

Putting People into Economic Policy

Finn Kydland, a Dallas Fed consultant since 1994, shared the 2004 Nobel Prize in economics with Edward C. Prescott for their groundbreaking work incorporating decisionmaking by individuals, households and firms into economic models.

Q. More than three years have passed since you won the Nobel Prize. What do you remember from that particular moment in your life?

A. All of it is still fresh in my mind, everything that led up to it, starting with the day it was announced, breaking the news to my wife, talking to my mother, who told me that six or seven journalists had already been to her house in Norway, and seeing from the published interviews how cool she was about it. I was in Norway at the time, giving some lectures, and all of those things stand out in my mind as much as being in front of the king of Sweden and accepting the medal.

Q. Tell me a bit about the actual ceremony.

A. A key event takes place two days before the awards ceremony. You give a lecture. You have about 40 minutes to talk about your work or anything you think is significant in relation to the work or why you got the Nobel Prize. That's actually the highest-pressure thing because there'll be anywhere from 500 to 1,000 people in the auditorium, and it's broadcast to anywhere in the world where people care to listen to such lectures.

Once that's over, then everything is just fun. On the actual day, the first thing was the awards ceremony, with a lot of pageantry that led up to receiving the medal from the king. When everyone had received the medal, we were whisked off to a big dinner for more than a thousand people. At the end of the dinner, the winners got to speak with the king and queen for five minutes, and then it was off to the dancing.

Q. How has your life changed since you've won the prize?

A. I do get different kinds of invitations now. I used to go to universities and present my research. Now, I also get invited to give key-



note addresses at conferences or particular events, and these are sometimes in quite exotic places, like Shanghai, Taipei, South America and Petra in Jordan.

But I think the most important thing is that I now have easier access to research funds. In particular, I got funding for an institute at the University of California, Santa Barbara, where I teach, called the Laboratory of Aggregate Economics and Finance, or LAEF. I spent half a day looking for a name that would create an acronym that would be pronounced the same as "Leif" Eiriksson, the great Norwegian explorer who was the first European to discover America.

That's what the institute is about—exploration and discovery. We put on conferences that focus on a particular issue, a particular question, and they turn out to be very lively. We had one on households, gender and fertility and one on Latin America's total factor productivity puzzle.

Q. Can you give us a layperson's version of the work that won you the Nobel?

A. The shortest way to describe it is that Ed Prescott and I showed how to put people into economic models and therefore policy. The award was for work we did in the mid- to late 1970s. In those days, macroeconomic models tended to be systems of equations in which researchers used statistical techniques to determine the parameters for consumption functions, investment functions, labor supply functions, labor demand functions and so on.

Around 1973, a two-page story in *BusinessWeek* expressed excitement about the idea you could use optimal control theory, a tool applied in physics, engineering and other sciences, to control the aggregate economy. This was just around the time that Prescott and I started our work, and we basically showed that using such techniques in that context isn't a good idea.

Q. What's the better idea?

A. We were explicit about the decisions facing rational people. Many of the most important decisions are very forward-looking—accumulating physical capital, accumulating human capital, buying long-term bonds and so on. We included these kinds of decisions in our models.

We put our framework to use in several contexts, and we actually won the Nobel Prize for two things. One was the application of our framework to business cycles, where we supposed there were no other sources of change beyond technological shocks that raise productivity. How much of the business cycles still remained? We determined that these kinds of shocks account for about two-thirds of post-World War II economic fluctuations.

The Nobel committee also mentioned the time inconsistency of optimal policy. Being explicit about households' and businesses' decisionmaking allows you to incorporate the fact that so many important decisions are forward-looking. They depend, for example, on what decisionmakers think the government is going to do in the future. An

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optimal policy would have to take into account the effect of future policy on current decisions.

When that future arrives, those decisions have already been made and there's an unfortunate incentive for governments to abandon the optimal policy and replace it with one that is better only under the naïve assumption that households and businesses won't see it coming. If the public anticipates the policy switch, the government is forced to implement a policy that is time consistent—there's no incentive to later repudiate it—but potentially much worse than the time-inconsistent policy.

Q. What are some of the policy implications that come out of this thought process?

A. While it's important to determine the best policies, you have to be consistent over time, and that's difficult in the face of this discovery that optimal policy is time inconsistent. When they reevaluate policies in the future, policymakers will no longer have the incentive to take into account the effect on decisions that have already been made. In the long run, the prediction is that you'll be worse off.

So how can you commit policymakers to carrying out consistent policies? We limit their discretion with rules designed to encourage time consistency. It seems to work better in the context of monetary policy than fiscal policy. In monetary policy, the attempts to isolate central bank policy from

political pressure by, say, making the central bank independent, have been a good thing.

In some countries, it's clear that the central bank is very much under pressure from the rest of the government. If the bank's head doesn't do what the other policymakers want him to do, he's simply replaced. There are many countries in which the tenure of the central bank head has been on the order of a year or less. In Argentina, for example, there were years in which the central bank head was replaced five times.

Q. Obviously, that kind of instability can throw off economic performance.

A. Latin America is a very interesting example of an area that used to be quite well-to-do—at least some of those nations. Over the past 100 years, they've consistently lagged further and further behind. And there's a lot to learn from trying to see why that is. Even for the past 20 years, one of the most depressing graphs I've looked at shows the physical capital stock in Argentina. The sum of factories, machines, office buildings and so on per working-age person declined by 20 percent from 1982 to the early 2000s.

Q. And these declines have something to do with policymakers' inability to take into account how people anticipate changes in economic policies?

A. Sometimes there are signs that leaders mean well, such as in the early 1990s in Argentina. But success becomes difficult if you have lost credibility among the people and among investors, not just domestically but also among foreigners who otherwise might have put their money in the

country. If you lose that credibility, it's very hard to regain it. And the credibility can easily be lost if you succumb to what I might call the time-inconsistency disease.

Q. What are your research interests these days?

A. They go along several lines. I'm still interested in studying particular nations. I've looked at Argentina, and it's a great contrast to a country like Ireland. I think there's a lot to learn from a very successful nation like Ireland and why in other cases, things go so disastrously wrong, as they've done in Argentina.

In the past two or three years, I've been trying to look for mechanisms through which money may play a role in the real economy. The models with explicit households and businesses initially applied to real economies—what happens to consumption, investment, labor input and so on. I guess I concentrated on the real economy because I view that as most important, but it's clear that one can build monetary factors into the economy. It's difficult, however, to get monetary factors to have much of a role in the real economy unless you cheat a little and assume price rigidity—something that I'm reluctant to do.

Another interesting project has to do with investment in durable household capital, such as residential construction and purchases of automobiles. It used to be that mortgages and car loans were made at fixed interest rates. And the question is whether monetary policy in such a circumstance actually may have had a role in the real economy. That's still an ongoing project, and given the current situation, I wish we had gotten further on it.

