In the summer of 1998 financial turmoil in Russia combined with a deep recession in East Asia reduced demand for exports from the United States. The Federal Reserve chose to pursue expansionary monetary policy rather than risk a deep recession. Let’s now use the model of the macroeconomy that we’ve developed to keep a logic of this policy and to look at what its long-range consequences might be.

We start by looking at factors that might suddenly shift in the aggregate demand curve and create a recession. Those factors would be any of the changes in autonomous spending that could come about because of factors in the environment. If consumer confidence declines, consumers may decide that they want to save money rather than spend it. The increase in savings at the expense of consumer spending shifts in the aggregate demand curve indicating that at any given price level now, less output is needed to meet the demand of the economy. The same thing would be true if business confidence were to fall. If businesses believe that they face an uncertain future and therefore they wanted to buy fewer tools, capitals goods, factories and equipment. Finally, if foreigners decide they don’t want to buy products from our economy, then the aggregate demand curve shifts inward as well. These three autonomous changes could suddenly shift the curve in and potentially lead to a recession. Let’s see how this recession plays out.

The reduction in aggregate demand creates an excess supply of goods at the original price level, but as factories are producing the amount that’s indicated on the blue curve at the price level, while people want to buy only the amount that’s indicated on the red curve. That gives us an excess supply of goods and services. What happens in this case is the price level begins to fall. As the price level falls, then consumers and businesses begin to spend more through the usual channels. First of all, the lower price level decreases demand for money and that leads to a lower interest rate, which increases investment spending. Also the lower price level increases the real value of consumer wealth, which leads to more consumer spending. And finally, the lower price level makes goods from the U.S. economy relatively attractive to foreigners, which increases net exports. On the supply side of the economy, the lower price level leads to reduced output. First of all, because real wages are now higher. Prices are falling relative to fixed wages so businesses find it unprofitable to produce as much as before and they cut back their output. Also the sticky price phenomenon. Some businesses are not able to lower their prices along with the market; therefore they lose market share and reduce their output. And finally, confusion. Businesses aren’t sure whether the price decline that they’re seeing in their own business is unique to them. That is whether it’s a reduced demand for their particular product or whether it’s just general economy-wide inflation. All this leads businesses to produce less and it creates this new short-run equilibrium. The short-run equilibrium involves a lower level of output, Y1, therefore we have a recession. Output is below full employment. Along with this recession we get reduced price pressure, or in our model, a lower price level. This is typically what happens when the economy suffers a decrease in demand. We get a lower price level overall, accompanied by a reduction in output. This is what we call bad deflation. That is a drop in the price level that’s accompanied by a contraction in the economy. The business cycle in this case is on the downward swing. We’re headed into recession and the lower prices are the consequence of reduced demand.

What would happen in the long run if we didn’t take any action? That is if consumers, businesses and foreigners were spending less and the government did nothing to accommodate it. Well, what would happen is that the output being below full employment creates downward pressure on prices and as prices begin to fall for labor and output and other factors of production, then companies pass these lower costs on the form of lower prices for products. So that the short-run aggregate supply curve shifts downwards until the economy returns to full employment. This is the adjustment process that the classical economists believe would happen in the long run. That is as long as you have output below full employment there’s going to be slack in the economy and that’s going to put downward pressure on wages and raw materials prices. As those prices fall, then output prices will fall as competitive businesses bid down the price to try to sell their goods and services. When the economy returns to this position the adjustment process is over. A good question at this point is how long does this adjustment process take? How long does it take the economy to get from this point to this point to this new long-run macroeconomic equilibrium? And the answer, of course, depends on people’s expectations and how quickly people figure out what’s really going on. How quickly do businesses figure out that, in fact, the lower prices are generally economy wide deflation. How quickly do people figure out that the economy has contracted and therefore, incorporate reduced price expectations into their behavior? The more quickly people figure this out, the more forward looking their expectations or the more people have rational expectations, the more quickly we get to this new long run point and the less time we hang out here with the recession.
There’s another problem, however, and that concerns institutional rigidities, wage contracts and the lot. Wages typically can move up very quickly in a competitive environment, but wages don’t actually fall because of union contracts and just the habit of the relationship between employers and employees. Because wages don’t fall rapidly, prices don’t fall so rapidly and we can wind up hanging up back up here at this point with unemployment that lasts for a long time. It maybe a long time before this adjustment process actually plays out and brings us back to full employment. Therefore, it’s probably better many economists argue rather than waiting for the economy to take its natural course and endure a prolonged period of deep recession with a lot unemployment and all of the consequences that that brings with people’s lives, it may be better for the government to take action that shifts the aggregate demand curve back to its original position rather than accepting that aggregate demand is now going to persist at a lower level with all of the consequences that entails. Government policy could countervail the decrease in private demand with an increase in public demand or an increase in the money supply that stimulates investment spending. Let’s now make a list of the policy tools that are available to shift the aggregate demand curve back out. They are, first of all, fiscal policy, which involves government spending or a change in taxes. And second, monetary policy, which involves changing the money supply so as to change the interest rate and influence business, spending. How would that work? First of all, an increase in government spending could shift the aggregate demand curve back to its original position. That is if households don’t want to spend the money, the government can simply spend the money for them, therefore, creating jobs and restoring the original price level and the original level of output. Rather than waiting for this long painful adjustment process, the government can simply step in and make up for the slack in demand. Alternatively, the government could cut taxes and cutting taxes might stimulate consumer spending by leaving more disposable income for households. By doing that the government shifts the aggregate demand curve back to its original position.

Finally, monetary policy. The Federal Reserve could increase the money supply by lowering reserve requirements, by buying government securities in open market operations and by lowering the discount rate. By increasing the money supply, the Federal Reserve lowers interest rates through the money market, which then encourages businesses to do more investment spending shifting the aggregate demand curve back outwards. If that happens, there is no need for this adjustment process. The way these policy tools work in this story is quite simple. The policy measure makes up for a reduction in private demand. The private demand shifts inward and government demand replaces it. Or the government gives a tax cut which encourages increased consumer spending or the Fed increases the money supply lowering interest rates and stimulating investment spending. This is how policy works then to countervail a reduction in aggregate demand.

Now, what difference does it make whether the policy is anticipated or unanticipated? If it’s very clear to people that the government is going to increase government spending right now, so that the aggregate demand curve is going to shift back outwards, there may be no period of actual recession. And maybe that’s just what happened in 1998. It became very clear to the economy that the Fed was going to make money easy to get so as to keep interest rates low and, therefore, prevent the aggregate demand curve from every shifting downwards. This bolstered people’s confidence and led to an increase in spending even in the face of bad news about Asia and Russia. So the commitment of the Fed to keeping the aggregate demand curve at this position became an organizing principle for the economy. Everyone knew then that the aggregate demand curve was going to wind up here so they adjusted their behavior accordingly.

One final story about policy that makes clear the power of the notion of rational expectations. Suppose the government increases spending in order to try to pull the economy out of a recession. Well, think about this. The government has a budget of its own and the government budget deficit is the difference between what the government spends and what it takes in taxes. In time the government has to pay off its debts and it has to pay them off with interest. So suppose the consumers decide that they want to spend less and the economy is in danger of dipping into a recession with lower prices and lower output. The government comes along and says, All right, we’re going to increase government spending and pull this economy out of a recession. But consumers aren’t fooled because they say, Huh! If the government increases spending today and it doesn’t raise taxes? Well, then what’s going to happen? We’re going to have to pay back that government debt down the road with interest. But consumers aren’t that much of the sharp pencil
calculators, but if they are, then fiscal policy becomes ineffective because people all set increases government spending by making decisions of their own in anticipation of having to pay off government debt. That’s one of the consequences of rational expectations pushed to its extreme.

So depending on how much people are looking forward, depending on how quickly their expectations adjust, we may get a different story. But the basic story is this. If aggregate demand shifts inwards, then policy can stimulate aggregate demand and shift it back outwards. That way, government policy can prevent a recession from being as severe or deep as it might otherwise be.