



House of Commons
Treasury Committee

**Appointment of Paul Fisher
to the Monetary Policy
Committee of the
Bank of England**

Sixth Report of Session 2008–09

Volume II

Oral and written evidence

*Ordered by the House of Commons
to be printed 21 April 2009*

The Treasury Committee

The Treasury Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of HM Treasury, HM Revenue & Customs and associated public bodies.

Current membership

Rt Hon John McFall MP (*Labour, West Dunbartonshire*) (Chairman)
Nick Ainger MP (*Labour, Carmarthen West & South Pembrokeshire*)
Mr Graham Brady MP (*Conservative, Altrincham and Sale West*)
Mr Colin Breed MP (*Liberal Democrat, South East Cornwall*)
Jim Cousins MP (*Labour, Newcastle upon Tyne Central*)
Mr Michael Fallon MP (*Conservative, Sevenoaks*) (Chairman, Sub-Committee)
Ms Sally Keeble MP (*Labour, Northampton North*)
Mr Andrew Love MP (*Labour, Edmonton*)
John Mann MP (*Labour, Bassetlaw*)
Mr George Mudie MP (*Labour, Leeds East*)
John Thurso MP (*Liberal Democrat, Caithness, Sutherland and Easter Ross*)
Mr Mark Todd MP (*Labour, South Derbyshire*)
Mr Andrew Tyrie MP (*Conservative, Chichester*)
Sir Peter Viggers MP (*Conservative, Gosport*)

Powers

The Committee is one of the departmental select committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No. 152. These are available on the Internet via www.parliament.uk.

Publications

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at www.parliament.uk/treascom.

A list of Reports of the Committee in the current Parliament is at the back of this volume.

Committee staff

The current staff of the Committee are Dr John Benger (Clerk), Sian Woodward (Second Clerk and Clerk of the Sub-Committee), Adam Wales, Jon Young, and Jay Sheth (Committee Specialists), Phil Jones (Senior Committee Assistant), Caroline McElwee (Committee Assistant), Gabrielle Henderson (Committee Support Assistant), and Laura Humble (Media Officer).

Contacts

All correspondence should be addressed to the Clerks of the Treasury Committee, House of Commons, 7 Millbank, London SW1P 3JA. The telephone number for general enquiries is 020 7219 5769; the Committee's email address is treascom@parliament.uk.

Witness

Tuesday 21 April 2009

Dr Paul Fisher, Executive Director, Markets, Bank of England

Ev 1

List of written evidence

- | | | |
|---|--------------------------------------------------------------|-------|
| 1 | Dr Paul Fisher: response to Treasury Committee questionnaire | Ev 8 |
| 2 | Dr Paul Fisher: curriculum vitae | Ev 12 |

Oral evidence

Taken before the Treasury Committee

on Tuesday 21 April 2009

Members present

John McFall, in the Chair

Nick Ainger
Mr Graham Brady
Jim Cousins
Mr Michael Fallon
Ms Sally Keeble

Mr Andrew Love
John Thurso
Mr Mark Todd
Mr Andrew Tyrie
Sir Peter Viggers

Witness: **Dr Paul Fisher**, Executive Director, Markets, Bank of England, gave evidence.

Q1 Chairman: Before I ask Dr Fisher to identify himself, I think it appropriate to place on record our tribute to Eddie George, Baron George, as he became, the former Governor of the Bank of England between 1993 and 2003. I know, Dr Fisher, you were private secretary to Eddie between 1999 and 2002. He gave evidence to us on many occasions and was always a most impressive witness. I had the pleasure of knowing him in both a formal and informal setting. He was a wise and good man, proud of the position that he achieved but humble on how he executed that position. I would describe him as a simple man: simple in his tastes, simple in his dealings with people but simple in that he left a profound impression on people. We will miss him. He made a tremendous record for the Bank of England. I think it is only appropriate to put that on record.

Dr Fisher: Thank you for your sentiments.

Q2 Chairman: Can you identify yourself for the record?

Dr Fisher: Good morning Chairman and Members, I am Paul Fisher, Executive Director, Markets, at the Bank of England and member of the Monetary Policy Committee.

Q3 Chairman: Looking at your CV, it appears that you have little experience of working outside academia or the Bank of England. If we look at the financial crisis over the past couple of years, as one of my colleagues said, maybe above all the economists and mathematicians have told us less than anybody else about the situation and how we get ourselves out of the situation. What makes you think you are appropriate for that hallowed position you are now going to occupy?

Dr Fisher: Two things: first of all, the particular position I have been asked to occupy is as financial markets director so my relevant expertise in financial markets of course is appropriate for that particular role. But in terms of experience of the real economy during the 1990s I ran one of the economics divisions that was responsible for monitoring the reports from the banks' agents; in fact, I carried out their appraisals as their line manager for four years.

During that period I would get out to visit the agents very regularly and have regular contacts with business leaders and contacts around the country. I had quite a lot of experience of going around factories and offices speaking to meetings of small businessmen during that period.

Q4 Chairman: You are mindful of the criticism of this Committee on Northern Rock that felt that the Bank of England was behind in terms of looking at individual institutions and not having real-time knowledge of the market. Given that criticism and observation, how do you intend to ensure that you really know and understand the markets and have that contact there?

Dr Fisher: There are two ways into that. First of all, I have a lot of people working for me who have a network of contacts in the markets and I am talking to them all the time and we have regular meetings. We try to know all of the major firms in the London markets from dealer level up to the senior executive level, and that includes not just banks but all manner of firms: insurance companies, hedge funds, anybody that is an actor in financial markets we can talk to. I personally will be seeing as many people as I can but the important thing is to have some personal relationships with people who are very key in those markets so that when something is happening they will actually call you and tell you what is going on and not just rely on us reaching out. It is a two-way process of building up relationships and making sure you have your finger on the pulse of what is happening.

Q5 Chairman: Following the Governor's appearance before us on Tuesday 24 March there was an uncovered gilt option on the Wednesday, the next day. Early reports suggested some of his comments here had led to the uncovered option. What did your market contacts suggest had happened?

Dr Fisher: I spoke to quite a number of people in the market, at the DMO and my own team about what was likely to have happened. I think the biggest factor was this was just before a quarter end when the market-makers in the auctions were under very

severe balance sheet pressure and trying to reduce those balance sheets. They did not particularly want to be holding a large stock of long-dated gilts on their books across the quarter end. That seemed to be the main factor. They did actually buy something like 1.5 billion in that particular auction; they just did not buy enough to cover the complete 1.75 that was on offer. In those circumstances, I think that was about 80% of the explanation for this. There were then other factors. There was a lot of talk about government deficits and there were also inflation numbers earlier that week. There were a number of factors also encouraging the market-makers just to hold back a bit in that particular auction.

Q6 Chairman: The asset purchase facility, how positive has the market been to that initiative?

Dr Fisher: The people I talked to—and generally I am talking to people from dealer level up to senior management level—are generally supportive of what we are trying to do with the asset purchase facility. They think it was the right policy move and they support us in what we are trying to do in terms of expanding the money supply and turning the economy around.

Q7 Mr Brady: Earlier in the current crisis the Governor was very insistent on the importance of moral hazard. Do you agree that moral hazard has largely disappeared in the financial markets today?

Dr Fisher: I think we continue to have to be very conscious that what our actions are now will impact on what people expect us to do in the future. That is the essence of moral hazard and we have to be very much aware that what we are doing will actually set a precedent for how people expect us to behave.

Q8 Mr Brady: Does the precedent set so far not detract from the idea of moral hazard?

Dr Fisher: I do not think so. It is a concept. It is really about the interaction between policy making and what people want you to do. If every time somebody asks us to do something we did it, then in future they would expect us to be that malleable again, so we have to be very clear for ourselves how we are going to approach a problem and what we are and are not prepared to do.

Q9 Mr Brady: Do you think that clarity involves now setting out some parameters as to when intervention might happen and what circumstances in the future?

Dr Fisher: Certainly, in all of the operations for which I am responsible, we try to set out as clearly as we can in advance exactly what the parameters of the operation are. All of the sterling market operations and the foreign currency operations we do we try to be as transparent about that up front so there should not be any surprises when it comes to what the operations are. Within that, of course, we try to be flexible in the design and nature of those operations to be able to cope with what is a very deep crisis in the real economy and in the financial sector. Yes, one does try to be clear up front about what the situation is. There is a slightly different problem in relation to

the resolution of banks that are failing where historically you always wanted some ambiguity. You do not want banks to know that you are going to bail them out, for example, because they will take the wrong decisions if they know that.

Q10 Mr Brady: Today we almost have the opposite problem now that everybody assumes we will go in and bail them out.

Dr Fisher: I think actually the problem in the market at the moment is that people are uncertain exactly how the authorities will react in any particular situation in resolving a bank. This is a particular problem for the holders of the so-called sub-debt, the subordinated debt, of the banks, in that they are unsure exactly how they will be treated and that is one of the biggest issues facing the market at the moment.

Q11 Sir Peter Viggers: Financial markets have become ever more sophisticated and no doubt this will continue. If you accept that this means that the risk posed by these very sophisticated markets is greater than it was decades ago, there may need to be a different kind and style of regulation. Do you agree with that and, if so, what part do you expect to play in it?

Dr Fisher: It is very important that the regulators understand exactly how the markets work in detail and that is a challenge because the markets have been very innovative over the last ten years or so introducing lots of products. As you will be very aware, part of the problem is indeed that the people running large financial institutions often themselves did not really understand what products they were dealing in and what the risks were. It is absolutely clear the regulators have to be on top of that and that is just a matter of training and skills and people getting close to the market to work out what is actually happening on the ground.

Q12 Sir Peter Viggers: You would bring to the post a continuation of the very strong academic strain in the Bank of England. It has been said that the Bank of England might perhaps be criticised for being better on analysis than action. What weapons are available to you if you see things are going wrong?

Dr Fisher: We have a range of facilities that we provide as liquidity insurance to the banking system ranging from our routine open market operations through the long-term repos up to the discount window facility. We have a range of facilities which are available to support the financial system. In terms of analysis, just on that point, it has been a characteristic not just of the Bank but of the UK response generally that the authorities have wanted to think very carefully before introducing a new policy. The reason for that is it is very easy in these circumstances to actually get the policy wrong and actually make the situation worse. If you look around the world, we have had one or two examples where policies have been introduced where the authorities have had to back-track and that has made the situation worse in those markets. We do need to be very careful. We have taken pretty decisive

21 April 2009 Dr Paul Fisher

action over the last 18 months. The cuts in interest rates from 5% to half a per cent is a record low in interest rates and a record rate of reduction, for example.

Q13 Sir Peter Viggers: You have sat as an alternate at Bank International Settlement board meetings. Do you think reforms are needed of the international financial architecture to prevent the current problems recurring both in the BIS and the IMF?

Dr Fisher: I think it is fairly clear that we need some better mechanisms for co-ordination and setting of policy internationally. Over the last ten years countries around the world have all been successfully setting policy according to what they saw as the needs of their own domestic economy. What happened as a result was a very big build up of imbalances between countries. The United States and ourselves had record current account deficits and countries in the Far East were building up record surpluses. Each individual policy setter thought they were doing the right thing so there is clearly a problem there in policy co-ordination which needs to be addressed. I am thinking of that pretty much from a monetary policy point of view. The international financial architecture goes wider in terms of helping countries out with balance of payments difficulties and so on.

Q14 Sir Peter Viggers: In particular, are you concerned about off-balance sheet exposures of large institutions that operate in international financial markets?

Dr Fisher: Do you mean offshore centres?

Q15 Sir Peter Viggers: No, I was thinking specifically of off-balance sheet exposures.

Dr Fisher: One of the problems we have seen is that whatever regulations you set, people work very hard to get around them. Off-balance sheet exposures have been one way to try and work their way to meeting the regulations and still generate risk and that is obviously a concern which needs to be addressed.

Q16 John Thurso: To what extent are you concerned about the recent weaknesses in sterling?

Dr Fisher: I try very hard not to comment on the level of sterling. Sterling actually is a relatively liquid market in terms of the size of the economy. We have quite a lot of trading in sterling and the market is really, at the end of the day, going to find its own level. I try not to express any concern because anything I say about that might cause the exchange rate to move up or down. It is quite clear the UK economy was building up a very large current account deficit so in some fundamental sense the depreciation of sterling was warranted in the long run. We have seen a very substantial depreciation. That has, if anything, been supportive of the direction of policy over the last 18 months or so in terms of wanting to loosen conditions. But this is a situation in which countries cannot seek to depreciate their way out of trouble because every country would be trying to depreciate against each

other. I think the best thing we can do is set domestic policy to try to meet domestic needs and allow the exchange rate to find its own level.

Q17 John Thurso: Part of the reason for my question is that there are a number of commentators who have been forecasting a complete collapse in confidence in sterling and warning of the problems of that for our economy. How would you rebut that if you wanted to?

Dr Fisher: My observation is the foreign exchange markets tend to look at what sort of policies you are running and whether they are appropriate for your circumstance. If they think you are setting policy well, then your currency will be reasonably strong and stable. If they think you are setting the wrong policies, you will get a weakening of sterling relative to the level it should be. So far this year the markets have responded very positively to most of the policy announcements that have come through and so I would take from that that they are supportive of the policy actions that have taken.

Q18 John Thurso: Do you think you should be particularly aware of that kind of loss of confidence that goes beyond, as it were, the rational market numbers, and what have you got in place to detect that?

Dr Fisher: It is always a risk. We have ourselves an active foreign exchange desk and so our dealers are in constant communication with dealers in the foreign exchange market in London. The foreign exchange market by and large is in London; we have 40% of turnover here. We have very immediate connections through to what the foreign exchange market is thinking about what is happening. Of course, loss of confidence will be an issue if sterling depreciated in an unwarranted fashion as that would create upward pressures on inflation which might be unwelcome. We hope that does not happen. I should say, if it is purely confidence, you would expect that to be temporary unless there was some long-term impression that UK policy makers were going to be off the pace.

Q19 John Thurso: In your questionnaire I noted that you said the bank maintains a small but liquid pool of foreign exchange reserve assets which the MPC could use to intervene in currency markets. Do you ever see the MPC considering such a move?

Dr Fisher: They have considered it in the past. There are four occasions in the MPC minutes which record them discussing whether foreign exchange intervention would be appropriate. They were all in the context of sterling being too strong and whether the MPC should intervene to put some sort of lid on sterling. Most of those discussions were short and the MPC fairly quickly came to the conclusion that they should not intervene. I think those were absolutely the right decisions. It is an instrument of policy which you cannot neglect and you cannot say never. One always has to be prepared to have all the instruments at your disposal and so we have foreign exchange intervention at our disposal should it be necessary.

21 April 2009 Dr Paul Fisher

Q20 John Thurso: Do you think, given the very changed circumstances we are in now compared to some years ago, that it would have been wise not to have reduced our gold reserves but to have held on to those?

Dr Fisher: The problem with the gold reserves is that they are not very liquid. We still hold 300 tonnes of gold but you cannot go out to the market and sell 300 tonnes of gold very quickly. It took several years to sell the 400 tonnes that was sold. In terms of what would I like to be available to me as an instrument to help me if I was intervening in foreign currency markets, it would not be gold. I think gold has more value in a much longer term sense if you get into situations where you might be at war or some dramatic circumstances like that. That is the time gold may be a useful reserve asset. I do not think the reduction in gold is particularly relevant to the situation we are focused on now. I would rather have the more liquid assets.

Q21 Ms Keeble: In a recent speech President Obama said there were glimmers of hope that things might be getting better. Do you share that optimism?

Dr Fisher: There are obviously some signs that some of the statistics around the economy are improving slightly. It is definitely in a sense that things are not deteriorating as quickly as they were. One or two things are looking like they are more stable but I would be quite cautious in my optimism. Suppose the worst of the recession was past just for the sake of argument. The recovery from here on would be quite slow and bumpy. There will be periods where the data looks better and there will be periods when it looks worse again. I would not want to be too forward in saying it is all over and the worst is past.

Q22 Ms Keeble: Do you agree with David Miles that the quantitative easing is having some impact in particular in bringing down the long-term interest rates?

Dr Fisher: Clearly it has had an impact on yields, and you can see that very clearly on the announcement, but it will take us quite a long time to know whether it is having the intended impact just as it would with the change in interest rates.

Q23 Ms Keeble: In your questionnaire you said that you thought the quantitative easing should be done quickly and to scale. Do you think it has been done to enough scale to have the sort of kick start that is needed?

Dr Fisher: I think the £75 billion figure surprised the markets on the upside, certainly taking that as one indication of scale. We did calibrate the £75 billion as best we could. It is roughly 5% of normal GDP, which is roughly the amount of missing normal expenditure from the economy this year so it is the right sort of order of magnitude to fill the gap that we see in the economy.

Q24 Ms Keeble: Do you think there will be the need for more or do you think it has been fast enough?

Dr Fisher: The Committee are going to have to have a long and serious discussion of this, particularly at its May meeting and its June meeting, as to whether or not we need to do more.

Q25 Ms Keeble: Where would your views lie, on more or caution?

Dr Fisher: At the moment it looks to me to have been calibrated reasonably well at about the right size but the point of the Inflation Report is that we take a much longer term look at how the economy is evolving and what the pressures are and it is best to make the judgment in that context.

Q26 Ms Keeble: I wanted to ask about the risks. You have mentioned in your questionnaire briefly about the risks to the taxpayer. Are you satisfied to rely in particular on the investment rate done by the credit rating agencies for the assets that are being purchased or do you think that, as there was criticism this morning of the credit rating agencies and their performance in the United States, that the Bank should undertake its own assessment of the valuations?

Dr Fisher: We use a range of evidence to try to assess whether or not it is safe to buy these assets but when we are offering the facility for general use you have to have some sort of external indicators which everybody else can see as well. The ratings by the rating agencies are part of that so everybody can see what some of the criteria are, but above that we always reserve the right not to buy something if we think it is too risky.

Q27 Ms Keeble: How do you go about exercising that right? There is a lot of scepticism of rating agencies because they are part of what got us here in the first place. To what extent does the Bank then do its own due diligence on the assets it has purchased?

Dr Fisher: We look at every company as it comes up and it is at the time of purchase you really need to do the due diligence. We are also keeping an on-going dialogue with the market and with the banks to try and make sure we keep abreast of what is happening in the different sectors of the economy.

Q28 Ms Keeble: Can you put a figure on what you think the risks to the taxpayer might be? You have put that they are offset by the beneficial effects of the scheme which is clear but can you quantify the risks in any way?

Dr Fisher: What we have tried to do is make sure the pricing on the assets we buy is such that we take into account the likely default probabilities for those assets and we are charging a fee which should cover us against expected defaults. Our expectation at the start would not be that we had net losses because we expect to recoup in the fee more than the expected losses. You could have a particular shock which hit a particular holding you have, so that you cannot be absolutely guaranteed you will not have any losses. But we hope the fees would cover the expected losses.

21 April 2009 Dr Paul Fisher

Q29 Mr Fallon: The Governor warned against another significant round of fiscal expansion. What is your view?

Dr Fisher: I read the Governor's comments last night just to check what he said and he was advocating caution given the size of fiscal deficits. But for me here today it is rather difficult and awkward for me to comment on what is going to happen to fiscal policy given that we have the Budget tomorrow.

Q30 Mr Fallon: I am not asking what is going to happen; I want your view of what should happen. He warned against another significant round of fiscal expansion. What is your view?

Dr Fisher: I found the Governor's comments ones I could very much agree with.

Q31 Mr Fallon: You do not have your own view?

Dr Fisher: I think it is best for the government to set fiscal policy and for the Monetary Policy Committee to focus on monetary policy. I really do not want to get drawn into a political debate about what the government should and should not do in the Budget tomorrow.

Q32 Mr Fallon: The Governor expressed a view. You are joining the Monetary Policy Committee. You have come out of the shadows now. You have views of your own presumably.

Dr Fisher: What I am focused on now is assessing what is actually in the Budget tomorrow and what the impact of that will be for the economy going forward because that is what I need to do in the context of the May Inflation Report. I am not focused at the moment on speculating what should or should not be in the Budget tomorrow.

Q33 Mr Fallon: But you do not think the Governor was wrong?

Dr Fisher: I think what the Governor said were totally orthodox views, which most sensible people would share.

Q34 Mr Fallon: That is the Bank's view as well as yours?

Dr Fisher: I think the Governor was speaking for himself and I did not dissent from what the Governor said.

Q35 Mr Fallon: I would like to try and get you to speak for yourself.

Dr Fisher: We are speaking the day before a Budget and as an MPC member I am in a slightly awkward and privileged position regarding what might happen with fiscal policy.

Q36 Mr Fallon: Do you think the VAT cut is working?

Dr Fisher: I think the VAT cut should have a positive impact on the economy. It is very difficult to work out, when you take these measures individually, what the impact actually is. There is no reason why it should not work in terms of having a positive impact.

Q37 Mr Fallon: I understand why it ought to work but what I am trying to get at is, after five months now, whether you think it is working? You must have been outside the Bank in that time.

Dr Fisher: It works in an invisible way. You have put in 2.5% of extra money on some purchases, either into the tills of the shops or into the pockets of consumers. That is a relatively small amount and no individual retailer or consumer is going to notice that much but in aggregate it is quite a large amount and so I would expect that to be having a reasonable impact. That is factored into the forecast as a positive impact on the economy.

Q38 Mr Fallon: You would expect it to have an impact. Is it having an impact?

Dr Fisher: I think it is. I could not point to you and say this is the particular way I can quantify the impact it is having.

Q39 Mr Fallon: You think it is working.

Dr Fisher: I think it is working along with very many other policy measures that are also working. It is not a silver bullet. It was not one thing in itself which was going to turn the economy around. It is having an impact on the margin.

Q40 Mr Fallon: It is quite expensive. How long do you think it should continue?

Dr Fisher: It is set to continue for a year, and whether it should continue for longer than that is a matter for the government to decide.

Q41 Mr Fallon: You do not have a view.

Dr Fisher: I do not really have a view on all the details of what fiscal policy should be.

Q42 Nick Ainger: To what extent do you think the housing market has started to stabilise?

Dr Fisher: Just the other weekend I was dealing with a house privately as part of an estate and we had three estate agents all tell us they thought the housing market was stabilising. That is repeated in some of the views of the industry more generally, but, of course, they have an interest in saying that. I hope it is true. I think it possibly could be true but I would be cautious. This is the spring and this is the time of the year when the housing market would be expected to pick up a bit normally so it is not surprising if you see a bit more activity around this time.

Q43 Nick Ainger: On the reports from various estate agents and the CML it would appear there is still a problem for first-time buyers and the availability of mortgages for them. What action do you think is necessary to try and address that problem to give that kick start from the bottom of the market up?

Dr Fisher: The most important thing for the housing market is that prices be allowed to adjust to a level at which people can afford to buy houses. We saw a lot of repressed demand for housing over the last few years. People have not been able to get on the property ladder because housing was just so expensive. We have to allow the housing market to find a new level at which people can enter. If it means

in future that people will have to save up a bit more to have a larger deposit that is probably a very sensible thing. We have to allow these adjustments in the housing market to work their way through. There is a danger that policy intervention in the housing market could actually stop those sorts of adjustments happening. This is one of those things where you have to be very careful with the policy intervention so you do not make it worse.

Q44 Nick Ainger: From your perspective, how important is the housing market to the recovery overall of the economy?

Dr Fisher: I do not think it has quite the importance that the coverage in the media would suggest. Everybody is interested in the housing market because we all have houses and most of us have mortgages but actually the biggest risk to the economy is the availability of credit to the business sector not to the personal sector.

Q45 Nick Ainger: One of the problems that certainly our inquiries have shown is there is this crisis in confidence not just within the banking sector but out there in the wider economy, fear of unemployment even for those who, when you actually analyse their position, it is unlikely they are likely to lose their jobs. The housing market is a reflection, is it not, of that lack of confidence? If the housing market does not start to stabilise and people start being able to get mortgages again, we have not restored confidence and therefore they are not going to go out and buy things and therefore the overall economy is not going to pick up in the way we would like it to.

Dr Fisher: It is one of the indicators of confidence and that is why I would be very keen for the adjustments to the housing market to be quicker rather than slower and so we get to that point where the recovery sets in and picks up.

Q46 Nick Ainger: Related to it are the levels of unemployment. Do you share Professor Blanchflower's concern about the need to counter the increasing levels of unemployment?

Dr Fisher: I think I share his experience that during the 1980s prolonged spells of unemployment were quite damaging for particular sectors of society. I think there are issues around trying to make sure that people, particularly young people, do not have very long spells of unemployment. Really that is a longer term supply side matter for the government to address rather than for us on the Monetary Policy Committee. Professor Blanchflower happens to be an expert in that particular area of the economy so those are his personal views.

Q47 Nick Ainger: Given the current circumstances where predictions are saying it could be 3 million unemployed, it could be even 4 million unemployed by 2012 because of the lag and so on, are you concerned that the MPC is not really balanced? Now Professor Blanchflower with his expertise has gone, is there not a rather large gap there. Bearing in mind what the overall economy is going to be facing over

the next two or three years in terms of unemployment, the MPC has lost his expertise at the very time it needs it most.

Dr Fisher: Of course we still have one further appointment to the Committee to make. Professor Besley is leaving the Committee later this year so we have to wait to see whether or not it is a labour market expert that gets appointed or not. We have four external appointments on the Committee and that is a limited number to try to cover all sectors of the economy. If we are missing a particular area of economic expertise in terms of Committee membership, then we have to go out and make sure we can tap into that expertise through other routes. We welcome academics into the Bank from all quarters for seminars and to give advice. We have regular visitors and we are not completely shut out from the expertise. I would expect the labour market team at the Bank to keep in close touch with the leading academics in that field.

Q48 Mr Tyrrie: I have a few questions on things you have said. Would you oppose changing the balance so that we have five outside appointees and four from the Bank to deal with exactly the point you have alluded to?

Dr Fisher: I have been working with the Committee ever since it started and there was a lot of discussion about these sorts of internal and external balances. In fact, I do not think it has ever really been an issue the Committee dividing between internal and external members.

Q49 Mr Tyrrie: I was not asking about that division. I was asking about the question of expertise where you say we have only got four appointees to cover the whole of the economy.

Dr Fisher: One of the issues on my mind is nine members is quite a lot of people already to have a discussion around the table with so we certainly would not want more members.

Q50 Mr Tyrrie: I am asking you a simple question. Would you oppose a change in the balance to five:four in favour of outsiders?

Dr Fisher: I would not vote for it. I think the current system and the current balance works pretty well so I would not vote for it. I do not think I would oppose it because it is for others to decide who should be on the Committee.

Q51 Mr Tyrrie: Could I ask you about something you said in response to Graham Brady about moral hazard. You said that the attention of banks was now focused on subordinated debt and how that might be treated by the authorities. Can you say a little bit more about that?

Dr Fisher: The subordinated debt was bought by a lot of the asset managers: insurance companies and pension funds. They are the holders of it and because of the way around the world, not just in the UK but in the US as well, different institutions were resolved in different ways and different classes of debt holders were treated differently, they are unsure about how those holdings of subordinated debt will get treated

21 April 2009 **Dr Paul Fisher**

in a bank resolution, and because of the certainty they find it difficult to price. They find it difficult to transact in those markets. They are sitting on a lot of assets whose value they are not sure of and whose liquidity has largely disappeared. That has been quite an important running debate over the last few months.

Q52 Mr Tyrrie: What is your proposal: give them certainty or retain the uncertainty for fear of creating moral hazard?

Dr Fisher: At the moment we do not have a proposal that would give them that certainty. What we have seen, however, in relatively constructive moves, is the banks starting to offer to buy back that debt. That is one way to remove the uncertainty, i.e. for the banks to buy it back and that seems to me to be a positive way out of the issue. If they can buy it back at a discount, it would also improve the bank's own capital position so that is something I would encourage.

Q53 Mr Tyrrie: You said some very interesting things about the four meetings at which the MPC considered intervention in foreign exchange markets to address the value of the sterling. Do you think it is conceivable that the Bank of England would want to get engaged in a sustained policy to affect the value of sterling directly in that way without it being also part of the policy of an elected government?

Dr Fisher: I think it is very unlikely and that is why our foreign currency reserves are quite small. The circumstances in which foreign exchange intervention becomes a sensible option are really quite rare. It normally has to be in circumstances where it would support your existing monetary policy action: what you are doing with the interest rates. Quite often what we saw in the past in UK history was people trying to use the exchange rate intervention as a lever because they could not set monetary policy to do the right thing and it was working in opposition. I think the circumstances under which foreign exchange intervention would be appropriate are quite unlikely but we cannot rule it out.

Q54 Mr Tyrrie: But a conflict between the Bank and the government about the value of sterling is inconceivable. That is what you are saying, is it not?

Dr Fisher: No, it is not so much about the conflict between the Bank and the government. If the MPC wishes to intervene, they have the right to do so and they have the mechanics to do so.

Q55 Mr Tyrrie: You are saying they will not use it if it is not also government policy.

Dr Fisher: No, they will not use it unless it is supportive of their other monetary policy intentions, i.e. supportive of what they are doing with interest rates.

Q56 Mr Tyrrie: So it is possible you may intervene in a way which contradicts government policy on the value of the currency.

Dr Fisher: The government has a policy of not intervening in currency markets.

Q57 Mr Tyrrie: At the moment they do.

Dr Fisher: Ultimately it is for the government to decide what the overall exchange rate policy is.

Q58 Mr Tyrrie: This is what I am trying to get at. We have now arrived at the question I was asking. What is the answer?

Dr Fisher: The exchange rate policy is part of monetary policy. The monetary policy framework we have is an inflation target. We do not have an exchange rate target. The MPC can intervene in exchange markets if it thinks it is appropriate to help meet the inflation target. That is the situation at the moment and the government has a policy of not intervening in currency markets directly itself.

Mr Tyrrie: It is something that, if sterling were to fall much further, we might want to come back to.

Q59 Jim Cousins: Was the switch from RPI to CPI a mistake?

Dr Fisher: It is not something the Bank was particularly looking for and let me explain why. The important thing with something like the monetary policy is that you have a nominal target which you are following with interest rates. Exactly, precisely what is the target is less important than you have a target and you stick to it and everybody understands it, knows what it is, and can see what you are trying to do. If you keep changing the target then people will lose confidence in what you are trying to do. As it happened, CPI is technically probably a better measure of inflation in terms of the way it is constructed but had a flaw that it excluded house prices because they could not agree across European statistical agencies how to appropriately measure house prices. It had some advantage and it has a disadvantage. Would it have made much difference had we stuck with the original target measure RPIX? It might have made a small difference at the margin but I do not think it would have made a huge difference in terms of what would have happened to interest rates over the last seven or eight years.

Q60 Jim Cousins: You do not think the August 2005 decision would have been different?

Dr Fisher: I do not think it necessarily would have been different. It is a decision where I would have voted with the minority myself not to cut interest rates.

Q61 Jim Cousins: That is with the advantage of hindsight. There are extreme inbuilt imbalances in the world economy. Do you think the G20 addressed those imbalances?

Dr Fisher: The world economy will itself address those imbalances if policy makers do not take action and we are seeing that. We are seeing the current account deficits in the UK and the US reduce.

Q62 Jim Cousins: You mean the imbalances in the end will be corrected by the natural force of events in the market.

21 April 2009 Dr Paul Fisher

Dr Fisher: Eventually, yes.

Q63 Jim Cousins: Would that be a painful process?

Dr Fisher: It could be in that one has very little control over how quickly the market drives you to those solutions. It is not just the markets but the workings of the economy as a whole which drives you to that change. We are seeing that. Our trade deficit is coming down and the USA's trade deficit is coming down. Countries that were running large surpluses with export-linked growth have seen very sharp reductions in growth. That sort of correction is happening. What I have not seen yet is a policy proposal which would make a big difference in the future to stopping these sorts of imbalances building up again and that is where we need to get eventually.

Q64 Jim Cousins: That is an important point. One thing you did say this morning was that whatever regulations you set people work very hard to get around them. That is hardly an adequate description for a financial markets' culture which is seeing the rise of the alpha male who brooks no criticism, deals with it by personal abuse, creates systems around them of yes people in order to resist any kind of contrary view and regulators who have found it very difficult to deal with a financial market's culture dominated by these kind of alpha males, and of course the media machines they can buy and put in place to protect them. Do you think you have the personality to deal with those alpha males?

Dr Fisher: I have come across quite a few of them in my career both inside the institutions I have worked at and outside, the particular people you describe much more outside, of course than inside. I do not find it difficult to deal with such people myself although, as it stands, I am not a regulator of course. I have had some experience in that the committee I chaired on the foreign exchange market maintained a voluntary code of conduct for the financial market. That is the closest I have come to being a regulator and I did not have any problem in chairing that committee with the heads of foreign exchange from around the London banks.

Q65 Jim Cousins: The evidence we have of recent years is that the regulations are well intentioned and the regulators, no matter how persistent and inquiring, and the committees no matter how numerous and grand and full of the great and the good, none of them were able to withstand the impact of the decision making of the grandees, the alpha males. They have dominated our financial markets, undermined them and destroyed them. Do you think you have the personality to deal with people like that?

Dr Fisher: Yes, certainly in the context of the job I am expected to be doing. I am not, however, taking the job of a regulator just to be clear.

Chairman: You hope you will get an alpha from us that we will never be plagued by an alpha male. Are you quite happy with that? Can we thank you for your attendance this morning and wish you well in your post as Executive Director of Markets for the Bank of England. Thank you very much.

Treasury Committee Questionnaire: Response from Paul Fisher

RESPONSIBILITIES AS A MEMBER OF THE MONETARY POLICY COMMITTEE

1. *Please explain how your experience to date has equipped you to fulfil your responsibilities as a member of the Monetary Policy Committee.*

Before joining the Bank I spent 10 years in academic research posts at Warwick University specialising in macroeconomic modelling: the subject of my PhD thesis and of the majority of my published work (which comprises contributions to around 30 academic articles/books).

In my first few years at the Bank, I carried out research on the Bank's macroeconomic model and on modelling the monetary aggregates. I co-authored articles on the broad and narrow money (M4 and M0) and on the construction and modelling of Divisia money.

As Group Leader of the Forecasting Group from Autumn 1992, I was directly involved in preparing the first Inflation Report forecast. I continued to be involved, in a variety of management roles, in preparing and presenting the forecasts, until February 1999 (including as head of the forecasting division – Conjunctural Assessment and Projections Division or CAPD—from the start of 1995). In my view it is essential to employ the best statistical techniques and economic theories to help derive quantitative projections; yet I am more aware than most of the many potential pitfalls associated with the use of models and forecasts and the necessity of using judgment to determine the MPC's outlook for inflation.

During much of the 1990s I was responsible for assessing/presenting data on UK demand, output and prices, and the assessment and outlook for the major international economies, to the Governors and subsequently the MPC. Since 2002 I have regularly presented to the Committee on developments in financial markets.

At the start of 1998, I joined the three-person MPC secretariat writing the MPC Minutes. I had to leave in early 1999 when I became the Governor's Private Secretary but subsequently re-joined the team in early 2006 and I attended MPC meetings for around four years in all, prior to joining the Committee.

As an academic and as an economist in the Bank, I made many presentations at academic conferences and seminars. During my time as Head of CAPD, I undertook monthly visits to the Agencies, joining meetings with contacts and learning to establish a rapport with business leaders. In more recent years as Head of Foreign Exchange Division I have spoken regularly at industry conferences. This has given me a lot of experience at communicating with a variety of audiences.

In sum I believe that my experiences in macroeconomic modelling and forecasting, in domestic and international data assessment, and in financial markets, together with experience of attending MPC meetings and writing the Minutes, make me very well qualified to be a member of the Monetary Policy Committee.

2. *What contributions have you made individually to the conduct of monetary policy within the Bank?*

In addition to my work on data presentations, forecasts and the Minutes outlined in response to Question 1, I have also made the following direct contributions:

A colleague and I specified and estimated a new forecasting model in 1994, which was the basis for subsequent Inflation Report forecasts and, in revised forms, was used by the MPC prior to adopting the “BEQM” model. My team was also the first to develop the concept of the “Suite of Models” approach into a practical proposition, emphasizing the eclectic nature of forecasting at the Bank.

My team and I designed and constructed the first “fan charts” which are still used to portray the Inflation Report projections (reported in Fisher, Britton and Whitley, Quarterly Bulletin, 1998).

A number of other devices and reporting formats my team and I introduced during the 90s are still being used today eg the Agent’s summary, surveys and monthly scores (which are now published).

More recently, in the Markets directorate, I helped my predecessor to reform the culture of the Area to focus on market intelligence issues, including the mission to inform the Monetary Policy Committee via its monthly briefings and ad hoc requests.

As Head of the Foreign Exchange Division, I have been responsible for re-building the Bank’s holdings of foreign currency assets to provide a small but liquid pool of foreign exchange reserve assets, which are now available should the MPC wish to intervene in currency markets.

3. *What activities do you intend undertaking in order to add to the public’s understanding of the role and decisions of the Monetary Policy Committee?*

My role as Markets Director means that I expect to spend a considerable amount of time meeting and talking to individual participants in financial markets, financial sector firms and representatives of different groups. These meetings can all be used in whole or in part to explain the role and decisions of the MPC. For example, since I started my new job on March 1st I have had around 50 meetings or formal conference calls with market participants and representative groups, just on the subject of the Asset Purchase Facility, and around 25 meetings on other issues (plus numerous ad hoc phone calls).

In addition to meetings with financial market participants, I expect to make three or four regional visits a year to meet with representatives from industry and I expect to make speeches about my views on monetary policy (plus other speaking engagements on financial markets). My first regional visit and speech are currently scheduled for 12 June.

Beyond that, for the public at large, I would like to explore the production of easily accessible information on how we set Bank Rate and how we provide liquidity insurance to the banking system (the Sterling Monetary Framework) for use in schools, by the media and for general public interest.

4. *Do you intend to serve out the full term for which you are appointed?*

Yes.

RESPONSIBILITIES AS EXECUTIVE DIRECTOR FOR MARKETS

5. *Please explain how your experience to date has equipped you to fulfil your responsibilities as Executive Director for Markets of the Bank of England. In particular, in what areas do you believe you will be able to make an immediate contribution and in which areas will you have to undertake additional research when in post?*

I have served as a Head of Division in two directorates of the Bank – Monetary Analysis (1995–99) and Markets (2002–09). From the start of 1999 until Easter 2002 I was private secretary to the Governor, Eddie George. That gave me a unique insight into all aspects of managing the Bank, and policy formulation across a broad front.

The Markets directorate of the Bank is an operational area which: implements monetary policy; provides liquidity insurance to the banking system; manages the Bank’s balance sheet; and manages the United Kingdom’s foreign exchange reserves. On the back of its operational capabilities, the Markets Area has a market intelligence objective which feeds in to both Financial Stability and Monetary Policy. As Head of the Foreign Exchange Division from March 2002 until end-February 2009, I was responsible for all operations denominated in foreign currency and for market intelligence across a broad range of contacts and markets.

Personally, from 2002–09, I chaired the Foreign Exchange Joint Standing Committee which maintains the voluntary code of conduct for trading in the foreign currency markets in London. I also represented the Bank at the G10 Markets Committee meetings in Basel and was an alternate to the Governor for the BIS board meetings. These, and other activities, mean that I have developed a network of private sector contacts across many markets and in the major financial centres globally. I also have a wide range of central bank contacts in both developed and EME countries.

Since the start of the financial crisis I have been increasingly involved in developing operations in the sterling markets, such as the Special Liquidity Scheme and the Asset Purchase Facility (as well as leading on the Bank's dollar repo facility and central bank swaps).

I have also served on various management committees of the Bank at different times.

Given my extensive experience, I feel there is not much need for me to research the work of the Markets Area and I have been able to make a contribution on all issues from the start. In particular I was fully familiar with the programme of asset purchases financed by central bank reserves which the MPC voted to introduce a few days after I took over as Executive Director for Markets.

There are two specific issues where I know that I do need to get up to speed. (i) I have not yet engaged on all of the finer details of the proposed developments to the Sterling Monetary Framework (the "Red Book Review") which have been the subject of a market consultation exercise. (ii) I do need to spend some time refreshing my knowledge of the Bank's current forecasting models (ie the suite of models including the "BEQM" model).

6. *What are your major objectives for the first six months as Executive Director for Markets?*

As you will know, the United Kingdom is suffering from the deepest recession in at least a generation and the worst global financial crisis in living memory. Helping to devise the Bank's policies to alleviate these shocks (to the extent that we can) and then leading on implementation of the associated market operations are my clear priorities. To have the desired impact, the right actions need to be carried out swiftly. Within that, the implementation of the Asset Purchase Facility and conducting the supporting operations of the Sterling Monetary Framework are the most urgent and important actions.

The range of special operations that the Bank has introduced means that there are unusually large reputational and financial risks—both to the Bank's balance sheet and to the public purse through HMG indemnities. So, as well as implementing the operations, continuing to manage those risks prudently is also an immediate priority.

Implementing the operations and managing the attendant risks requires us to build and maintain a dedicated and professional staff with the requisite skills and numbers. Leading those staff as Director is both a privilege and a challenge.

I shall, of course, be engaged in many other activities both internally and externally as I establish myself in the role of Director, but none of these are as important in current circumstances.

7. *The Markets area of the Bank of England has responsibility for implementing the Asset Purchase Facility, and the Special Liquidity Scheme. Are you comfortable with the design and implementation of those schemes so far? Is the taxpayer as protected as you think they should be?*

The Special Liquidity Scheme (SLS) was closed to new drawdowns at the end of January 2009, before I took over as Director, although I was part of the team that designed and implemented the scheme in March and April 2008. The scheme was very successful in achieving its objectives of liquefying legacy assets on the balance sheets of the UK banking system and will continue to offer that support for a further three years. Nevertheless, the existence of the SLS wasn't sufficient to protect the banking system fully from further substantial shocks. In particular, the fall-out from the collapse of Lehman Brothers in 2008 meant that further interventions were necessary.

The SLS has very significant protection for the taxpayer in form of substantial haircuts (ie extra provision of collateral against the loans of Treasury Bills) and daily re-margining. The SLS also charges a significant fee. But, in holding a portfolio of risky assets as collateral, one can never guarantee that there will not be any losses in the event of a counterparty default.

The Asset Purchase Facility (APF) is designed to expand the money supply in the context of near-zero Bank Rate. I am content that the design of the scheme broadly reflects its purpose and that it should be successful in expanding nominal spending – relative to what otherwise would have happened. There is no risk of credit loss associated with the purchases of gilts. Fluctuations in their value should be assessed in the overall context of the public finances, not in the narrow valuation of the APF Fund.

The purchases of commercial paper and corporate bonds have been designed as credit-easing policies to address clear market failures, rather than to acquire large quantities of assets or to fund particular markets or sectors. The commercial paper scheme seems to be working in its objective to provide cheaper access to short-term finance for UK corporates. The sterling corporate bonds scheme, although still relatively new, also seems to be succeeding in its aim of establishing some transparency and consistency of pricing, and hence to promote liquidity in the secondary market.

Inevitably, in holding corporate assets, it is quite possible that there will be credit losses. That said, losses should be limited directly by the designs of the schemes (eg purchases of investment grade only) and, assuming a sufficiently diversified portfolio is acquired, any losses crystallizing should be offset by the fees being charged.

There must be some risks for the taxpayer associated with each and all of the various special schemes in operation. But I am clear that the worst outcome would be an unnecessary deep and/or prolonged recession in the UK. In that context, I think the financial risks to the taxpayer are offset by the beneficial effects of these schemes on the outlook for the economy as a whole.

8. *How would you characterise the current state of the relationship between the Bank of England and Financial Markets?*

The nature of financial markets means that there is not a single relationship. Rather the Bank has relationships with many individuals, firms, lobby groups, media representatives etc. My own experience has been that the majority of contacts have been extremely supportive of the work that the Bank has been doing and criticisms are generally constructive. As Head of the Foreign Exchange Division, I took part in hundreds of meetings or phone conversations with market participants each year. The vast majority of contacts were helpful and supportive. Inevitably, some participants will judge the Bank by how they perceive our actions to impact on their own financial position. But most of the more senior people in the sector realize the wider importance of central bank actions to support the system as a whole, and they do all they can to help us meet our objectives.

One can always do more, however, and I anticipate spending a large part of my time in managing such relationships.

MACROECONOMIC ENVIRONMENT

9. *Over the next three years, what are the major risks you foresee to the MPC meeting the inflation target?*

The major risks I am concerned about are:

(i) That monetary accommodation does not have sufficient positive impact on demand and that we miss the inflation target on the downside. That could result either (a) from further downward shocks to the real economy, offsetting the monetary injection (b) from monetary loosening being ineffective.

Elaborating further on those points, in my view, the main downside risk to economic growth in the United Kingdom is the possibility of the world economy growing even more slowly than expected. The recently published data reveal a far more pronounced downturn in many overseas countries than in the UK and unexpected further weakness in world demand could hold back domestic growth. If this risk crystallises then our monetary policy actions may not have been enough.

I think that the biggest downside risks originating in the domestic economy are from business and consumer confidence remaining at recent historical lows, despite the policy actions, and from insufficient lending by the banking system. In these scenarios the transmission mechanism for monetary policy – whether from cuts in Bank Rate or increases in the money supply directly—might be substantially impaired. If so, monetary policy actions might have little material impact on nominal spending.

(ii) That the monetary loosening is successful in restoring nominal growth but that there is a much smaller positive response in real activity – and we miss the inflation target on the upside.

This could come about if businesses and individuals recognise that the very considerable monetary stimulus already in train will lead to higher inflation, and hence that increase is self-fulfilling, but that confidence remains so low, and/or the supply of credit remains so impaired, that investment and consumption expenditure remain weak.

(iii) There must also be a risk that the monetary loosening works better than expected and that the economy recovers more swiftly than projected, putting upwards pressure on inflation. But in that case the MPC should be able to respond quickly to tighten policy.

(iv) Although I can see these specific risks, perhaps my main concern is that, however skillful the MPC is in setting monetary policy, and however effective the measures turn out to be, excessive expectations about what policy should achieve, combined with the seriousness of the recession, might cause a loss of confidence in the policy framework. That would make the task of achieving low and stable inflation much harder in future, and would likely cause out-turns for growth and employment to be much worse than they should be.

10. *How supportive are you of quantitative easing?*

One important consequence of the Inflation Targeting regime has been that the MPC was able to cut interest rates quickly, to historic lows. But the scale of the shocks means that more monetary accommodation is warranted. “Quantitative easing” or expansion of the money supply, is the classic textbook response in this situation. But it must be done quickly and in scale, and must be carefully designed to liquify non-bank private sector balance sheets.

This hasn't been done in the UK before, so no one knows exactly how successful it will be. But in the current macroeconomic circumstances I am confident that it is the right thing to do and that it will help, which is why I voted for it at my first meeting. I am less confident about precisely how much we should do and there are risks both of doing too much and of doing too little. It is worth noting that such uncertainty is also present when considering changes in Bank Rate, although we have more experience to draw on in that case.

Dr. Paul Gregory Fisher—Curriculum Vitae

April 2009

PERSONAL:

Date of birth 7 September 1958, Married (Sue), 2 Children (22, 18).

ACADEMIC QUALIFICATIONS:

PhD in Economics. University of Warwick 1990.

MA in Economics. University of Warwick 1983.

BSocSci in Economics with Statistics. University of Bristol 1980.

CAREER HISTORY:

Bank of England, June 1990—present:

Executive Director, Markets. March 2009—present

And Member of the Monetary Policy Committee

Responsible for:

- all Bank of England operations in financial markets and their balance sheet consequences;
- managing the UK's official foreign exchange reserves on behalf of HMT;
- market intelligence for monetary and financial stability;
- management of 140 people in the Markets Directorate.

Member of the Monetary Policy Committee.

Head, Foreign Exchange Division, March 2002–February 2009 and Chair of the Foreign Exchange Joint Standing Committee

Responsible for active management of the UK's official foreign exchange reserves, the Bank's foreign exchange reserves and all foreign currency operations on the Bank of England's balance sheet including cash management/treasury functions. The division contributes market intelligence for the core purposes of monetary and financial stability. Included management of 35 people. Also Chair of the Foreign Exchange Joint Standing Committee (a group of market practitioners which maintains the code of conduct for trading foreign exchange, wholesale money and bullion in London).

Was also member of MPC secretariat March 2006–February 2009

Private Secretary to the Governor (Sir Edward George), March 1999–February 2002

Responsible for organising the Governor's office which in turn organises his meetings, papers, diary, correspondence etc. Attended the Governor's major meetings as minute taker and acted as secretary to committee meetings of the Governors and Executive Directors.

Head, Conjunctural Assessment and Projections Division, January 1995–February 1999

Responsible for the Bank's domestic and international forecasts, economic assessment of UK economic data on demand and output and prices, and economic assessment of the major international economies. From June 1997, included monthly data presentations and quarterly forecast presentations to the Monetary Policy Committee and, during 1998, writing Minutes of MPC meetings. Responsible for the reporting of the Bank's regional Agents and their performance appraisals. Made monthly visits to the regions. Management of around 25 people.

Economist and Manager, June 1990–December 1994

Held a number of different analytical and managerial roles working on econometric modelling, forecasting and the demand for money. Group Leader/Adviser on the forecasting group from Autumn 1992 and worked on the Inflation Report forecast from launch.

University of Warwick, September 1980–May 1990:

Research Associate, ESRC Macroeconomic Modelling Bureau, September 1983–May 1990

This job involved setting up all the major large scale forecasting models for the UK economy on a single main-frame computer system and engaging in comparative economic and econometric analysis of their properties and forecasts. With colleagues, I presented the results at academic meetings, and published in academic journals/books. I was personally responsible for developing and maintaining the computer software and for producing related research on handling nonlinear, rational expectations models. Also some part-time teaching of statistics and econometrics. Achieved a PhD with part-time study whilst working full time.

Junior Research Associate, Department of Economics, September 1980–August 1983

This job involved running econometric programmes on behalf of members of the Department and, in one case, engaging in joint research. Achieved a Masters degree with part-time study whilst working full time.

ACADEMIC PUBLICATIONS:

Books:

1. *Rational Expectations in Macroeconomic Models*. Kluwer Academic Publishers (1992).
2. *Models of the U.K. Economy: a Fourth Review by the ESRC Macroeconomic Modelling Bureau*. Oxford University Press. With K F Wallis (ed.) J A Longbottom, D S Turner and J D Whitley (1987).
3. *Models of the U.K. Economy: a Third Review by the ESRC Macroeconomic Modelling Bureau*. Oxford University Press. With K F Wallis (ed.) M J Andrews, J A Longbottom, and J D Whitley (1986).
4. *Models of the U.K. Economy: a Second Review by the ESRC Macroeconomic Modelling Bureau*. Oxford University Press. With K F Wallis (ed.) M J Andrews, D N F Bell, and J D Whitley (1985).
5. *Models of the U.K. Economy: a Review by the ESRC Macroeconomic Modelling Bureau*. Oxford University Press. With K F Wallis (ed.) M J Andrews, D N F Bell, and J D Whitley (1984).

Journal articles and contributions to collections of articles:

6. "Explaining and forecasting exchange rates with order flows: Comments." *Economie Internationale*, 96, 129-133. With R Hillman (2003).
7. "Macroeconomic models at the Bank of England", in *Econometric Modelling: Techniques and Applications*, Holly and Weale (eds), Cambridge University Press. With J D Whitley (2000).
8. "Economic theory and econometric dynamics in modelling wages and prices in the United Kingdom." *Empirical Economics*, 24, 483-507. With G Bardsen (1999).
9. "Business cycles: real facts or fallacies?" in *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, (Strom, ed) pp499-527, Cambridge University Press. With G Bardsen and R Nymoen (1998).
10. "The inflation report projections: understanding the fan chart." Bank of England *Quarterly Bulletin*, 38, 30-37. With E Britton and J D Whitley (1998).
11. "Utiliser l'ecart de production pour prévoir l'inflation: l'expérience de la Banque d'Angleterre." *Economie Internationale*, 69, 135-152. With L Mahadeva and J D Whitley (1997).
12. "The output gap and inflation: the experience of the Bank of England." in *Monetary Policy and the Inflation Process*, pp68-90. Bank for International Settlements Conference Papers, vol 4. With L Mahadeva and J D Whitley (1997).
13. "M0: causes and consequences." *The Manchester School*, LXIV, 4, 371-387. With F J Breedon (1996).
14. "Interest rate effects in the Bank of England's medium-term forecasting model." in *Financial Structure and the Monetary Policy Transmission Mechanism*, pp537-562. Bank for International Settlements. With S K Dhar, A M Holland and D L Pain (1995).
15. "Monetary Policy in the United Kingdom." *Economics and Business Education*, Vol II.2, 6, 79-83. With S Hudson, (1994).
16. "The determination of M0 and M4." Bank of England *Quarterly Bulletin*, 34. With F J Breedon (1994).
17. "Divisia measures of money." Bank of England *Quarterly Bulletin*, 33, 240-255. With S Hudson and M Pradhan (1993).

18. "The exchange rate, forward expectations, and the properties of macroeconomic models." *Macroeconomic Modelling of the Long Run*, Hargreaves (ed), pp207-208, Edward Elgar Publishers. With D S Turner (1993).
 19. "Nonstationary model solution techniques and the USA algorithm; some practical experience." *Journal of Economic Dynamics and Control*, 16, 109-116. With A J Hughes Hallett (1992).
 20. "Seasonality in large-scale macroeconometric models." *Journal of Forecasting*, 11, 255-270. With K F Wallis (1992).
 21. "The historical tracking performance of U.K. macroeconomic models 1978-85." *Economic Modelling*, 7, 179-197. With K F Wallis (1990).
 22. "On economic structures and model solution methods: or should econometricians use Newton methods for model solution?" *Oxford Bulletin of Economic Statistics*, 52, 311-324. With A J Hughes Hallett (1990).
 23. "Econometric evaluation of the exchange rate in models of the U.K. economy." *Economic Journal*, 100, 1230-1244. With S K Tanna, D S Turner, K G Wallis and J D Whitley (1990).
 24. "Comparative properties of models of the U.K. economy." *National Institute Economic Review*, 129, 69-88. With S K Tanna, D S Turner, K G Wallis and J D Whitley (1989).
 25. "Comparative properties of models of the U.K. economy." *National Institute Economic Review*, 133, 91-104. With D S Turner, K G Wallis and J D Whitley (1989).
 26. "An efficient solution strategy for solving dynamic nonlinear rational expectations models." *Journal of Economic Dynamics and Control*, 12, 635-657. With A J Hughes Hallett (1988).
 27. "Iterative techniques for solving simultaneous equation systems: a view from the economics literature." *Journal of Computational and Applied Mathematics*. 24, 241-255. With A J Hughes Hallett (1988).
 28. "Comparative properties of models of the U.K. economy." *National Institute Economic Review*, 125, 69-87. With S K Tanna, D S Turner, K G Wallis and J D Whitley (1988).
 29. "The convergence characteristics of iterative techniques for solving econometric models." *Oxford Bulletin of Economics and Statistics*, 49, 231-244. With A J Hughes Hallett (1987).
 30. "Efficient solution techniques for dynamic nonlinear rational expectations models." *Journal of Economic Dynamics and Control*, 10, 139-145. With S Holly and A J Hughes Hallett (1986).
 31. "On evaluating the importance of non-linearity in large macroeconometric models." *International Economic Review*, 27, 625-646. With M H Salmon (1986).
 32. "Models of the UK economy and the real wage- employment debate." *National Institute Economic Review*, With M J Andrews, D N F Bell, K F Wallis and J D Whitley (1985).
-