London. 29 February 2012.

"The labour market, productivity and inflation." Department of Economics, Manchester University. 20 November 2012.

"The balance of payments." Warwick Economics Summit. Coventry. 16 February 2013

5. Have you received the support from the Bank that you need to fulfil your role? Are there changes that the Bank could make to support external members of the MPC better?

The support I have had from the Bank has been as much as could reasonably be expected. There are two members of the Bank's staff who work with me, and the other staff at the Bank respond to my questions as quickly as is practical. The secretarial support is also excellent.

6. What other work commitments do you maintain in addition to membership of the MPC, and how do those benefit your work on the MPC? Do you expect to take on any other commitments in the future?

I spend one day a week at the National Institute of Economic and Social Research where I am a Senior Research Fellow and one day a week at Queen Mary, University of London where I am a part-time professor. At the National Institute my work has been essentially a continuation of projects I was involved in before joining the MPC. This has included a study of the interaction of life-long learning and earnings prospects in the context of a broader analysis of drivers of employment and earnings. Other work has included looking at business surveys and how best to extract a signal from them and studying influences on household consumption and saving. Beyond keeping me connected with academic work more generally this has helped with my MPC work in a number of ways. The work on employment and earnings provided estimates of the effects of unemployment on people's earning power and thus allowed me to estimate how far these might account for the productivity puzzle. Work on consumption and saving allowed me to estimate the influence of changes to the retirement age and increased risk of unemployment on people's saving behaviour, to help me understand what to make of current saving rates. Work on business surveys inevitably helps with their interpretation, or perhaps more importantly, with understanding the limits to what can be learned from them.

At Queen Mary I lecture on monetary economics and on inflation targeting. The time I have for research has been devoted largely to the studies described above.

Both of these appointments were taken up with the then Governor's approval. I do not expect to take up any further commitments but, should I wish to make any changes to my activities, I will seek the Governor's approval, as per the MPC code of conduct.

7. What contributions have you made to explaining the work of the MPC, and enhancing public confidence in its actions?

I have, up to June 2013, made eleven speeches, given nine interviews to national and foreign media, thirty-five talks to business groups, visited eighty-one firms while on twenty-three regional visits and published two articles in national newspapers; on most regional visits I have also given interviews to local papers or local radio stations. My speeches and interviews explain the thinking behind the way I have voted and offer a means of communicating both my own views and the collective judgement of the Committee about the state of the economy. On several occasions they have been designed to explain the choices the Committee faces and the limits on its actions. I made a specific public intervention in June 2012 to explain what I thought ought to be the Committee's role in decisions about Bank interventions in credit markets with monetary implications, such as the Funding for Lending Scheme. The sort of arrangement which I thought was necessary has now been set out formally recognising the primacy of the Committee rather than the Bank Executive in decisions about monetary conditions.

In August 2013 I voted against the proposition for forward guidance that had resulted from the Committee's discussions. While I supported the general principles of the policy, I argued that there was a need to do more to manage the risk that forward guidance could lead to an increase in medium-term inflation expectations, by setting a shorter time horizon for the first inflation 'knock-out', which is based on the MPC's forecasts. My vote focused attention on the primary objective of the Committee and stressed to the public the importance I attach to that.

I have nevertheless stated my intention to vote in the light of the forward guidance framework the MPC has adopted. The concerns I felt had to be offset against the risk of the Committee appearing dysfunctional if I used one framework to explain my decisions while the other eight members used a different framework. On balance I felt that confidence in the MPC's actions could better be maintained if my subsequent decisions were taken within the framework used by the rest of the Committee.

8. What do you regard as the major risks to the outlook for the UK?

Much the largest risk facing the UK is that the economic crisis in the euro area will intensify once more, possibly leading to the break-up of the euro area. The crisis last year had adverse effects on the UK in three ways. First and most obviously, it was an important factor behind the poor performance of British exports last year. In value terms exports of goods and services to the rest of the EU fell by four per cent while those to non-EU countries rose by two per cent. Since nearly half of our exports go to the EU and most of these, of course, go to the euro area, this has important implications for the economy as a whole. Secondly, concerns about the euro area infected financial markets. In particular they pushed up on bank funding costs with implications for the rates banks were likely to charge on loans. Thirdly, the crisis created a general sense of uncertainty in this country, which probably had the effect of depressing both private sector investment and consumer spending. All of these would be likely to recur were the crisis in the euro area to intensify.

The forecast that the inflation rate will fall back to target is based on the assumption that the exchange rate will stay close to its current level. All my experience suggests that this is as good an assumption as any, but the economy is obviously exposed to the risks of sharp exchange rate movements in either direction. One particular point is that a large external deficit remains; in part this is a consequence of a sharp decline in the balance of investment income. This raises the risk of a further downward movement by the exchange rate which would be likely to delay the return of inflation to its target.

But there are also downside risks to inflation. The rate of growth of wages, as measured by the ONS' measure of Average Weekly Earnings (regular pay), has fallen to around one per cent per annum. If wage growth remains weak while productivity growth returns to something more normal, then labour costs will start to fall and businesses will be able to rebuild their profit margins with less inflation than my central expectation. In such a situation inflation would be likely to be weaker than the MPC has forecast.

9. What is your current estimate of the extent of the output gap? Do you believe the output gap is still a valuable measure?

I have never believed that the output gap is directly relevant as a means of predicting movements in inflation and, in my current post, I am not enthusiastic about projecting variables which do not help with an understanding of inflationary pressures. Experience both here and in other countries has shown that estimates of the output gap are subject to very substantial revision and, as I will explain, the uncertainty is particularly acute at the moment.

In principle the output gap is a measure of the extent by which actual output differs from the supply capacity of the economy. A gap between the two may be associated with unemployed and under-employed labour or with businesses whose output is below capacity, given their capital stocks and the labour they employ, and whose productivity is therefore depressed. Unemployment is expected to, and, from the evidence I have seen, does put downward pressure on wage growth and, through this, on inflation. It is often suggested that businesses accept squeezed margins when their output is below capacity, so that this second element of the shortfall also contributes to reduced inflation. But the evidence I have seen is not as clear. For this reason I think the output gap is not a helpful concept when thinking about inflation; it matters whether the slack is in the labour market or presents itself as spare capacity in businesses.

There is, at the present time, uncertainty about both elements. Although the measure of unemployment is reasonably precise, there may also be under-employment present. Some people who are employed might rather work longer hours. And there are always questions of how far those who do not describe themselves as unemployed may nevertheless influence wage setting, and how far those who have been unemployed for a long time influence inflationary pressures. Over the last three years there has been a fairly sharp increase in employment without a large reduction in unemployment, as people have been drawn in to the labour force.

The question of how much spare capacity there is in businesses is much more uncertain. If one took the view that, since the crisis, underlying productivity had continued to grow at the same rate as before the crisis, that would imply that, on average, firms have a margin of spare capacity of well over ten per cent of output. Nevertheless survey questions about spare capacity suggest the margin has, for the last three years, been relatively small. Certainly, it is hard to see that employment would have expanded in the way that it has, were there a large margin of spare capacity in firms.

At some point it is possible that some of the "lost" productivity will be regained. But, since no one can be sure about how far or how rapidly this might happen, no one can be sure about the size of the output gap. And no one with an understanding of the statistical issues involved would want to provide a single current estimate at the moment. Despite this, the current level of unemployment and evidence from business surveys, together with the answers I get from the firms that I visit, indicate clearly that there is a margin of slack in the economy.

10. What is your view of the UK's 'productivity puzzle'?

Output per hour worked in the United Kingdom's market sector at the end of 2012 was five per cent lower than it had been in early 2008 while, had pre-crisis trends continued, it would have been expected to be over ten per cent higher[1]. It is fairly common for productivity to be weakened in the aftermath of a financial crisis, although the magnitude of the present weakness is unusual.

There are a number of identifiable factors which account for some of the weakness. First of all, North Sea oil and gas output fell by thirty-seven per cent[2] between 2008Q1 and 2013Q1, removing just under one per cent from GDP or about 1.2 per cent from market sector GDP. Since the industry, by its nature employs few people, the impact appears mainly in labour productivity. Secondly, fixed investment has

[1] Table 7. ONS Labour Productivity 2012Q4.
[2] ONS Second Estimate of GDP. Q12013. Table B1. This figure relates to all mining and quarrying. Gas and oil extraction is much the largest component of this.

been weak since the crisis. There are standard techniques for measuring the importance of this for productivity; these suggest, however, that the impact of weak investment has, so far, not been large. There was probably also some overstatement in the output of the financial sector before the crisis. For example, those involved in mis-selling were shown as adding value while, now the costs of sorting out mis-selling are being addressed, it would have been more appropriate if they had been shown as subtracting value at the time the mis-selling happened.

There are three other components which have been identified. First of all, it is suggested that capital is misallocated. The sharp increase in the price of traded goods following the depreciation probably made it rational to increase output of traded goods, while cutting back on untraded goods. But, since the allocation of the capital stock reflected historic decisions made before the crisis, this meant that the capital was in the wrong businesses, with the consequence that labour productivity is depressed. This argument is correct but it is again difficult to believe that it accounts for more than a small part of the shortfall; in any case, as capital flows to the appropriate sectors one would expect to see above-average growth in productivity following an initial drop. This has not happened. Of course it might be argued that uncertainty has discouraged this adjustment. But those sectors which are short of capital should be those where returns are highest, and ought to be sectors where investment is at its most attractive.

A second component of the explanation is that the labour market is not offering the same opportunities as it did before the crisis. Until 2008 there was a general drift up the occupational scale. People tended to move to better-paid jobs. And, to the extent that relative pay reflects relative productivity, this was one of the mechanisms by which productivity increased steadily. Since the crisis this process has become, at best, much weaker. But that, too, accounts for a relatively small component of the shortfall. In any case it does not explain why labour market opportunities have declined.

A third component of the explanation is based on the observation that there have been fewer company liquidations than there were in the recession of the early 1990s. There are a number of factors behind this. One, of course, is that the law has changed so as to make it easier for businesses in difficulties to carry on trading. If the companies with the lowest productivity are those which, in the circumstances of the early 1990s, would have been liquidated, then productivity would be appreciably higher, although so too would unemployment. But a study[3] suggested that the labour productivity of businesses which closed down, whether as a result of bankruptcy or for any other reason, was, in the period 1980-1992 only about three per cent lower than those which carried on. While that study looked only at manufacturing, the overall picture now would have to be very different indeed for the low liquidation rate to account for much of the productivity gap.

[3] Disney, R., J. Haskel and Y. Heden. (2003). "Restructuring and Productivity Growth in UK Manufacturing" *Economic Journal,*2003, pp 666-694

There is the possibility that businesses are hoarding labour in anticipation of better days. Some evidence to support this is provided by the fact that the recent increase in employment has happened not because recruitment has been unusually high but because a normal rate of recruitment has gone with an unusually low number of people leaving their jobs. At the same time, it seems inherently unlikely that hoarding could go far to explaining such a prolonged period of stagnation of productivity.

It is also possible that weak demand conditions themselves depress productivity. Those businesses which I visit which have to tender for work, tell me that much more effort has to be put in to finding work than was the case before the crisis. This effect cannot easily be quantified, but it contributes to low productivity at least to some extent. The faster growth we have experienced recently will help us quantify the extent of this.

But it seems to me likely that, after allowing for all of these effects there is probably some residual component which cannot be accounted for. Almost all studies of productivity show an unexplained residual component, so we should not be very surprised to find one when trying to account for the productivity shortfall.

As the points above make clear, I do not think there is a single simple resolution of the productivity puzzle, and it is not always easy to disentangle the different effects. But if, as I hope, the economy is now moving from stagnation to modest growth, it will be very interesting to see what happens to productivity and the outcome will give us more clues about the importance of the different effects I have summarized above.

11. What is your own view of the new MPC remit?

The new remit gives the MPC the operational independence needed to deliver an inflation target of two per cent, with employment and output growth as subsidiary goals. In that respect it is, of course, similar to its predecessor. Nevertheless it differs in important respects. First of all, it makes absolutely clear that the target is flexible and that, where appropriate, the MPC should allow inflation to deviate from target in the short term. I think an important outcome of this clarification and the discussion which anticipated it was that, in February, when the MPC produced a forecast showing that inflation was more likely than not to be above target in two years time, there was a general understanding of the approach we were adopting. This contrasts with the experience of 2008 when forecasts of inflation above target at a two-year horizon caused considerable surprise. So the new remit is likely to make it easier for the MPC to do its job on any future occasion when disturbances to the economy mean that the MPC judges the best thing is to let inflation remain above or below target for more than a brief period.

Secondly, the remit asked us to discuss the role which might be played by thresholds and forward guidance. This was done and a document, *Monetary Policy Trade-offs and Forward Guidance,* was published in August. Thirdly, the remit requires us to be more explicit about the trade-offs between damping undesirable fluctuations in output and keeping inflation close to its target. There are two elements to this. First of all, on the assumption that people understand the MPC's policy and its implications, it is possible to produce estimates of the extent to which inflation stability has to be bought at the expense of output instability[4]. There are, however, other issues which certainly affect my views on the trade-off. A sustained period of above-target inflation, as a result of a sequence of shocks might lead people to assume that the MPC had become more tolerant of deviations of inflation from target, and thus to assume that inflation would continue to remain above target. In such circumstances the implications for output when inflation was eventually brought back to target would almost certainly be considerably greater than if the MPC were to retain credibility. But equally, after such a sequence of disturbances, an attempt by the MPC to bring inflation rapidly back to target could result in an output squeeze which would affect Britain's productive potential for some years, perhaps by creating a pool of people who remain unemployed for a long period and who do not find work again, even when economic conditions are generally favourable. It is unlikely that there can be clear estimates of the importance of these two effects and different MPC members will therefore probably have different views about how important they are as influences on the trade-off.

Finally, the new remit requires the MPC to have due regard to the actions of the Financial Policy Committee which was established on a statutory basis only at the start of April. This is a very important point, because, of course, the FPC makes decisions which influence monetary conditions. But I am sure that, even without any mention of the issue in the remit, the MPC would take account of the effects of FPC decisions on output and inflation. The financial stability "knock-out" adopted as a part of forward guidance, of course, means that the MPC will pay attention to the views as well as the actions of the FPC.

12. What are your views on the prospects for the UK housing market?

The housing market has shown considerable signs of revival in the last few months. House prices in July were about five per cent higher than a year ago and turnover was up by nearly twenty per cent. The number of mortgage advances for house purchase has also increased sharply.

ONS data for the second quarter of this year show that the output of that part of the construction industry producing new housing in the private sector was marginally above its previous post-crisis peak of the third quarter of 2011. Despite this improvement, output is only about seventy per cent of the levels reached in 2007[5]. Housing starts and completions in the private sector are far below the levels seen over the period 1990-2007.

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[4] See Bean, C. (1998). "The New UK Monetary Arrangements: a View from the Literature". *Economic Journal*. Vol 108. Pp. 1795-1809.

[5] ONS Construction Output and New Orders : July and Q1 2013. Table 1a

Factors which may be limiting house-building include difficulties that speculative builders have in raising finance and a fear that, if they build houses, people will not be able to raise the mortgages needed to buy them. The second of these concerns should have been alleviated by the improvement in the mortgage market since the second half of last year. It was also been suggested that house-builders are reluctant to develop land while prices are stagnant. I have no basis for knowing whether this is the case or not. Finally, it is widely suggested that planning rules are an obstacle to development. I have no specialist knowledge about this, but equally I have not seen any suggestion that these have changed markedly since the period before the crisis. The extra liquidity offered by the Help to Buy scheme may encourage house-building, but I share the previous Governor's view that it should not become a permanent feature of our economy. While reports on the first stage of the scheme suggest that it has had a substantial influence, with two thousand buyers a month benefitting, this number is small compared with the overall number of housing transactions.

It was quite possible that demand side indicators will continue to show further buoyancy. While supply of new houses is also likely to increase, for current levels of loan approvals, house prices are rising appreciably more rapidly than would have been predicted on the basis of the relationship between the two for the period before the crisis. There is obviously a risk that, if the mortgage guarantee element of Help to Buy is not priced satisfactorily, it will add to demand while supply is weak, leading to increased pressure on prices.

In the long run it should be expected that house prices will rise. First of all, if inflation is at its target value, prices should go up. Secondly, the fact that land is not a produced resource means that an upward drift in real national income is likely to be associated with rising land and thus house prices. This factor is exacerbated by planning restrictions.

Rising house prices may make people feel cheerful and more prosperous, thereby supporting household spending. But rising house prices impose a burden on those who do not yet own houses but aspire to in the future. Like government borrowing, rising house prices can crowd out productive investment. Naturally, in setting policy we take account of the effect of developments in the housing market on demand conditions.

We are also very aware that developments in the housing markets can pose risks to financial stability. This risk is high if lending is taking place on the basis of poor security or with little margin to spare should prices turn down. In that eventuality the FPC would provide the first line of defence against any risks to financial stability. But monetary policy must be available as a second line of defence. Our forward guidance framework builds in a financial stability knock-out to ensure that, while keeping Bank Rate at its current low level, we are not taking risks with financial stability.

13. What impact do you think the Funding for Lending scheme has had on the economy?

In the first half of last year, as concerns about the euro area intensified, banks' funding costs rose sharply. These increased costs of raising the money needed to repay maturing deposits meant that either banks had to accept a squeeze on their profits or they had to raise the rates they charged on loans. At the same time there were fears that banks would become more reluctant to lend and press for repayment of existing loans, leading to a further economic downturn. The Funding for Lending Scheme was introduced to make finance available on favourable terms and to do so in a way which gave banks strong incentives to increase their lending.

Following the improvement in sentiment towards the euro area, funding costs have fallen throughout Europe. This reflects easing concerns about the ability of euro area countries to finance their borrowing needs. In the UK funding costs have fallen by nearly one percentage point since their peak last summer, a fall larger than in the other large European countries. I am comfortable in attributing at least some of this fall to the Funding for Lending Scheme. The effects of reduced funding costs have been seen in falling mortgage rates.

It is, nevertheless, not clear at present how far lending rates to businesses, and particularly small businesses, have come down. Different businesses undoubtedly have access to very different terms depending on their perceived credit-worthiness. Separately, it is not clear whether banks' willingness to lend to small businesses has increased. The extension of the Funding for Lending Scheme is intended to address this by providing particularly strong incentives for banks to increase their lending to small businesses.

The fall in funding rates in the market since the summer of last year means that the incentives built into the Funding for Lending Scheme for banks to increase their lending are weaker than I had expected. The consequence of the fall in market funding rates is that drawings may not reach the £80bn which had been anticipated by the end of this year; data up to 30th June show usage of £17.6bn with £1.1bn of drawdown in the second quarter of this year. At the same time, it is worth noting that participants' plans suggest their net lending should rise in the rest of 2013.

But the importance of the scheme goes beyond what these usage and lending data indicate for three reasons. First of all, as noted, it has probably contributed to the fall in funding costs and secondly, because, even if not much use is being made of it at present, the extended scheme provides reassurance to participating banks that they will have access to funding on favourable terms even if market conditions worsen again. This, itself, is likely to increase their willingness to lend. Finally, despite the fact that the impact of the Funding for Lending Scheme on lending flows has been offset by legacy effects which result from some large banks wanting to reduce loan portfolios of particular types, it has had the effect of bringing down mortgage rates and probably also reducing the extent to which banks have been competing for retail deposits. The general view is that a reduction in rates has more of an impact on spending by borrowers than it does on spending by savers so, on balance the reduction in rates has probably been one of the factors supporting consumer demand recently. As recent data have shown, a revival in overall bank lending is not a necessary condition for economic growth, at least in the short term.

CURRICULUM VITAE

Martin Robert Weale

CURRICULUM VITAE **MARTIN ROBERT WEALE**

Dr M.R. Weale (b. 1955) joined the Monetary Policy Committee of the Bank of England in July 2010 after having been the Director of the National Institute of Economic and Social Research since 1995. In 2011 Queen Mary, University of London appointed him a part-time Professor of Economics. Until 1995 he was a lecturer in Economics at the University of Cambridge and a Fellow of Clare College (B.A. 1977, Sc.D. 2006) He has researched a large number of aspects of applied economics at both macro and micro-economic levels. He has published his work in many books and journals, including the *Economic Journal*, the *Journal of the Royal Statistical Society, the Journal of Business Economics and Statistics,* the *Journal of Public Economics,* the *Review of Economic Studies* and the *Review of Economics and Statistics*.

Weale was appointed CBE for his services to Economics in 1999 and was elected an Honorary Fellow of the Institute of Actuaries in 2001. City University awarded him an honorary doctorate in 2007. He was a member of the Statistics Commission from 2000 to 2008 and of the Board for Actuarial Standards from 2006 to 2011. As Director of the National Institute he frequently appeared on the broadcast media and was widely referred to in the press. He has made numerous appearances in front of select committees and is used to presenting his work to a variety of different audiences.

1. Personal

Posts

External Member, Monetary Policy Committee Bank of England

Senior Research Fellow (from October 2010), National Institute of Economic and Social Research.
Professor. Department of Economics and Finance. Queen Mary. University of London from September 2011

2. University Education and Qualifications

1974-77	Pt1A Maths Tripos, Pt 2 Economics Tripos, Clare College, Cambridge.
1977	BA (1st Class Honours, Part 2 Economics Tripos).
2006	Sc. D. in Economics University of Cambridge.

3. Career

1977-79	Overseas Development Institute Fellow, National Statistical Office, Zomba, Malawi.
1979-1987	Research Officer, Department of Applied Economics, Cambridge (Junior Research Officer to 1984).
1987-95	University Lecturer, Faculty of Economics and Politics, Cambridge (University Assistant Lecturer to 30.9.90).

1981-95	Director of Studies (to 1992) and Fellow in Economics, Clare College, Cambridge.
1986-87	Houblon-Norman Fellow, Bank of England.
1993	Visiting Scholar, Institute for Empirical Macroeconomics, Federal Reserve Bank, Minneapolis.
1995-2010	Director, National Institute of Economic and Social Research.

4. Honours

1999	C.B.E. for Services to Economics.
2001	Honorary Fellow, Institute of Actuaries.
2007	DSc Honoris Causa, City University.

5. Board Memberships

1990-8	Member. HM Treasury Academic Panel.
1995-7	Member. HM Treasury Panel of Independent Forecasters (the 'Wise Men').
1996-2000	Chairman. National Accounts User Group.
1997-2000	Chairman. ONS Academic Panel.
2000-2008	Member. UK Statistics Commission.
2004-2007	Member. European Advisor Committee on Statistical Information in the Economic and Social Spheres (CEIES).
2006-2011	Member. The Board for Actuarial Standards.
2008-2011	Chairman. Centre for Measurement of Government Activity Advisory Board. Office for National Statistics.
2009-	Member. Consumer Price Advisory Committee, Office for National Statistics
2010-	Member. Monetary Policy Committee
2011-	Trustee. Kennedy Memorial Trust

6. Research Grants

1985 ESRC Studentship jointly with Central Statistical Office. This funded a PhD student who worked on various aspects of data reliability

1986 Houblon-Norman Fellowship Bank of England £11,500 to work on Macroeconomic Policy.

1989 ESRC Research Award (with Drs Feinstein and Solomou) £60,000 to revise estimates of UK National Income 1855-1985.

1991 Nuffield Foundation (with Dr Solomou) £3000 to produce estimates of quarterly national income for Germany 1925-38.

1991 ESRC (with Prof. Cave and Dr Johnes) £8480 to run a study group in the economics of education.

1991 Royal Economic Society, HM Treasury and Department of Education and Science (with Prof. Cave). £8000 to run a conference on the economics of higher education.

1991 Central Statistical Office (with Mr Begg). £22156 to produce estimates of flows in trade credit.

1992 Central Statistical Office (with Messrs Begg and Wright). £25,000 to look at ways of measuring banking output.

1992 Leverhulme Foundation. £20,789 to look at the implications of different ways of deflating GDP on estimates of economic growth.

1993 Central Statistical Office. £41,500 to produce estimates of monthly GDP and new leading indicators. (with Dr Smith and Mr Wright).

1995 ESRC (with Drs Henry and Lee and Professor Pesaran*)* £205,067 to study aspects of macroeconomic modelling and forecasting using monthly and quarterly data.

1996 ESRC (with Dr Blake) £74,283 to study UK Consumer Spending 1920-1995.

1996 ESRC (with Dr Dutta) £89,385 to study the impact of income uncertainty on consumer behaviour.

1997 ESRC (with Prof Smith) £117,912 to study leading indicators for the United Kingdom.

1997 EUROSTAT €350000 to study co-incident and leading indicators for the European Union

1998 ESRC £80,251 to study inheritance and inequality.

1999 ESRC £549,941 (with Messrs Barrell, Pain and Young) to study fluctuations and long-term prosperity

1999 Leverhulme Trust £158,000 (with Ms Metcalf) to study the effects of student fees on universities

1999 ESRC £92,102 to study firms' expectations of output growth.

2000 ESRC £109,400 (with Professor Sefton) to study means testing and early retirement

2000 ESRC £39,626 to study the role of efficiency as an explanation of international income differences

2000 European Commission £124,000 to study flash estimation of quarterly GDP

2001-2002 EUROSTAT. £120,000 to study various aspects of economic data

2002 Inland Revenue £80,000 (with Professor Sefton) to study the influence of taxes on household saving.

2002 European Commission (5^{th} Framework). £109,000 to study ageing and retirement.

2003 European Commission (5^{th} Framework) £111,622 to study demographic uncertainty and the sustainability of welfare systems.

2003 European Commission (6^{th} Framework) £205,595 to study ageing, health status and determinants of health expenditure

2003 Department for Education and Science £169,000 (with Ms Metcalf and Dr Stevens) to study recruitment and retention in higher education.

2003 Department of Health. £135,356 (with Ms O'Mahony) to study measures of productivity in the health service.

2003 European Commission (DG-ECFIN) €50,000 to explore qualitative business surveys

2004 Joseph Rowntree Foundation £34,000 to investigate the interaction between poverty and debt

2004 European Commission (6^{th} Framework) £60,000 to study sustainability of pension systems.

2005 ESRC £45,000 to study qualitative business survey data

2005 ESRC £45,000 to study consumer sentiment data from BHPS. Project to start December 2005.

2005 DWP £100,000 (with Dr van de Ven) to study household debt.

2005 ESRC £210,000 (with Dr van de Ven) to study economic consequences of demographic uncertainty.

2005 EUROSTAT £240,000 (with Dr Mitchell) to study various statistical aspects of short-term economic forecasting.

2006 ESRC £229000 (with Dr Mitchell) to compare individual responses to CBI and ONS business surveys.

2007 ESRC £637000. (with Mr Mason) National Institute component of ESRC Centre for research into life-long learning.

2008 Leverhulme Trust £83,000 The Effects of Decision-making Myopia on Private Provisions for Retirement

2009 Eurostat. €500,000 (with Dr Mitchell). Work on short-term forecasting and nowcasting.

7. Publications

A. Books & Reports

1986 – ***British Banking: 1960-1985.*** The Macmillan Press Limited.   pp. 232. With the late J. Grady.

1989 – ***Macroeconomic Policy: Inflation Wealth and the Exchange Rate.*** Unwin Hyman Ltd. pp. 364. With A. Blake, N. Christodoulakis, J. Meade and D. Vines.

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“Uncertain uncertainty.” Institute and Faculty of Actuaries. London 29 March 2011

“Why the Bank Rate should increase now.” Finance Directors’ Strategy Meeting. London. 13 June 2011

“The choice between rebalancing and living off the future.” Doncaster Chamber of Commerce. Doncaster. 25 August 2011

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9. Other Public Output

Frequent radio and television broadcasts and newspaper articles while Director of the National Institute.

Articles in the ***National Institute Economic Review*** on a quarterly basis since November 1995 providing commentary on the international and UK economies. Frequent appearances at the Treasury Select Committee of the House of Commons

Newspaper, radio and television interviews as a member of the Monetary Policy Committee.