Robert Barro was born in 1944 in New York City and graduated with a BSc (physic) from Cal Tech in 1965. He obtained his PhD in economics from Harvard University in 1969. Professor Barro has taught at a number of universities, including Brown University, 1968–72, the University of Chicago, 1973–5 and 1982–4 and the University of Rochester, 1975–82 and was Visiting Fellow at the Hoover Institution, Stanford University 1977–8. Since 1988 he has been Professor of Economics at Harvard University.


We interviewed Robert Barro in his office at Harvard University on 16 February 1993.

*As an undergraduate you studied physics at Cal Tech. Why did you switch your interest towards economics as a postgraduate student at Harvard?*

I guess I liked the combination of quantitative analysis with applied social science policy issues. I started from a quantitative background and so it was an easy transition, maybe too easy because if you had some technique you could do better than you should in the Harvard graduate programme at that time.

*What do you consider to be the key papers/books which have had a major influence on the development of macroeconomics in the last 25 years?*

The right way to do this is to look at the Social Sciences Citation Index and find the ones that are cited the most. That index is the opinion of the profession weighted by publications and I assume people cite work because they think it’s had some influence, even if they do not like it.

*What have been the main influences on your own work?*

I remember in the early 1970s I had done this work on Keynesian economics with Herschel Grossman [AER, 1971] and I felt we had made some progress there, but eventually it was a dead end in terms of actual explanatory power. Then for a period of maybe a year or two I didn’t know what was a good direction to go in having decided that the existing framework wasn’t right but not having a substitute. At that point I was heavily influenced by Bob Lucas’s work on rational expectations macroeconomics. That work had a lot of impact on me and it came just at the right time when I had been frustrated with the kind of work I had been doing within the profession. Lucas’s [1972, 1973 and 1976] papers all had a lot of influence on me. Those are very heavily cited papers. A little later the work by Sargent and Wallace [1975] was also influential.

*Did you initially regard yourself as a Keynesian economist?*

I did not regard myself as a Keynesian economist in the sense that I thought that activist government policy intervention was going to be very helpful. But it seemed to be the only game in town in terms of macroeconomics and I wanted to understand it. In graduate school two papers in particular had an influence on me, a paper by Robert Clower [1965] and the related chapter in
Patinkin's [1965] book. They seemed like two complementary pieces in terms of how excess supply spills over from one market to another. I remember thinking about trying to put these two papers together and that's what Herschel and I did, I think successfully. It helped me understand the sticky price, sticky nominal wage Keynesian framework and what determined quantities of output and employment. I think we resolved that, but since then the Keynesian part of the profession has regressed, in that there is now a poorer understanding of Keynesian macroeconomics than there was 20 years ago. People have forgotten or do not know that work and as a result are making the same kind of mistakes that I thought we had corrected at that time.

What in your view were the crucial weaknesses of the Keynesian model in the early 1970s?
Well I guess not being able to deal with price determination and inflation was a key embarrassment of the model. But also it reflected an inability to deal with the supply side of the economy, it was a completely demand-side model. That meant productivity, technological advance and incentives for working were not part of the framework. The oil shock made it clear that those kinds of matters had to be brought into the model.

How important do you think it is for macroeconomic models to have neoclassical choice-theoretic foundations?
The alternative to the Keynesian model seems to encompass a market-clearing setting and the things that underlie supply and demand come from the usual price-theoretic foundations. I am not sure it is all that crucial to have a highly technical mathematical theory, but it is important to have something that is consistent with the framework of utility and profit maximization underlying the axioms of the actors in the model. That does not mean high-level technique.

You are known as a leading new classical economist. Are you happy with the label 'new classicalist'?
I guess it's all right if it suggests bringing in micro foundations to a macro framework and thinking of market clearing.

Do you regard new classical macroeconomics as a separate school of thought from monetarism?
I have never quite understood the term 'monetarism'. It is often used in contradictory ways. Friedman used to refer to the quantity theory of money as an organizing principle of how to analyse price determination and inflation, and that's fine. It certainly allows for important real effects on the economy from monetary disturbances in the short run. But the framework that Milton laid out in 1970 was actually quite Keynesian – it didn't look all that different from the conventional IS–LM model. On other occasions, monetarism is used to suggest that you do not want a lot of government intervention, that the government messes things up. But the framework that generates those results is not that clear.

What do you regard as the central propositions of new classical macroeconomics?
First, there are some positive results about what is supposed to matter for business fluctuations and second, there are some important implications for government policy – whether policy intervention is useful or matters at all. Some of Lucas's positive results about what matters for business cycles have not borne up that well. Initially there was a lot of stress on monetary disturbances even within an equilibrium framework. In fact that is what made it so hard. To get important real effects from monetary shocks was a struggle because they should be fairly close to being neutral. Lucas accepted the idea that money was empirically important: so he wanted a theoretical framework that would be consistent with that. It was a great intellectual achievement. But my own thinking on this has evolved over time because now I think that monetary shocks are less important as an empirical matter as a driver of business cycles. So that whole exercise was a little misplaced. Why go through the big challenge of explaining why money is very important and make it consistent with an equilibrium-style framework when it turns out that money is in fact not so important?

In your macroeconomics textbook you argue the case for a market-clearing approach because it avoids internal inconsistencies and because it provides a better understanding of the real world. Is the influence of new classical macroeconomics growing in other textbooks?
I think it is growing. The latest vintages have more elements of the new classical and real business cycle material than in any of the previous macro books. But in doing a macro book I think that you need one basic approach, it does not work to give equal time to all the alternatives. Students just get confused, they want a single coherent story. I do not know how that reflects on your book, but that is what I always thought [laughter]. The publishers always want to have more of the orthodox Keynesian stuff, IS–LM, etc. But the main purpose of a macro book is to evaluate events and policies and I do not think that you can do that satisfactorily with more than one approach.

Do you not think it is healthy to subject students to a breadth of perspectives, even at undergraduate level, so that they realize that there is so much controversy within the discipline?
Maybe when you have gone through one model systematically — later on you can do that, presenting a parallel treatment. Otherwise I think students will just turn off from that — at least US students will. I may not be right. But I do not know any other satisfactory way to do it.

Alan Blinder [1987] has argued that the weight of evidence is overwhelming against the rational expectations hypothesis. How do you react to this line of criticism?

It is true that we do not have very good theories of how people learn about the world. But there is no other satisfactory theory of expectations; there is only one competitor in this game, that is why it is so awkward. In fact, rational expectations has won the day with respect to macro theory. Most Keynesians basically use it and of course it's true that you can still get Keynesian results even using rational expectations. It used to be thought that rational expectations macroeconomics was somehow synonymous with new classical macroeconomics. Well that's not right, in the sense that you can meld rational expectations into Keynesian-style models. However this seems to be inconsistent because the notion of rational expectations implies that people act efficiently in terms of how they formulate supply and demand decisions, so it is puzzling to have that efficient mode of operation in one place and yet argue that prices are sticky.

How do real business cycle theories deal with money?
Money is basically a side-show in those models, but they do need to be consistent with a number of empirical regularities. One set of facts has to do with the procyclical character of monetary aggregates. To show how these models can be consistent with these facts, even though money does not really do anything much in those models, you need some kind of endogenous money story, either through the banking system or the method of operation of the monetary authorities. You end up generating a pattern where money and output move together and maybe with money moving first. People clearly accept that already in certain contexts. For example, around Christmas time there is a tremendous demand for money and the monetary authority basically supplies it and thereby reacts to the economy. So in those contexts endogenous money is completely accepted. People also accept the idea that if the monetary authority is targeting interest rates then that is going to generate a pattern in which monetary aggregates are endogenous and react to output and other variables that affect the demand for money.

The so-called 'monetarist experiments' both in the UK and the USA in the period 1979–82 provide a rich source of controversy. How do you interpret what happened in this period?

I've never been sure, especially in the context of the USA, whether you can really interpret that period as one where monetary aggregates were being targeted. I did a long study about the character of money supply, interest rates and the price level in the United States and in that statistical work I was not able to detect something dramatically different in that interval. I have not studied the UK.

How do you view the new Keynesian attempts to rectify the weak micro foundations of Keynesian economics?
I really think that they have made no important advance there. One result which is of some interest comes from the menu cost work of Akerlof and Mankiw. But one of the criticisms is that the direct costs of changing prices seem to be trivial, so it is hard to see why you would want to stake a theory on this. The result is that the individual cost of changing prices is trivial yet the macro implications can be more substantial. But that doesn't really work because, as soon as you get away from full employment, it is no longer true that the private costs are trivial. There was a parallel problem in new classical models in terms of how money matters. It all depends on informational gaps such as not knowing what the money supply is. For countries like the USA that does not look very important, just as the cost of changing prices in the new Keynesian theory does not look too important. I guess both criticisms are valid and both theories are missing something important. There are some other strands of this new Keynesian work, such as the efficiency wage theories, but I do not think there is anything too much in that — it is not a monetary theory at all and does not relate to the question of whether money is important in business cycles.

Blanchard and Fischer in their Lectures on Macroeconomics [1989] suggest that on the surface macroeconomics appears to be a field divided by schools, but that this represents public relations gimmicks and the strong incentives that exist in academia to differentiate products. Do you agree with their view?
I accept the idea that people like to differentiate their products to make it look like what they are doing is important and unique, but still views are often very different. There is a real difference in substance between these schools, particularly when you start talking about policy recommendations. Some support activism of various kinds, monetary and fiscal, or even direct intervention. There is also a vast difference in terms of what is viewed as a good way to look at the economy or what is an interesting research issue.

What role does fiscal policy have?
The Ricardian view I think has been a great triumph [laughter]. I've given up a lot of my previous views but not that one. I think that was basically
accurate. Despite the great attention that has been given to budget deficits and public debt, the empirical evidence shows that it does not look like it has been very important for explaining interest rates, current account balances and the evolution of investment.

Don’t you think that large budget deficits are damaging to the US economy? I think the argument over the last decade has really been over the size of the government. Reagan wanted to have a smaller Federal government and his approach to achieving that was to cut taxes and try to use that as a lever to bring down expenditure. I think that was right. The argument was really between people who wanted to raise taxes and have a bigger government versus those who wanted to keep taxes low in order to bring down expenditure. That was the real argument, not how big the budget deficit was.

Is this not a political rather than an economic argument? Maybe we can apply economic tools in thinking about whether government expenditure is useful or not, but I agree it is partly a political argument. Bush basically gave up on this programme by raising taxes, accepting that the government will be larger. Clinton is now eagerly pursuing the idea of having a larger government. When he says he is going to be courageous and raise taxes and he cares about the debt and the budget deficit, what he is really saying is that he likes bigger government, maybe because he thinks it’s useful.

What do you think are the most important stylized facts of the business cycle that any good macro theory needs to explain? Investment is a key element in the business cycle. Most of the movement of output in the business cycle is in a component which we call investment or, more broadly, durables, and it often includes consumer durables and business inventories. If you look at consumption of non-durables and services it moves very little, so you would want to explain those facts. Productivity and real wage rates tend to be procyclical, whereas many theories generate opposite implications. The price level in the post-war period for the main countries is actually counter-cyclical, whereas most people tend to view it as procyclical and then try to explain this. In some of these cases there has been a basic misunderstanding of the facts.

Many critics of new classical economics have argued that there is a lack of supporting evidence of strong intertemporal substitution effects. How do you react to this line of criticism? It is hard to get direct evidence on that, just as it is hard to get evidence on how sensitive investment is to the cost of funds - it’s the same kind of problem. Just as you can see that investment is very sensitive over the business cycle, the labour input also moves a lot. If you take an equilibrium perspective and you observe that the labour input is moving, you need to think about what incentives are making it move a lot. But to get direct evidence of intertemporal substitution has been difficult to isolate. The same holds for consumption. It is hard to pin down the intertemporal effects, even though people are more willing to believe that these effects exist. Actually pinning down supply and demand curves is a difficult exercise - there is a hard identification problem there.

Do you think we should still use the term ‘business cycle’ after the contributions of the real business cycle theorists? Real business cycle models are compatible with transitory movements of output and employment. Now it is possible to have a theory driven only by permanent technological disturbances, then output might look like a random walk relative to trend and there would be only permanent movements. But it is not inevitable that this line of theory would produce that result.

During the 1980s, despite all the criticisms from new classical economists, Keynesianism seemed to be making some form of comeback. Is this how you see recent developments? Well there is some validity in that as a factual statement. The new classical work was new and exciting in the middle 1970s and everyone wanted to learn it and teach it to graduate students. Inevitably there was going to be a period where there was less progress, although the real business cycle work did come along together with new work on economic growth. I guess there is some tendency to actually move away from something that’s no longer new and fresh. I don’t think a Keynesian comeback has anything to do with new empirical evidence or indications that the theory is working better. Certainly the President and his administration are more sympathetic to interventionist lines of thinking. We are going to spend 15 billion dollars and everything is going to be fine [laughter].

Why does equilibrium business cycle theory seem to treat unemployment as a secondary issue? To explain unemployment within an equilibrium-style framework you need some search and incomplete information stories, some kind of framework where it is costly to shift from one activity to another; for example the sectoral shift idea that David Llillén [1982] has stressed. I think that work is interesting but I’ve never been sure about the best way to treat unemployment within the equilibrium-style framework.
How do you view Keynes as an economist? Do you think he would have been worthy of a Nobel Prize in Economics?

Absolutely. Keynes was a brilliant economist. He came up with an ingenious theory within the context of an economic crisis. Even if I think in the end that the theory is not right what does that prove? Most theories are not right. He also did some very interesting monetary work earlier which has nothing to do with what we now call Keynesianism—the Tract On Monetary Reform, for example.

Does the political business cycle and time inconsistency literature provide a clear case for monetary and fiscal rules, or should we trust politicians with discretionary policy?

I think it is a very interesting line of work. Some of the best work has been done by my colleague, Alberto Alesina. He has some interesting empirical results about the interplay between political events, macro policies and business fluctuations. The time inconsistency literature says something useful about the desirable ways of framing policies and why it would be useful for monetary policy to be committed to price stability and not get distracted into other things. A similar kind of constitutional perspective applies to fiscal policy. The idea that governments have an incentive to renege or surprise after the fact is pervasive. For example, Clinton now wants to dump on the drug companies because their prices are too high, but their prices are high as an incentive to do the research and invent new drugs. It’s an exact parallel with what comes up with monetary policy, or debt policy where there is an incentive to inflate away the debt. These are all the same problems. As another example, we had a hurricane disaster in Miami and the government came in and bailed people out. Thus the government subsidizes people to live in the wrong place where they are subject to these dangers.

Do you think having an independent central bank is crucial for price stability?

Well, independence seems to be a matter of degree. Some people have looked at this empirically and it seems that more independence delivers lower inflation without costs in terms of growth performance. Alex Cukierman and some of his colleagues have a book on this in which they look at various developing countries. They found that you not only get less inflation but those countries with independent central banks also do better on growth performance. To say it is crucial is probably going too far because to doubt there are lots of different routes to getting price stability.

Do you think that discretionary monetary and fiscal policies inevitably impart an inflationary bias to an economy?

It clearly goes in that direction. To some extent governments are not completely vulnerable to this temptation. They do not always give in to it, for reasons that I do not fully understand.

Have the new classical contributions resulted in a revolution in macroeconomics?

Yes, I think it completely changes the way people who use that framework look at macro determinants of policy. Firstly, it’s a positive story about what happens when there is some disturbance to the economy. Secondly, it’s a completely different way of looking at policy evaluation. There is a tendency to look at these issues from a constitutional perspective.

Is new classical macroeconomics more robust than monetarism?

I don’t know whether it will be the single overarching framework that everybody believes in, but there are clearly aspects of it that are permanent in terms of how one thinks about macroeconomics, such as rational expectations. The Ricardian view of public debt is important. Even if people do not think it’s right they feel obliged to know what it is. The interplay between supply and demand in a macro framework is central and tends to push you towards market forces and market clearing.

Would you agree with Stanley Fischer’s comment that the views of Milton Friedman, Karl Brunner and Alan Meltzer are closer to those of Keynesians than those of the equilibrium business cycle school?

Yes that’s probably right. I like Milton better when he does applied price theory and relates this to social issues, although the Monetary History is a great book.

Would you agree that the last 20 years of research suggests that macroeconomists should take an eclectic approach to their model building?

I do not know what this eclectic view would be, or how you would proceed along such lines. How would you mix the best features of different macro models? The real business cycle literature has the virtue of relating the theory to the empirical regularities in an organized way. It views empirical behaviour as a test of the theory. The Keynesians do not take that approach, at least not now. There is not that much subjecting of the theory to empirical testing. What does the IS–LM model imply about the cyclical behaviour of investment, productivity, real wages and interest rates and how does this match with the data? The Keynesians do not usually take that approach.

Do you see any signs of an emerging consensus in macroeconomics, and if so, what form is it likely to take?
I do not really see it. Olivier Blanchard would like me to say yes. He thinks it is very unpleasant not to see consensus, but I do not see it.

*If you were advising President Clinton, what would be your advice with respect to macroeconomic policy in the 1990s?*

The notion of my advising President Clinton is, of course, quite amusing. Anyway, one important concern is price stability. People have become overly optimistic about it, taking it for granted now that we have low inflation. I think that it is quite fragile. Fortunately Alan Greenspan is reliable and it is lucky that President Clinton has him in the Federal Reserve. I do not think that fiscal policy issues are central. You cannot run budget deficits forever with the debt-GDP ratio rising continually. At some point you have to have taxes matching expenditure, but it is not a crisis. I would like to see a cut in a lot of government expenditure programmes because many of those programmes are not very useful and the financing of these programmes is distortionary. I thought Reagan was going in the right direction there, but he did not go far enough. The other thing I would like to say is that in terms of macro policy one should take a long-run perspective. What really matters is the rate of growth and productivity expansion over the longer term and the government ought to be geared to doing things that are useful in that context. Apart from price stability, there should be a more favourable treatment of income from capital. It is possible that some infrastructure investment would be useful, but not some of the grandiose programmes that Clinton thinks about.