On Making Economics Realistic

Interview with George Akerlof

George Akerlof has been a pioneer in developing theories that explain important deviations from classical economics. In 2001, he, along with Joseph Stiglitz and Michael Spence, won the Nobel Memorial Prize in economic science. His acceptance speech was a forceful denunciation of many standard claims of economics today. In fact, Akerlof believes a truer view of how the economy works reflects the spirit of Keynes. He is concerned that the nation will try to reduce inflation too far.

Q You presented in your Nobel Prize acceptance speech a broad criticism of conventional economics based on your own work in asymmetric information and behavioral economics. You started with what has become your famous piece on the used car market. What got you interested in this market in the first place?

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A. I became interested because, particularly at the time, automobiles and the variation in automobile sales played an especially large role in the business cycle.

Q. When was this?

A. It was the 1960s. I was looking to see whether the tendency to buy new cars rather than used cars could explain this cyclical variation. It had occurred to me that this variation might be due to asymmetric information. The paper did not show this conclusion, but later work by Rick Mishkin did.

Q What did you end up explaining with your paper?

A. It shows that the market for used cars—because of asymmetric information—is likely to be quite a small market and that other markets with sufficient asymmetric information will, in fact, collapse and will not be there at all. The leading and most obvious such failure is in health care insurance.

So the paper, in fact, does explain quite a bit. First, it explains why some really important markets that should exist simply are not there. Asymmetric information can cause markets in which trades would be beneficial to collapse.

Q. The basis of this market is that the guy selling the used car knows a heck of a lot more about that car than the person buying it?

A. Yes. The person selling the car knows more, and so the buyer does not want to buy. The market may not develop, or it may disappear altogether. Here is how it works. Suppose there is a given price for a used car. Those sellers with cars that are very good are not going to offer them for that price. Those with bad cars will usually be happy to offer them at that price. The buyer, seeing that he is potentially going to get one of these bad cars, will insist on a lower price than he is willing to pay for the best

car that is being offered. The seller who is just on the margin and has the best car says that that is not sufficient, and so he withdraws. That makes the pool of available cars worse. Then the price that the buyer is willing to pay drops further, which causes a further reduction in the quality as the people at the top of the market continue to withdraw. It is a vicious circle.

Q. This theory provided you, as you say in your Nobel Prize acceptance speech, with some hope that you could return to what you describe as a Keynesian kind of economics, at least in the spirit of Keynes's classic book, *The General Theory*.

A. The whole endeavor—this was just the beginning of a long-term endeavor—was to construct a macroeconomics that was much more specific regarding market institutions and their operation.

Q Did Keynes in some sense make oversimplified assumptions that were easy to criticize by what you called the new classical economists?

A. That is not clear. There is a scattering of equations in Keynes's model, and any equation almost automatically involves simplifying assumptions, but there is also a great deal of prose. In Keynes's prose, there are few oversimplified assumptions. But if you read the equations, you underestimate what he wrote. Some later economists have taken these equations to be most of what Keynes said and did not pay sufficient attention to the fact that putting his prose comments into a model would be much more difficult. So there is a lot more in *The General Theory* than the simple classical model that people took out of it.

Q That is an important point. So, there you were, sitting

in the 1960s with a sort of beginning of a revival—at the very least a kind of neoclassical synthesis. And then, given some of that oversimplification, there was a further rebellion toward new classical economics, with its headquarters, so to speak, at the University of Chicago.

A. Yes, that is right. So the new classical economics challenged the Keynesian theory. It asked the basic question in Keynesian theory, which is why there was such a thing as unemployment. Since the economics of the time operated almost entirely in terms of perfect competition, the question was: Why in competitive markets would there be such a thing as unemployment? The question arises because in competitive markets it is difficult to have a theory of unemployment. In a competitive market, if you have a bushel of wheat, you can by definition always sell your bushel of wheat at the going price.

Q. Perfect competition assumes, in a nutshell, what?

A. There are many buyers and there are many sellers in a market, and no one of them has any market power. That is perfect competition. So, if I have my bushel of wheat, or if I have my thousands of bushels of wheat, and I decide to take a slightly lower price than is currently being offered, I will be able to sell all my wheat. We see this every day in the stock market. The stock market is a big competitive market. If you have shares of stock—even fairly big blocks of stock—you can typically sell them with only fairly small shadings in the price.

Q How is this applied to unemployment?

A. If you thought that there were many different buyers and sellers of labor, and markets for labor were therefore very competitive, you would think that an unemployed worker could get a job if he or she simply lowered her reservation wage slightly. Alternatively, the unemployed worker could also get a job, not

at a lower wage, by reducing her demands regarding her conditions of employment.

Q So the theory says that the only reason I cannot get a job is that I am asking too much money?

A. Too much money, or perhaps that you are too fussy about your conditions of employment.

Q. Or you might not want to move.

A. That is right . . . some jobs are harder than others. Jobs contain two things: one is the wage, and, of course, the other is all kinds of things like working conditions, location of the job, the title, etc.

Q. The new classicals would say there is no such thing as involuntary unemployment.

A. I think that is right.

Q. Yet, as you point out, we have seen fairly conclusive evidence of involuntary employment—for example, in the Great Depression of the 1930s.

A. That seems to be a good example. Also we see cycles in unemployment. By that I mean that unemployment varies greatly. That variation over the business cycle seems to be an indication that there is something going on other than just market clearing. If there were market clearing, you would think that the number of people searching for jobs, which is the Labor Department definition of unemployment, would not vary tremendously. Farmers usually sell most of the wheat they grow, although sometimes they are happy and sometimes they are sad about the price they receive for it.

Q Does asymmetric information or behavioral economics explain involuntary unemployment?

A. The leading explanation for involuntary unemployment

now is efficiency wages. The efficiency-wage story says that the labor market does not work like the market for the purchase and sale of bushels of wheat because labor is very different from wheat. Just because people are physically present at their jobs does not mean they are automatically going to work hard. They need to be motivated. So, for a whole variety of reasons, employers often pay labor much more than necessary just to get them to show up in the morning—because of morale. They want the workers to work harder. Workers need incentive. If, in fact, employees could get exactly the same jobs just across the street, as perfect markets suggest, they would not have much incentive to work hard. One of the incentives to work is that your employer is paying you something that is especially valuable, so many employers find that it is useful for them to pay more than the market-clearing wage.

Q So there is a kind of rationing process?

A. Such wages cause rationing in the labor market. If employers pay above the market-clearing wage, more workers are going to apply for jobs than there are jobs available. Employers will pay such high wages for a variety of reasons. A leading reason comes from asymmetric information—that the employers cannot watch workers all the time and know everything they do. Employers cannot completely monitor them. So employers pay workers a higher wage so that, should they be caught shirking, they would lose something if they had to seek employment elsewhere. That gives an incentive. That is one leading theory.

There are various other theories based upon morale. That is, a lot of employers want to pay high wages to workers so they will have high morale, and then the workers will be committed to the workplace and do good work. There is a lot of evidence that, in fact, this is exactly what occurs. There is actually much more

evidence for this theory than for the straight market-clearing, perfect-markets story. In almost any labor market, different employers pay a wide variety of wages for what we think is similar-quality labor. If one employer is paying $10 an hour for a given type of labor and another employer is paying $20 an hour for the same type of labor, then, ipso facto, one of these employers, the one with the higher wage, must be paying above market clearing.

Q This suggests something in the behavior of workers that may not necessarily be accounted for in neoclassical or classical economics.

A. The evidence is that many, many employers are paying above market-clearing wages, which makes the concept of involuntary unemployment meaningful. It means there can be people out there searching for high-wage jobs that are available, yet these people are not settling for lower wages. Such a person is rational to be searching for a high-paying job—such jobs are available—even if she might need a little luck to get one. The existence of high-wage jobs creates a gap between the demand for labor and the supply of labor. Thus there may be unemployed people who are unwilling to take the worst opportunities available to them, but they are rational to be searching because, with luck, a higher-paying job may come along.

Q. Does this imply that there is always involuntary unemployment?

A. I think probably there is always some involuntary unemployment, yes.

Q What are the policy implications of this? If there is no involuntary unemployment, as new classical economists would

say, then there is not much one can do about creating more jobs without creating inflation, I assume. But if there is involuntary unemployment, what does it mean about policy?

A. I want to return to the policy implications. But let us first talk about another issue you raise. An implication of the neoclassical model of the economy is that monetary policy cannot even stabilize the economy.

Q. Can you explain that further?

A. With neoclassical economics, monetary policy is ineffective in stabilizing output. Indeed, it is totally ineffective. Neoclassical economics makes monetary policy ineffective because prices and wages are totally flexible. In that case, a shift in monetary policy that has been foreseen will just result in changes in prices and wages that exactly mimic the increase in monetary policy. A change in the money supply, which would be a change in monetary policy by, let us say, 5 percent, would be accompanied by an increase in wages and in prices by 5 percent. It would have no effect whatsoever.

But new theories of unemployment give a reason that wages and prices would be sticky. Under the new theories of unemployment, there are firms that are very close to indifferent about paying a higher wage or a lower wage. They have chosen a wage that is just at the optimum, and they are at the margin of indifference between higher or lower wages and also higher or lower prices. With just a small bit of laziness on the part of such firms, when there is a change in the money supply, they will leave their wages or their prices fixed. Such sticky prices (or wages) in the presence of an increase in the money supply then result in increased real demand. The reason is that the money supply has risen relative to the price level. With such a relative increase in the money supply, people find themselves with an excess in their bank accounts; they will therefore buy either more goods or more assets. If they buy more goods, demand increases directly.

If they buy more assets, interest rates fall, which will also increase demand.

Q So Alan Greenspan, or somebody like him, does matter?

A. Definitely, yes. And, of course, that is what everyone believes throughout the Western world. Monetary policy does have an effect on output and employment. We should be a bit careful. What the new classical economists said was that monetary policy *insofar as it was foreseen* would have no effect on the level of output. My view is that monetary policy tends to be very public—that is, it tends to be seen very quickly—so their view says, in practice, that monetary policy has almost no effect on the economy.

Q. Is that a rational-expectations view of monetary policy?

A. Rational expectations says that the systematic part of monetary policy, that part which could be foreseen, will have no effect.

Q. So, you mean if there is a shock—a sudden change in monetary policy—it could have an effect?

A. Yes. I was careful here—I circumvented that part by saying "monetary policy insofar as it was foreseen." The foreseen part would be the systematic part and have little or no impact.

Q I would like to get to the NAIRU (nonaccelerating interest rate of unemployment). I guess we should combine it with a little definition of the Phillips curve. But new classical economics—and indeed, it has become standard among many economists—argues that there is a given natural rate of unemployment, and if you try to reduce it, the pace of inflation will accelerate—the NAIRU. Let us go into your analysis, then, as to whether there is a NAIRU or not. You believe there is not.

A. It might be useful for me to begin with an explanation for such accelerating inflation. According to the standard story, in price setting and in wage bargaining, people try to set a real wage that they want—a wage before inflation. People bargain in these real terms, and then they add on the expected rate of inflation. Suppose the Fed keeps unemployment below the natural rate of unemployment. People see that unemployment is low; they sense that the job market is tight. As a result, they see that they can demand a higher real wage. But because demand is so high at that level, there is going to be more inflation than they were expecting. Then they add that higher inflation onto their real wage demands. So there is a vicious circle, which raises inflation, and therefore expected inflation, yet higher. There is an ever-accelerating inflation if unemployment is below the natural rate.

The big problem with the analysis is that, to be consistent, if the unemployment rate is above the natural rate, you ought to have accelerating deflation. People do not talk much about that.

Q And there is no evidence of that accelerating deflation?

A. Well, we seem to find that, at high rates of inflation and low rates of unemployment, there is fairly good evidence that we get acceleration in the rate of inflation. But if you look at the opposite case—high rates of unemployment—there is much less evidence that you get accelerating *deflation*. Now, that means that the basic theory of the NAIRU has a problem. Take a look at the Great Depression. For the first few years, from 1929 to 1932, there was rapid and accelerating deflation. But from 1932 to 1942, there was almost no change in the rate of inflation at all. There was not accelerating deflation. And yet, no one I know would argue that in the Great Depression the unemployment rate was not above the NAIRU, and above the NAIRU by a great deal.

There simply should have been accelerating deflation, and there was not. So somewhere, some place, the theory breaks down, and the question is, where does it break down?

Q. Where exactly does it break down?

A. It breaks down when the inflation rate is very low. You find that at low rates of inflation, there is a significant trade-off between inflation and unemployment. There are two reasons the standard logic of the NAIRU no longer works when inflation is low. First, workers do not like cuts in their money wages. And because such cuts have significant effects on morale, firms are loath to make such cuts. This resistance to money-wage cuts creates a trade-off not between the acceleration in inflation and the level of unemployment, but between the level of inflation and the level of unemployment.

There is a second reason for the failure of the logic of NAIRU at low inflation. When inflation is low, it does not matter much to workers whether or not you add expected inflation onto the wages they bargain for in real terms. There is evidence that both firms and workers tend to ignore inflation when it is low. This tendency gives a second reason that, at low inflation, there is a trade-off between the *level* of inflation and the *level* of unemployment. Again, the logic of NAIRU fails.

Q. What are the policy implications of this situation?

A. The policy implications are very important. Very low inflation is always a telltale sign that the monetary authority is not doing its job: The economy could permanently have more jobs, at almost no cost. Central banks especially should not pursue inflation targets that are too low. A zero-inflation target for any Western country would result in very high unemployment. Calculations by Bill Dickens, George Perry, and me suggest that going from a 2 percent inflation target to a 0 percent target will result in a shift upward of two percentage points in the long-term unemployment rate.

Q Are there some empirical examples of this conclusion?

A. A good example may be the Canadian economy for the decade of the 1990s. The Canadian monetary authority for the 1990s had very low inflation targets and maintained very low inflation throughout the course of the decade. Did it have an effect? Canadian unemployment was very high throughout the 1990s. They should have had a very large deceleration in inflation, given the theory. In fact, they got only something like a 0.1 percent change in the inflation rate. They paid a very high price in terms of having high unemployment for negligible gains. For the United States, on our side of the border, it also is a useful warning: that being overly aggressive about trying to reduce inflation to the absolute minimum is a very bad thing.

Q Let me go to another interesting subject you raised in your acceptance speech. New classical economists would argue there really could not be bubbles in the stock market. Please explain that.

A. Many people in finance believe that asset prices reflect fundamental values—that asset prices basically reflect the present discounted values of the returns that people are going to get from stocks or bonds. The behavioral finance people, especially Robert Shiller of Yale, believe that asset markets can get out of control and that prices deviate quite a bit from market fundamentals. The problem is that it may be a fairly easy task to evaluate one stock relative to another. But it is very difficult to know what the price of all stocks should be. It is just like when one buys a house: It is easy to tell what the price of one house should be compared to the one next to it, but whether houses are a good value or a poor value as a whole is very hard to judge. So there are times of euphoria when stock prices are

extremely high, as there are also times when stock prices are tremendously depressed.

Q. And Shiller has shown that the assumption that the market accurately discounts future earnings does not seem to hold up historically.

A. That seems to be the case.

Q Let me get right to the policy implication of that. Is there a role for the Federal Reserve to try to ameliorate potential bubbles, or actual bubbles?

A. My own view is that the key central policy goal of the Federal Reserve is to make the proper trade-off between inflation and unemployment. In that regard, the Federal Reserve's concern about asset bubbles, which it definitely should be concerned about, is secondary.

Q. Would it not be secondary only to the extent of its significance, of how inflated the market is?

A. It is quite clear that the Federal Reserve in the late 1990s could have cut asset prices by raising interest rates. They could have foreshortened the bubble. But if they had done so, they would have also raised unemployment. I would not trade the prosperity of the late 1990s for a shorter bubble. That prosperity made a huge number of people much happier.

Q But you do believe in a Tobin tax—a tax on securities transactions—for example?

A. Yes. I think that a Tobin tax is probably a good idea.

Q. Because it would reduce speculation?

A. It is not clear that a Tobin tax would have dealt with this last bubble, but it might have helped, because huge numbers of

people were doing a lot of trading, and they were very naïve. It might have reduced the trading.

Q Let me ask you about one last area: what you call identity economics and its implications for social policy. Can you explain that a bit more?

A. One problem that economists have not properly analyzed is minority poverty in the United States, and especially African-American poverty. African Americans are more responsive to good schooling than any other segment of the population. And yet, we are starving our inner city schools of the funds that are necessary to hire the very best teachers and also to have the small class sizes that have been shown to be effective. Behavioral economics has, especially with identity theory, made a special case for extra funds to be devoted to the inner city. There are very high returns in terms of better school performance from increased spending.

Q So, let me get back to John Maynard Keynes. You began your speech by saying that we can revitalize economics in the spirit of Keynes. One of the first things we think about when Keynes's name comes up is that he argued that government could stimulate the economy in times of higher unemployment and undercapacity. Does your thinking revitalize the case for Keynesian stimulus?

A. Yes, definitely. Behavioral economics provides a new way of looking at macroeconomics. It is not just a question of having a handful of simple recipes. You need to analyze economies in terms of their institutions, especially in terms of the motivations of the price setters, the wage earners, the employers, and so on.

When you do that, you get a macroeconomics that is not rule-based and that is much more flexible in its thinking. For the United States, one major application is that we want to avoid very, very low levels of inflation. A zero-inflation target especially would be a disaster in the United States and would cause the loss of millions of jobs.

Q Are there any implications for the ongoing debate between fiscal and monetary policy?

A. With fiscal and monetary policy, I think I am probably on the side of Tobin. Tobin always wanted to have a tight fiscal policy, a loose monetary policy. A loose monetary policy yields low interest rates, and low interest rates provide an incentive to invest. This recommendation does not just come from behavioral economics—it is very classical. Behavioral economics neatly combines classical economics with the deviations from it. We do not need to throw away our classical thinking. We add to it, and we fine-tune it to fit reality.