

# A VIEW OF RECESSIONS, FROM THE AUTOMOTIVE INDUSTRY

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I would like to talk about the issues that have arisen over the past day and a half from the perspective of a large industry, the automobile industry. We learned from Peter Temin's paper that we may have caused the Great Depression. So it is certainly worth looking at the impact of a recession on the auto industry, and then at the recommendations for policy we in the industry would make, based on our experience.

## RECESSION IN THE AUTOMOBILE INDUSTRY

First, just a little description. I cannot think of an industry more cyclical or more dependent on the business cycle than the auto industry. A good year in the industry is sales of 15 million units. We are now selling above that, at a rate of a little over 15 and one-half million. That is a good year. A severe recession year is 13 million units. So a drop from 15 million to 13 million, a little over 15 percent, is really the difference between decent performance and severe losses, with a lot of job reallocation or job destruction, I might add.

One way to think about our response to a recession is this: In a normal year, as I said, we sell 15 million units. With roughly 100 million households in the United States, a typical household is in the market for a new vehicle once every six and one-half years or so, on average. However, this is a postponable purchase, and if the household decides to hold on to that car for an extra year, then instead of selling 15 million units, we will sell about 13 million units. So the question is, what induces

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a household to hold on to that vehicle a little longer? Over time, clearly, there is a secular trend, because we are making better cars and they last longer. But in the cyclical sense the question is, what induces the household to hold on a little longer? Households with incomes over \$75,000 enter the automobile market once every four years, on average, households with incomes below \$35,000 about once every eight years, for the overall average of once every six and one-half years. So the market is very income dependent. And clearly, if income declines in all income categories, they all enter the market less frequently, and you get people holding on an extra year or so.

## THE ROLE OF SHOCKS

Now, when we look back at previous recessions and try to find out, much as the papers at this conference have done, what caused that falloff in sales or what caused people to hold on to that car, in the immortal words of the movie *Casablanca*, you “round up the usual suspects,” and the usual suspects around here are higher interest rates and shocks. There is no getting around it. Every time that we have observed a precipitous, or I should say large, decline in sales, it has been associated with an increase in interest rates. But an increase in interest rates alone typically is not enough to do it. You need that shock. We could trace back through, certainly since the first post-World War II recession, and a shock has always been there. So in terms of the title of this conference, “Beyond Shocks: What Causes Business Cycles?”, it is very difficult for me to get beyond the shock. The shock is typically associated with that fall in sales. Higher interest rates clearly work to make the financing of a car more expensive; the opportunity cost of capital is higher, and as a result that slows down purchases. But the kind of precipitous decline that we see in recessions really is not associated with the interest rate level, by and large; it is associated with that shock. And more often than not in recent history, the decline has been associated with an oil shock, which also has a relative price effect on autos, since autos use oil intensively.

The key question for me, working in a business firm during a recession, is whether that recession was forecastable. Well, if it was due to a shock, a shock by definition is not forecastable. Now, I have tried that line out on my management several times, and I have never succeeded. I am perhaps in somewhat the same position as the Fed appears to be, according to the papers given yesterday. The two conclusions I took away from the history highlighted in those papers are that either the Fed is irrelevant or the Fed does the wrong thing. Well, when I tell my management that while I am here to forecast, to tell you what the economy is going to do, I cannot forecast shocks, it does not go over well. But that does not mean that I am irrelevant. That is because other

factors influence that recession. The shock might not be forecastable, but when a shock occurs, it does not necessarily mean that we are going to have a recession.

## THE IMPORTANCE OF A ROBUST ECONOMY

Typically, what we see before recessions is some degree of vulnerability. In some sense the probability of a decline goes up, and that is where an economist can make a contribution in terms of saying, yes, things are happening and some vulnerability is present. The shock might be some totally unforecastable event, but when it occurs we will be more vulnerable. And that is an important point to bear in mind. We have tended to focus on the shock; we look at a recession, we see a shock that drives down the economy, and we know that shocks are not forecastable. But in fact, all shocks do not lead to recessions. Christopher Sims mentioned yesterday that one of the faults in our methodology is that we go and look for the recession that we can associate with a shock, even though a lot of shocks do not result in a recession.

And what if we were able to distinguish why that was the case? Just as a “thought experiment,” I asked Franco Modigliani this morning, “If we were to have an oil shock today, would that cause a recession?” Well, it is arguable. Clearly it would depend on the extent of the oil shock. But the fundamental robustness of the economy right now, the fundamentally low inflation rate right now, could lead you to argue that we could absorb that kind of shock. You could say that Asia was a shock, certainly, to the U.S. economy. But do we have a recession? The jury is still out on whether we will have one, I guess, but the argument would be that the precursors, or the state of the economy, did not lead to it. At the time of the stock market crash in 1987, if you go back and look at the newspapers of that day, they were plotting the behavior of the economy against the behavior of the economy in 1929. Had I known at the time that because of the change in the structure of car financing, we were not going to get a Great Depression, I would really have made some play on that! But clearly, we have got to pay attention to those events. And that is where, for a business anyway, the skill and art and science come in. Shocks occur randomly. But, depending on the state of the economy, our job is to forecast whether or not they will result in a recession.

## THE 1990 RECESSION AS AN EXAMPLE

I would like to illustrate these points by looking back at the 1990 recession. I understand that in the context of the post-1914 period, it is a small recession and not necessarily typical. However, it does illustrate

some of the points I want to make. I went back and I looked at what the Blue Chip economic forecasters, that collection of industry and bank economists, were saying in 1990. In June of 1990 before the invasion of Kuwait, to summarize one of their forecasts, they had a few lines that said, "Once again, the consensus reaffirms that as a whole the economy will not slip into a recession either this year or next." Well, that clearly proved to be wrong. And, following on my argument that it is the shock, they should not be held responsible. Moreover, we should give them credit, because they were forecasting a slowdown. The economy grew in 1989 at a rate of 3 percent, or at least so we thought at the time, and in mid 1990 Blue Chip was forecasting a slowdown to 1.9 percent and then growth of a little over 2 percent in 1991. Two percent growth is closer to zero than 3 percent, so the economy was more vulnerable to shock, and the shock then came.

The other bit of evidence from that period that I believe emphasizes the shock, and it came home very clearly to me at the time, working in the automobile industry, was the precipitous fall after the invasion of Kuwait, which does lead you to associate the decline with a shock. If you recall, the invasion of Kuwait occurred in early August, and then the consumer sentiment index, measured by the University of Michigan, took a precipitous drop. I hesitate to say it was a record, although it may have been, in terms of both the absolute decline and the percentage decline in sentiment associated with that event. Then auto industry sales fell off. They had been slowing, and they fell off in August, bounced back in September, but then in October, November, they started to fall. And with the war beginning in January, sales took a huge dive down, and in February, when the land war began, they stayed down. So as a result, I associate that whole event with that shock.

I went back and tried to get data on our dealer retail orders at that time. Unfortunately, we had thrown them out as part of the new efficiency. So there has been some job destruction there, because we used to have people collecting these things. But I recall the abrupt falloff in orders. We schedule our plants based on dealer orders, and right after Thanksgiving, when President Bush announced the January deadline for the war, those orders just came down. It is typical for us to reschedule production once a month, on a three-month rolling basis. Our orders were so sparse at the time, the question was whether we were going to shut down, and we were doing our scheduling on a weekly basis. And in fact our scheduling meeting was chaired by the chairman of the company, which is a very unusual thing. He normally does not get involved. So, the whole sense was that this was a very abrupt thing, it was a shock. Of course, I was up there saying it was not forecastable! But where does that leave us for the questions of policy? That is where I think this whole conference is aimed, ultimately.

## THE ROLE OF MONETARY POLICY

The question, as I said before, is how vulnerable the economy is. And that relates to the conduct of monetary policy. We heard yesterday the notion that the recessions that followed the oil shocks of the '80s, anyway, were a result of the expansionary monetary policy, inappropriate monetary policy of the '70s. Well, we have also seen in other shocks that interest rates were raised, not willy-nilly, but because of an inflationary buildup. This would suggest to me that the essence of getting policy right is as follows: You are not going to prevent that shock, but you can make the period just before the shock better, so that we are less vulnerable. Then even if we are hit with a shock, the impact on the economy will be smaller.

The second issue is that we also have the period after the shock. And the question is, after the proximate cause hits and after the implications play out, how fast do we get out? And there you will find the argument for the proper role of policy. In the most recent recession, I would argue that interest rates came down very slowly. In one period, interest rates were coming down at about the rate of decline in inflation expectations, also recorded by the University of Michigan consumer survey. As a result, the real interest rate was not changing. And then a period followed in which nominal rates were actually stable. We were going from a high level of interest rates down to a low level. We were just getting there too slowly, I think. That is, of course, arguable, but the point I make is correct, which is that the periods before and after the shock are crucial for policy, even if you accept the notion that we are not going to be able to do much about those shocks.

One sidelight on policy and recession concerns the data flow: how much information is coming into the Fed and what the Fed sees happening. Auto sales are recorded by the U.S. Bureau of Economic Analysis (BEA), but in the recession I discussed earlier, we affected the BEA numbers. The BEA recorded a more moderate decline in production than was actually taking place. The reason was the two kinds of auto sales: sales to fleet, and sales to customers, retail customers. In the early stages of a falloff (and this is looking at our own data, but I suspect you would have also seen this at GM and Chrysler), you do not know how long this decline is going to last or what the effect is going to be, and you do not want to shut down your plants. But your orders are very thin. We pulled ahead orders we knew we were going to deliver to the fleets, by that I mean Hertz, Budget, the rental car companies. So if you look at the numbers, you will see that, on a year-over-year basis, the retail numbers fell off sharply in August, then came back a bit, and then went down again. We overdid it on the fleets. In fact, in retrospect we realized that what we were doing with the fleets was inventorying cars in a novel way. We gave them to the rental companies, took them back four months later,

and found that new car sales were affected by it. So we did not change the overall level of demand out there, we inventoried and paid for it later. But when you looked at the data, the falloff did not look as precipitous. However, the chairman of the company at the time would call me up and say, you have got to get the message to the Fed, you have got to get the message to the Fed, that things are deteriorating faster than we are showing. I tried my best.

In conclusion, then, if you do accept this argument that, at the end of the day, shocks are what cause the tip-over, then the essence of policy is to make the economy as good as possible, both before and after the shock.