Thank you very much. Listening to Donald Brash convinced me that, for many countries, there is a long way to go to achieve price stability. In addition, there is some sense of envy and gratification. As he explained, New Zealand’s inflation target is above zero because inflation may simply be just measurement errors. I hope that nobody from my government was listening because he would immediately adopt the conclusion that our inflation is measurement errors.

There is also the question of who is responsible for lowering inflation and for omitting or missing the target. In our case, the division is very clear. It is ex post. If you miss the target, the Governor was responsible. If you hit the target, of course, the government was responsible.

Let me provide a brief background about inflation in my country. Israel’s experience with inflation has gone through basically three phases since the mid-1980s. Up to the mid-1980s we had hyperinflation. During that period, there was a major stabilization program—the core of which was budgetary restraint and exchange rate anchoring—along the lines that Rudi Dornbusch described. We were then stuck at an inflation rate of 18 to 20 percent for about seven years. Inflation targets then came into the game and now we have about half the rate of inflation we started with.
Thus, what are the lessons and mechanisms that brought about the decline in inflation? Many of you have raised the question of where the exchange rate comes in. And, indeed, initially in the stabilization program, the exchange rate against the dollar was a very important anchor. The question, though, became how do you exit from it? As inflation at home continues, you have real appreciation. And with the real appreciation, competitiveness gets eroded and may hurt the economy after a while (as it did in Israel). With large changes in bilateral exchange rates, Israel moved to pegging to a basket of currencies, then to a band vis-à-vis the basket, then to a wider band vis-à-vis the basket. And from time to time, an adjustment of the band had to take place.

At the end of 1991, the existing system was introduced, which we refer to as the “crawling band,” not “crawling peg.” The slope of the band is a function of the difference between the inflation target and the expected inflation abroad. That is how the inflation target came into being in the Israeli context. In a way, it was the mechanism by which we got out of a relatively rigid exchange rate regime. And in order to introduce the slope, the inflation target came in through the back door.

Why did we start getting interested in inflation? After all, inflation was about 20 percent and nothing bad happened. Our economy has been very indexed and the illusion that inflation does not carry a cost was prevalent. But after a while, several things happened. First, some public opinion polls showed to the politicians that inflation does matter; in fact, it mattered more than unemployment. Second, as foreign investors started to get interested in the Israeli economy, we found out that one of the first questions that investors asked was, “What is your inflation rate?” Third, the rating agencies came in. In short, that’s where the motivation came from. There was initially no motivation to lower inflation. Up to that point, fighting inflation occurred only when your back was to the wall.

When we come to the targets, a few specific technical questions come up. First, who sets the target? In our case, we found that it is essential that the government have a very important say in setting
the target—not simply the central bank, but the government with the central bank. There are several reasons. First, it forces the government to put inflation within the spectrum of its own objectives. Second, it assures that inflation is not just the residual that comes out of the budget debate, but that it is done simultaneously. Third, it forces the tradeoff issue. For a long time, when the central bank tried to fight inflation, arguing that we needed to lower inflation, people came back to us and asked, “Who told you? There is a tradeoff—there is unemployment, there is growth. You are not an elected official.” The tradeoff involves a political decision. We can always argue whether there is a tradeoff or there isn’t. But if the politicians feel that there is a tradeoff, they can translate that feeling into the setting of the inflation target. Once the inflation target has been set, then the independence of the central bank is understood, as far as the user of the policy instrument. It also helps the central bank to explain why it raised or lowered rates: here is the target, we are about to miss it, that’s why we have to raise or lower rates.

Should it be a point target? Obviously not, for several reasons. First, typically when you disinflate—in our case, when you go from 20 percent to 10 percent to 8 percent—you also are engaged in financial market liberalization. And that’s the period where some of the relations are not as stable. It is good to have a range. And of course, you need to allow for real exchange rate changes and other changes. There is another question, which is, which index should you use? Although it sounds like a technical question, it is actually a fundamental one. Many countries have removed parts of the index from their inflation target. Not the consumer price index (CPI), but the CPI excluding one or more components. In our case, I don’t think we have a choice: it is the CPI. The reason why we do not have a choice is that the Israeli economy is very indexed. Many contracts, if not most, are indexed to the CPI: rents are CPI-indexed, mortgages are CPI-indexed, government bonds are CPI-indexed, and wages are CPI-indexed. Thus, the CPI is the index that matters for behavior, which is why it is a very important matter. However, if one decides to exclude some items from the index, one technical statistical test should be made. Any excluded item should be one that may have larger noise, but not a fundamentally different rate of inflation than
the average rate of inflation. Otherwise, you are excluding something which is more fundamental.

Should you have a single-year target? We have found that a multiyear target is essential for several reasons. First, monetary policy operates with a lag. By midyear, you are operating as far as the next year’s target, so you better know what it is. Second, our politicians, like those in most places, are much more at ease in agreeing on a long-term target than on a short-term target, because the long term is never-never land. It was so easy to speak about the end of the decade; except that today, the end of the decade, the end of the century, the end of the millennium, the end of the term of the existing government are all falling at the same time. The fact of the matter is that we are moving closer. And as we move closer, forcing a long-term target is a very useful way to introduce discipline.

How do we conduct monetary policy? Because of our inflationary heritage, we have had indexed bonds for a long time. Most of the government’s debt is indexed. One of the achievements of the disinflation process has been to broaden the base of the nonindexed, or shekel-based, financial instruments. So in the conduct of monetary policy, we make extraordinary use of inflationary expectations as measured from these financial instruments. Since we have indexed and nonindexed for the same maturity and for the same government, we can read inflationary expectations over the next twelve months. And the public knows it. As a matter of fact, when we introduced the inflation targets, a statement was made to the public about the way our Open Market Committee would study the economy. We told the public what variables we are looking at and the inflation rate that is expected from the rate of monetary expansion. In our case, it is M1, which has the most stable relation and has a two- to three-quarter lag to future inflation. In fact, a week before our monetary announcements (which are happening once a month), the financial press is simulating the discussions that will take place. They will report that since they know that the inflationary expectation that the central bank looks at is so and so, and that the rate of monetary expression has been so and so, then it is likely these guys will do so and so. And occasionally they are right, which is OK.
The idea is not to surprise the market, but rather to communicate with the market. So we have found these indexed bonds are a very useful instrument in the conduct of monetary policy.

How fast should you lower inflation? One of the difficulties that we had was that we started with excessive success. In the year after we introduced the inflation targets, inflation was cut by half. As a result, politicians got the idea that reducing inflation was an easy task. Therefore, the next year’s target was even more ambitious, but it was missed. As it was missed, a real test for the inflation target strategy was put into place: Are you going to revise the target upward? Or are you going to use tight monetary policy and tough monetary policy? We decided to use tight monetary policy and interest rates went up very significantly. I know that monetary policy was tight, because during that first month, the Governor had to travel with bodyguards.

So as it happened, the decision about the next year’s target became much more difficult. It was at this point that the Finance Minister said, “My goodness, if I have a tight target next year, this crazy central bank will start raising rates and they will take us seriously. After all, we’re only politicians; why should we be taken seriously?” And that’s where the debate took place. Everyone agreed, therefore, on a long-term target. We all want to be in paradise, but not yet. The issue, therefore, is how quick is quick?

What is the role of preconditions? How are we going to reduce inflation? And what is the interaction between the budget on the one hand and monetary policy on the other? And when I remarked this morning in reference to Larry Summers’ point about the business of coordination, it was not just an analytical insight but rather a bitter experience. We have made some deals with the government, just as the G-7 has made deals with the United States about the budget. The fact is, it is very easy for governments to make a commitment. But it is much more difficult to either pass it through Congress, or once passing it through Congress, to implement it. So, we have an exchange with the government, in which they say they have already made their fiscal reduction. How do they know? Well, they have
announced it. Therefore, you need to make your monetary expansion. And how do they know that we have not done it yet? Because interest rates are still high. So before long, monetary expansion is already taking place. And once monetary expansion is taking place, there is no need to fight unemployment anymore, because policies are already expansionary, so there is no need to cut the budget any more. Before long, it’s over. So at least in our case, we have been very explicit. We coordinate, but we make it very clear that coordination means that monetary policy will take into account government actions, not government announcements.

And this brings, therefore, the question of how do you make sure that everyone recognizes that there are two guys on the block, not only one—there is fiscal policy and there is monetary policy. When we speak about inflation reports, we have insisted and (it has not been adopted, but it is in the process) that twice a year there should be a cabinet meeting in which the Governor presents the inflation report. If we are missing the inflation rate, we explain what it means for monetary policy. And the government understands it. At the same session, there is also a fiscal report. The Finance Minister reports to the government where the budget stands relative to the plan. If the budget plan is not being met, the government decides what actions should be taken in order to deal with it. Thus, we do not have a mechanism that leads to an overburdening of monetary policy. In the late 1980s, many countries suffered because monetary policy was overburdened—not because of ill design or ill will, but because of poor management of the budget.

What are the necessary preconditions that are needed? First, of course, you need to have the capacity to change interest rates. But if your capital markets are open to the world, then raising interest rates as you fight inflation means that capital flows in. And as capital inflow comes in, you have an appreciation of your currency. If you only worry about inflation, you celebrate. But you are not allowed to celebrate because exporters and the government remind you that something is happening to the real exchange rate and that you better do something to the nominal rate. And before long, you find yourself worrying about interest rates for inflation, and exchange rates for
competitiveness. You see that you don’t have two heads to have these two hats. And that’s exactly where the next issue comes in.

In many of the countries that have used interest rates to fight inflation, while maintaining open capital markets, capital inflow came in. These countries have then found it necessary that after the maximum appreciation that could be sustained politically or otherwise took place, the central bank had to intervene in the foreign exchange market. But if you intervene in the foreign exchange market, you better make sure that you have financial monetary instruments to sterilize the monetary injections that occur as you buy the foreign exchange.

All of this means that you cannot do it for too long. Ultimately, the real exchange rate is the story of government spending and the budget; the nominal exchange rate and inflation is the story of the monetary authority. The division of labor between real exchange rates, budget deficits, nominal exchange rates, inflation, and monetary policy, must be made explicit.

And we found ourselves against an extraordinary lobby. In contrast with Donald Brash, where everyone wants low inflation, in our case, exporters want high inflation. Since high inflation means higher costs, why would exporters want high inflation? Exporters understand that high inflation means that the Governor will not need to have high interest rates because the Governor must have agreed to high inflation. And if we don’t get the high interest rate, then the exchange rate will not be so appreciated. And thus it comes back to the exporters. They don’t understand fully that it is the budget deficit that affects the real exchange rate, not monetary policy. Thus, they come and say that they want high inflation. There must be the recognition that the interest rate that deals with inflation is higher than the interest rate that contributes to exchange rate stability, that is still higher than the interest rate that gives a boost to the short-term capital markets. And that’s where we are in the transition. And somebody asked how we get out of the transition. And let me remind you that Jacob Viner once said that a transition period is the period that lies between two transition periods.
In conclusion, we have found that inflation targeting has been an extraordinarily important and useful mechanism to explain what the central bank is doing. There are inevitable conflicts when we try to accomplish too much. Our central bank law was drafted in the 1950s, when everyone thought that one could simultaneously be young, beautiful, rich, healthy, and all the rest. So our central bank, like the Federal Reserve in the United States, is supposed to take care of prosperity, growth, the standard of living, and inflation and price stability. So against this background, having an inflation target has proven to be useful.

But, the real test will be when we are going into a downturn. Since the beginning of this decade, we have grown over 40 percent; 50 percent in the business sector. So growth has been very, very high. Given this background, tight monetary policy that lowered inflation from 20 percent to 10 percent was not viewed as an extraordinary thing. But the test will come when a slowdown, I wouldn’t call it a recession, inevitably comes. And that’s when the Phillips curves will come out from under the carpet.

Like Rudi Dornbusch, I agree that when you start from hyperinflation, inflation targeting or monetary targeting is the wrong thing to do. You must break inertia; you must really press on the brakes. And that’s where either exchange rate or some other system will do the job. But you must realize that an exit policy is part and parcel of that system. In this way, when you exit, you are not viewed as having lost credibility. Rather, you are viewed as having graduated to the next stage. And once you are in the next stage, then you look at Donald Brash with envy and you hope to be there.

The key is that if you are going to adopt inflation targets, make sure it goes side-by-side with budgetary targets. Furthermore, make sure that the decisions and the discussions about the inflation report are joined with the decisions and discussions about the budget report. In this way, you will not become the orphan that is the residual of all the evils in the system.