

**John B. Taylor**  
(b. 1946)



John Taylor is currently Mary and Robert Raymond Professor of Economics at Stanford University. He is best known for his work on the development of rational expectations models with staggered wage setting, the design of monetary policy rules for the conduct of economic policy and international policy co-ordination.

We interviewed Professor Taylor in a common room in Grey College, University of Durham on 11 September 1997 while attending the annual conference of the Money, Macro and Finance Research Group.

## BACKGROUND INFORMATION

*What attracted you to study economics?*

I originally became interested in economics as an undergraduate in college. I was fascinated by the way structured mathematical quantitative techniques could be used to address real world problems. I really found that fascinating. As I had a particular interest in the quantitative side I took quite a few courses in statistics and mathematics in college. I was an undergraduate at Princeton and was lucky to be given good advice and be taught by people like Dick Quandt and Burt Malkiel, who were themselves very excited about what they were doing. My senior thesis at Princeton was actually very close to what I

am working on now: monetary policy rules. I wrote it with the help of Phil Howrey, who is now at Michigan. After that I decided to go to graduate school to study economics.

*Have you always had a keener interest in macro, as opposed to micro, issues?*

Yes. Right from the start macro issues fascinated me, although I am not sure why. In part I think it is because when I first started studying economics I was more aware of macro issues and problems. I graduated from college in 1968 at a time when people were still talking about the success of what was then the New Economics. Thereafter when so much controversy and debate arose I decided to stick with macro. When I went to graduate school at Stanford I changed my focus towards econometrics but always with the intention of using those econometric skills for the study of macro. Partly because of the tremendous amount of controversy building up in macro at that time, and partly because I got very interested in the problem of joint estimation and control, I decided to focus my studies and dissertation more on the technical side of things: on time series econometrics and dynamic optimization theory. My thesis adviser Ted Anderson is a statistician. In fact I wrote a very technical paper on optimal control theory for my PhD thesis. That turned out to be really fortuitous because at that point in time all the work on introducing new ideas in macro, including rational expectations, was using time series econometrics and stochastic modelling. So I was fortuitous to have had that technical training and at the same time not have really received a macro training that was in any one particular school. That allowed me to be more open to new ideas.

## DEVELOPMENT OF MACROECONOMICS

*Which papers and/or books would you identify as having had a major impact on the development of macroeconomics since the publication of the General Theory?*

Well, the classic works on consumption by Friedman and Modigliani and on financial markets by Tobin are very important. The works by Phelps and Friedman on the Phillips curve are even more important in the way they changed the discipline. The Lucas papers published in the early 1970s were also very influential. Then there is a collection of papers that Lucas and Sargent put together on *Rational Expectations and Econometric Practice* (1981) which contains material on consumption theory, investment, monetary theory, time inconsistency and so on. I view that collection of papers as the modern equivalent of the *General Theory*, not only in the context of being highly technical but also being representative of a new way of thinking.

*What do you think was Keynes's major legacy to economics?*

Well I think that Keynes showed the importance of aggregate demand in a more general way than had been known earlier. The notion of aggregate demand shocks as a source of the business cycle has had a lasting effect. Of course Keynes's followers put much less emphasis on the supply side and inflation which meant that Keynesian theory was bound to run into problems at some stage. I don't think the notion of sticky wages and prices so much comes from Keynes. If you look at earlier work before Keynes it contains all kinds of descriptions of rigidities. Even David Hume in his essays talked about the slow adjustment of prices.

*Do you regard Friedman and Lucas to have been the most influential macroeconomists since Keynes?*

Yes. Both Friedman and Lucas have had a major impact on the discipline, but in different ways. Friedman, very early on, questioned certain aspects of Keynesian modelling and policy. If you go back it is remarkable to see how far Friedman once was from the mainstream. Today a lot of Friedman's views are mainstream, especially in the way people think about the unemployment-inflation trade-off, consumption, and money's impact on the economy. His influence has been longer and broader than Lucas's. Lucas has focused his attention more on the technical modelling side of macroeconomics. His main influence has therefore been in terms of the way he has changed how macroeconomists construct and use models in their work. On a personal level, his demonstration of the importance of rational expectations and his 1976 paper on 'Econometric Policy Evaluation: A Critique' has had a great influence on my work.

*Do you view the development of macroeconomics in terms of an evolutionary process or in terms of a series of revolutions and counter-revolutions?*

I view it more in terms of an evolutionary process that takes a while to occur. However when you look back over a period of say 20 or 25 years the changes look revolutionary. If you look at macroeconomic papers written now versus 25 years ago they are completely different. In that way it looks more like a revolution has taken place in macroeconomics. Over one or two years you don't notice developments, because they evolve slowly over time. The rational expectations revolution that began in the early 1970s resulted in as big a change as did the Keynesian revolution. I think of them analogously. In both cases they involved highly technical pieces of work, only readable by professional economists. Then the ideas seeped into textbooks, econometric models and finally into policy.

*Would you agree with James Tobin (1996), who has argued along the lines that the field of macroeconomics is split into schools which differ in their theories and hence in their policy recommendations.*

I understand his viewpoint, but I don't see it that way personally. I enjoy, and have learned from, talking with Jim Tobin. But I also learn a lot from talking with people from other schools. If you look at things more from a scientific perspective there is considerable similarity between the schools. Sometimes the differences are stylistic or involve a particular type of policy orientation that people start off with. My feeling is that, by thinking about things more on a scientific basis, you can appreciate the work done in different schools. I also think that there could be more communication between the schools. Jim Tobin is correct in the sense that schools have not communicated much with each other in the past, but that is changing. I sense that certain schools, like the real business cycle school and schools that focus more on sticky wages and prices, are coming together very rapidly right now.

*Thinking back to the impact that new classical macroeconomics had on the development of macroeconomics in the 1970s, why was the policy ineffectiveness proposition taken so seriously at that time?*

Well I think there are two main reasons. First, the main application of it was to the breakdown of the Phillips curve, *the* most significant macroeconomic event at that time. Lucas illustrated the policy evaluation critique with three examples, one was the breakdown of the Phillips curve, one was the consumption function and one was investment. The policy ineffectiveness proposition showed you even more dramatically how wrong you could be by not dealing with expectations properly. Second, because there was a way of dealing with the Lucas critique by adopting the rational expectations assumption, the policy ineffectiveness proposition generated a lot of interest in policy evaluation. I had very little interest in the policy ineffectiveness proposition *per se*. My interest was in doing policy evaluation, by developing new models with rational expectations and sticky prices and then using those models for policy.

*The paper you co-wrote with Phelps, as well as Fischer's paper, which were both published in the Journal of Political Economy in 1977, incorporated rational expectations into a model with sticky wages. That type of model now forms part of the mainstream textbook approach. Looking back how important was this work?*

I thought it was very important at the time and was surprised it didn't move more rapidly into the mainstream. I had a pragmatic view – perhaps because I had not been trained in any particular school – that you had this technique of rational expectations and also an enormous number of interesting policy

problems which had yet to be addressed with this method. You also had some early models – the ones that Lucas and Sargent worked with which assumed flexible prices – which didn't seem to make a great deal of sense. They had some applications, but for the most part they didn't seem nearly accurate enough to be used in practice. While I was surprised that sticky wage or price rational expectations models didn't catch on more quickly, what surprised me even more was the way that models with money and monetary policy in them (both sticky and flexible price rational expectations models) were abandoned for real business cycle models which excluded money entirely.

*When we interviewed Robert Lucas he suggested that 'the distinction between anticipated and unanticipated money is the key idea in post-war macro'. Do you agree? If not, what do you regard as being the key idea?*

Well the key idea is rational expectations and in a sense that means being able to distinguish between anticipated and unanticipated changes. So I think that there is some agreement between us there. But it is not just the distinction between anticipated and unanticipated *money* that matters. Other examples include the distinction between anticipated and unanticipated changes in interest rates, or in taxes or government spending. Also other kinds of policy changes are important. For example, in my work I place greater emphasis on changes in the *systematic* part of monetary policy – how money or interest rates react to shocks – than on the shocks to money.

*In your view what impact has unit root econometrics and real business cycle research had on macroeconomics?*

The unit root literature had an impact in telling people that some of the fluctuations in the economy – perhaps a significant fraction – were not just temporary demand shocks but could actually affect the long-term trend in the economy. It helped people see that the fluctuations could be due to real factors, and that the growth trend could change and you could be on a new growth trend fairly randomly. If instead the economy returned to the original trend path, then there would be more of a demand interpretation of the fluctuations. Real business cycle research had a similar kind of impact in that it helped people see that fluctuations could be coming from the supply side – not from a theoretical, rather from an empirical, perspective. That is useful when describing reality because not all fluctuations are from the demand side. While a big fraction of business cycle fluctuations is from the demand side, longer-term fluctuations are most likely from the supply side. The other main contribution from real business cycle research is purely technical. The people who work on those models have developed a methodology and skills which enable them to extend the models in many ways, perhaps to introduce rigidities, sticky prices and contracts and utilize the models in ways that

wouldn't have been possible if they hadn't invested in the methodology. Thus, real business cycle research has been a good influence on modelling techniques, although a lot of the benefits have yet to be seen. I guess that in ten years time we will see an even greater influence of their work on macro modelling, but in a different and more general context than at present.

*How do you view the work of new Keynesian economists on the micro foundations of sticky prices and wages?*

Well I think that work on menu costs or other costs of adjusting prices is still somewhat disappointing in terms of what they have been able to deliver. It has been very interesting and I have been fascinated by it, but what has disappointed me is that in very few cases have those models been able to make a difference for policy. Such work on the microfoundations of staggered price and wage setting models hasn't helped us learn much more about how policy works or how interventions might make a quantitative difference.

*Ben Bernanke (1995) has suggested that finding a coherent explanation of the Great Depression is the 'Holy Grail' of macroeconomics. Which explanation do you favour?*

Well the most significant factor is monetary policy. I think that is true in the broadest sense. Ben Bernanke focuses more on banking failures and the credit side, which I regard as part of monetary failure. For me the most convincing explanation is the failure of monetary policy to keep what we would now call aggregate demand stable. If that had been done we could have avoided the Great Depression or at least had a much smaller downturn. Recovery from the Great Depression also appears to have been largely monetary-induced. Christina Romer (1990, 1992, 1993) has some nice work on that subject. Of course there were adverse dynamic effects which went beyond the influence of monetary policy. For example, the reduction in training for workers, people who were removed from the labour force for long periods of time, international effects and the trade wars came about because of the Great Depression. In this century we have learned from two big events in terms of policy, the Great Depression and the Great Inflation. That we have learned so much from those two events is one of the main reasons why we seem to be doing better now in stabilizing inflation and real output.

## ECONOMIC POLICY

*What do you regard to be the proper fiscal role of government?*

The most important thing is to make sure that the automatic stabilizers are working and not get in their way. Discretionary policy on the fiscal side is

almost useless at this point in time, due to lags and the distrust people have of government fiscal policy due to deficits. In the 1991 US recession President Bush proposed a discretionary fiscal package and it didn't go anywhere. President Clinton came in and proposed one and that didn't go anywhere. In the meantime changes in taxes and spending through automatic stabilizers dominated. On the longer-term side fiscal policy should promote economic growth through low marginal rates of taxation so as to encourage saving and investment. Keeping things as simple and credible as possible is important. Also we shouldn't be involved with changing things all the time, which is disruptive.

*What other factors caused the move away from fiscal policy towards monetary policy as the main tool of stabilization policy?*

The realization that so many of the factors in the business cycle were monetary. Also the fact that our experience with discretionary fiscal policy has been so disappointing. We saw how important monetary policy was in the 1960s, 1970s, 1980s and still is today. Finally the ability of monetary policy to operate more quickly is a big advantage.

*What is your view of the Ricardo-Barro debt equivalence theorem?*

In the context of long-run fiscal policy it is useful in that it focuses your attention on the amount of resources absorbed by government spending. A major effect of government on the economy is measured through government purchases as a share of GDP. It seems to me that the way purchases are financed is less important. What I like about the Ricardian equivalence view, although it is too extreme, is that it emphasizes the spending side as the way the government affects the economy. There are, however, a lot of examples such as Martin Feldstein's studies of social security where empirically it doesn't hold.

*How do you view the supply-side approach to fiscal policy which was prominent in the early 1980s?*

Well, the approach was useful in that it focused our attention on the supply side of the economy and on incentives. This effect was similar to the impact of real business cycle research. However the notion that you can cut tax rates and raise more revenue is wrong in many cases, and has not held up with respect to broad changes in taxes. It is wrong and irresponsible to tell government to cut any tax rate and their revenue will go up. This would occur when tax rates are very high or when elasticities are very high, which is not always the case.

*What do you regard as being the most important role for monetary policy?*

To keep inflation steady and low, as a long-term goal. That is best for the real side of the economy and generates a more satisfactory growth rate. It also ensures a better short-run macroeconomic performance by keeping the business cycle smaller. For example, over the last 15 years we have had the first and second longest periods of peacetime expansion in US history, with a fairly short recession in between. The reason is that we have kept inflation steady and low. It is important that monetary policy follows a stable systematic rule in order to deal with the inevitable shocks that periodically hit the economy.

*In recent years a lot of your research has focused on issues relating to rules versus discretion in macroeconomic policy making (see Taylor, 1993a, 1993b, 1994). Do any economists still favour a k per cent monetary growth rule?*

Aside from Milton Friedman, I think the closest would be Ben McCallum and Allan Meltzer who favour an adapted monetary base rule. Ben and Allan suggest that the monetary base grows at a certain rate which adapts to changes in potential GDP growth.

*During the 1950s and 1960s stabilization policy was regarded as a control theory problem, whereas by the mid-1970s, in particular with respect to monetary policy, it was viewed as a game-theoretic problem. What have policy makers learned from the game-theoretic literature?*

The importance of establishing credibility. The game-theory literature illustrates the dangers and temptations to change policy. However the earlier work on optimal control had perhaps an even larger impact because it got economists who worked on policy into the habit of thinking about policy as part of a system through a reaction function or feedback rule. What policy makers do today is going to affect what people think policy makers are going to do tomorrow. Thinking about policy as a reaction function or a policy rule came out of that earlier work.

*The other thing which had come out of the game-theory literature is the importance of governments having reputations in order to establish their credibility. In May this year the new Labour Government in the UK gave more independence to the central bank. Do you think an independent central bank is a prerequisite for establishing credibility?*

Not necessarily, although in certain contexts it is important. You could have a central bank run by the government where the government follows a particular policy rule. For example, even if the central bank is not independent it could follow a fixed money growth rule. However in the context of today's world, where there isn't any one fixed money growth rule which is acceptable, there is no simple way for the government to tell the central bank



exactly what to do in all circumstances. You have to give some degree of authority to policy makers to make choices, so they do need to be independent from the current political environment. Having said this I think we emphasize independence too much relative to accountability. New Zealand, for example, has illustrated the importance of accountability in monetary policy.

*What is your view of the recent emphasis given by many governments to inflation targeting?*

Inflation targeting is a good idea. As I said before, monetary policy should aim to keep inflation low and stable, and an inflation target helps that and will therefore lead to better economic performance. While the US doesn't have an explicit inflation target most people feel FOMC members have an implicit target somewhere between 1 and 2 per cent; that seems to work nearly as well as having a formal inflation target.

*Do you favour a policy target of zero inflation?*

Well, I worry about having inflation too low and especially negative inflation. Fluctuations in the nominal rate of interest are limited by zero and you might not get much change in the real interest rate. However, given the bias in the measurement of inflation I see no problem with an inflation target of 1.5 per cent. I get more worried about deflation and that is another important reason to have an inflation target. The Japanese would have done much better over the last five years if they had adopted a zero inflation target. They would have had to increase money growth when inflation dropped below zero and that would have been beneficial for the economy.

*Where do you stand on policy with respect to exchange rates?*

It depends very much on the country concerned. For the US I am a firm advocate of floating exchange rates and the main reason is monetary independence. One of the reasons that US economic performance has been so good is because monetary policy has been free to do what is right to control inflation and stabilize the economy. When you consider other cases it depends on the relative size of the economy. For a very small open economy a fixed exchange rate seems to make more sense. Now Europe is a much more difficult problem. There are strong political demands for monetary union. However, overall I would emphasize the value of monetary independence. For example, in the UK unemployment has come down and economic performance has improved following greater international monetary independence *vis-à-vis* Germany. If there is monetary union in Europe it has to be recognized that giving up monetary independence could be a problem. The gains in terms of greater credibility feeding off the Bundesbank will hopefully make up for that.

*What is your view on the high level of unemployment experienced in Europe since the early 1980s?*

That has to do not so much with macroeconomics, but with microeconomics and labour market issues. I know there is a lot of debate and controversy over this subject. While I have not studied European economies as much as the US it strikes me that labour market rigidities in Europe are crucial to explaining the unemployment problem. In a world where technology is changing rapidly greater flexibility in the labour market would make a difference. Of course there are also cyclical changes in unemployment. Although it is very hard to prove I think the rise in unemployment in the UK in the early 1990s was largely cyclical.

## POLICY ADVICE

*For which administration have you acted as an economic adviser?*

I was on the Council of Economic Advisers' staff during the Carter and Ford administrations. I also worked in the Bush Administration as a member of the CEA; that was a political appointment.

*In giving advice what aspects of economic theory did you find most useful?*

In the broadest sense of economic policy making by far the most useful thing is a firm grasp of basic economic principles. There are a lot of crazy government interventions that are constantly being suggested which basic economic analysis tells you don't make any sense. When it comes to giving advice on more specific macro areas, like monetary policy, then more than a knowledge of basic principles is necessary. For most people macroeconomics is very hard to understand. There you need to have much more background training and experience to understand the different schools and debates.

*What lessons did you learn from your time as an economic adviser?*

The most important lesson is to focus on economics and not worry about the politics. That may sound a little surprising, but if you make a calculation that a policy will not make it politically it influences what you recommend. In almost all cases I can think of, when I thought too much about the politics rather than the economics, it was a mistake. The second lesson is the need to spend a lot of time learning how to communicate economic ideas to people who have had no prior economic training.

*At the round table discussion on 'Applied Economics in Action: The Council of Economic Advisers' at the AEA meeting in January this year Robert Solow suggested that economists act as 'intellectual sanitation workers'. Martin*

*Feldstein and Joseph Stiglitz also argued that the CEA has a crucial role in representing the national interest as opposed to special interests (see American Economic Review, May 1997). Do you sympathize with these viewpoints given your experience as an economic adviser?*

Yes, as an economic adviser 90 per cent of your work is putting out fires and keeping bad ideas from happening. As for the national interest I would put it a different way than Stiglitz; I would say that economic advisers are there to represent consumers. For me the principle of letting the market work unless there is a good reason to intervene goes a long way.

*When Joseph Stiglitz joined the CEA you suggested that it would make him more sceptical about what governments can do.*

(*Laughter.*) Well I think he is a little more sceptical – he now has more examples of government failure – but probably not as much as I would have guessed. Generally speaking, people who go and work in government do get more sceptical about what the government can do.

*Do you think that one of the problems economists experience in advising politicians is that very often the advice given is not what politicians want to hear?*

No, I have not found that to be the case. Maybe I've been lucky with the people I have chosen to work for (*laughter*). In some cases, of course, politicians will not do what you recommend; but frequently that is not because they don't like it, but because they realize that they can't push it through right now or because it is not going to work politically.

*In an article you wrote for the Economic Record (Taylor, 1989) you stressed that people shouldn't ignore ideas just because they are associated with an approach which is biased either towards or against government intervention. Joan Robinson (1960) many years ago also pointed out that it is foolish to reject economic analysis because of the political doctrines with which it is associated. Did you find that economic advice was ever rejected because it was associated with a left-wing or right-wing view?*

Yes, that is very common. I think we all have a tendency to react that way; to look at the messenger as well as the message. In the political environment there is something else that happens. It makes a difference which side *first* puts forward a view. I remember one case when I first started in the Bush Administration where I suggested indexing capital gains taxation. The proposal was rejected out of hand because at that time it was the opposition's idea. While people clearly take sides in politics, in intellectual pursuits you are much better off carefully listening to what other people have to say regardless of their political views.

*Martin Feldstein (1997a) has suggested that the predominant view in 1946 when the CEA was created was one which assumed 'macroeconomic instability and microeconomic insensitivity'. Is the reverse true today?*

Well macroeconomic stability has improved, largely as a result of better policies. But I can't believe that micro sensitivity has increased. Maybe we are just more aware of microeconomic sensitivity now. We now have more evidence of it because of all the micro studies of how people respond to changes in taxes for example.

*Do you think the UK would gain from having a Council of Economic Advisers?*

Well I hesitate to answer your question without giving it a lot of thought because so much depends on the political environment. Certainly in the United States the Council of Economic Advisers has been very useful. One of the advantages of the CEA now is that it is very public and you know who is a member. Having said that it seems to me that there is something valuable in having a group of economists close to the chief executive that he or she can rely on for private advice.

*In reality how independent is the Fed from Presidential pressure?*

Well there are restrictions which limit the Fed's independence. For example there are issues that the Fed is interested in, such as regulatory power and international policy, which the administration has leverage on. But right now I think it is pretty independent.

*The early political business cycle literature, such as the Nordhaus model (1975), suggests that prior to elections governments will try to buy votes by expanding the economy. More recently Alberto Alesina (1989) has suggested that Republicans or right-wing government's tend to give more emphasis to the control of inflation whereas Democrats or left-wing governments give more emphasis to unemployment. Do you feel these are accurate insights?*

In recent years there is very little evidence that US Presidents have been able to get the Fed to do whatever they want. For example the Fed raised interest rates during the 1988 election year, the reverse of what political business cycle analysis would predict on the macro side. As for the partisan approach it is true that the Republicans have been more concerned with price stability than the Democrats, but even that has started to change in the United States. Alberto's work may have more applications in Europe.

*What is your view of the current US administration's economic record?*

The relationship with monetary policy has been good. Other than that I can't really say too much either way. It seems to me that they haven't done very

much. The fiscal stimulus package of 1993 failed. Since then they have got another budget agreement with the co-operation of Congress. I wish they could do more on education, regulation and tax policy. Having said that I would give them high points for not doing bad things, which is 90 per cent of the job.

## ECONOMIC GROWTH

*Do you agree with the view that economic growth is the part of macroeconomics that really matters?*

Certainly in the longer term, for developing poor economies and increasing living standards, growth matters. That is why I have decided to treat economic growth before fluctuations in my introductory economics text (Taylor, 1998a) and I believe more texts will follow that approach in the future.

*How do you account for the revival of interest in growth analysis?*

Three things. One is that the business cycle is now less of a problem. In the United States we have had only one relatively short recession in the last 15 years. A lot of the freshmen students I teach can't even remember the last recession. The second reason is that growth is more of a problem now, especially since the reduction in productivity growth in the mid-1970s. A third reason is that for a lot of people economic growth is more appealing to teach. It is more straightforward and being an extension of micro is easier for students to understand.

*In your intermediate macroeconomics textbook, co-written with Robert Hall (Hall and Taylor, 1997), you have moved growth to the front of the book. That now seems to be the case with a lot of the intermediate macro textbooks.*

Bob and I did that in our third edition. It has worked very well for us. Abel and Bernanke (1995), and Mankiw's (1997b) intermediate macro books also have the analysis with growth first. As I mentioned earlier this approach works very well at the introductory level as well.

*Do you regard economic growth as a useful bridge when moving from the teaching of microeconomics to macroeconomics?*

Yes, in that respect it is very useful. I should add that it is useful in the basic principles market because ideas such as diminishing marginal product are useful in macro as well as micro. In many ways it is even more useful to teach growth first when introducing macro at the principles level because students can understand cyclical fluctuations better once they know about the growth trend in the economy.

*What in your view are the most important determinants of growth?*

The first step is to distinguish between increases in capital and technology. I think the slowdown in US growth has been due more to non-capital items, which we call technology. Now in terms of the determinants of capital, tax policy is very important in encouraging saving. We know less about total factor productivity growth, but I would go out on a limb and say that education and regulation are the two most important things. We need to keep the amount of regulation low and also improve our education system.

*Does inflation damage growth?*

Yes, especially at high levels. We don't have very much evidence for low levels of inflation. But another important benefit from low steady inflation is the business cycle effect. By keeping inflation low and preventing it from getting out of hand you run a lot less risk of having recessions.

*What do you regard to be the main contribution of endogenous growth theory?*

Endogenous growth theory has been useful in bringing to our attention policies that stimulate total factor productivity such as research and education. Total factor productivity, the technology term, is no longer treated as being exogenous. While some people say that we always knew it wasn't really exogenous, the new endogenous growth theory has focused our attention on modelling the process of technological improvement: invention and diffusion of techniques into innovations, and also the role of entrepreneurs and finance.

*What can the OECD countries learn from the growth performance of the East Asian Tigers?*

A lot of that growth performance has been a process of catching up. However we can all learn from policies which encourage trade, technical research and education and so on. We can also learn about the benefits of having economic growth as the key goal of economic policy. I can remember putting together an economic proposal for Bob Dole where our goal was to raise the growth rate by one percentage point. Once you have a goal of faster growth then you can generate better policies because attention is focused on how that goal is to be achieved.

## GENERAL

*How healthy is the current state of macroeconomics?*

Well I think it is really quite healthy. The big thing that I see now on the research side is bringing sticky prices and wages, and monetary factors, into real business cycle models. That work is very interesting and exciting. The

work on growth theory is also another healthy aspect, although we must not lose the knowledge and interest in the fluctuations side of things. One area though, which I think is quite worrying, is high unemployment in Europe. I wish there could be more focus on that topic. Even though I think of it largely as a microeconomic issue there is still a lot of work that people who think about the whole economy could be doing. On the policy side what I find healthy is the way that central banks are focusing on inflation, following more systematic kinds of rule-like behaviour. I've noticed in the last five years the change in thinking about monetary policy which has been influenced by the research on policy rules. Ever since the rational expectations revolution there has been a tremendous interest in policy rules on the part of academics but much less so by policy makers until recently. When I went to work for the government in 1989 I wanted to bring more attention to that issue. In the first Economic Report of the President we did in 1990 we had a section on policy rules. Since then interest about policy rules has increased dramatically.

*What issues are you currently working on?*

The application of monetary policy rules and finding ways to reduce the amount of discretion that has led to monetary policy mistakes in the past. I'm doing that partially by simulating my multi-country rational expectations model. I am also looking at US economic history to see the impact of different monetary policy rules. Several years ago (see Taylor, 1993b) I proposed a particular rule for central banks to follow. That rule has received a lot of attention from policy makers which has generated even more interest in policy rules. Because of the questions the rule has raised I am doing more research on such rules. So that is what I'm doing right now.