

Grow Your Business  
Grow Your Wealth  
Grow Your Self



Developing Leaders  
Developing Companies  
Developing Opportunities

*UNITING BUSINESS OWNERS FOR PERSONAL & PROFESSIONAL GROWTH*  
PEER GROUPS • EDUCATIONAL WORKSHOPS • COACHING

---

**Embargoed until Tuesday, March 2 at 2:00 p.m. Eastern Time**

The Economy

and

Why the Federal Reserve Needs to Supervise Banks

Narayana Kocherlakota  
President  
Federal Reserve Bank of Minneapolis

Allied Executives Business & Economic Outlook Symposium  
Minneapolis, Minnesota  
March 2, 2010



## Narayana Kocherlakota Speech

---

I don't need to tell people in this room that the U.S. economy has recently experienced one of the worst recessions in recent decades. As business executives, many of you could come up here and give that speech. I also don't have to tell you that economic activity remains subdued. This is especially true regarding the unemployment rate, which remains high and is not expected to decline appreciably for at least the near term.

However, my main message today is that, bad as it was, the recent recession could have been much worse. Right now, Congress is considering whether to strip the Federal Reserve of its supervisory authority over banks. I will argue that in the past two and a half years, this supervisory authority was critical in allowing the Federal Reserve to rule out the possibility of much worse economic outcomes.

Following that discussion, I will give you my economic forecast. But before I proceed, I would like to remind you that the following views are my own, and not necessarily those of others in the Federal Reserve.

So to begin, let me take you back to September 2008. This was a time of tremendous uncertainty, and uncertainty—as all of you know—can strangle an economy. At that time, almost all believed that a horrific economic collapse—already named Depression 2.0—was possible. (Indeed, many believed that it was inevitable.) Real GDP fell by over 3.5 percent from December 2007 through June 2009. Unemployment doubled from 5 percent in December 2007 to 10 percent in December 2009. Those numbers are shocking, but they pale compared with what we would have seen had Depression 2.0 transpired. During the Great Depression, real GDP in the United States fell by 27 percent from 1929 through 1933. Unemployment rose over that same period from 3.2 percent to 25 percent. Today, unlike in September 2008, this type of catastrophic economic collapse is no longer on the menu of likely or even plausible events.



## Narayana Kocherlakota Speech

---

How did this improvement in the level of economic uncertainty come about? The answer gets to the heart of my remarks. The improvement in our economic situation is attributable in large part to actions taken by the Federal Reserve, actions that were possible because of the expertise and information that the Federal Reserve had acquired as a supervisor of the nation's banks. We avoided an economic depression this time. But stripping the Federal Reserve of its supervisory role would needlessly put a Great Depression on the menu of possibilities for our country.

The next section of my talk, then, will describe how the Federal Reserve's supervisory authority allowed it to respond quickly and appropriately to a rapidly deteriorating financial situation. The problem in September 2008 was that the country, indeed much of the developed world, was in the midst of a financial panic that had started a year earlier. Financial panics are events that blur the line between liquidity and solvency. And here I should take a moment to define these terms. A firm is solvent if its revenues (in a discounted present value sense) exceed its expenditures. A firm is liquid if it is able to raise enough funds—either by borrowing or by selling assets—to pay its current costs. In a well-functioning financial market, solvent firms are typically liquid, because they can borrow against their future revenues. In contrast, in a financial panic, lenders feel unable to assess the resources or the collateral of borrowers. Borrowing becomes highly constrained, and even highly solvent firms may become illiquid. In severe financial panics, like the one that took place in the Great Depression, the shortages of liquidity can eliminate large amounts of GDP and large numbers of jobs. It was exactly this possibility that we faced in the fall of 2008.

The actions of the Federal Reserve System were instrumental in ensuring that this eventuality did not occur. Beginning in the fall of 2007, the Federal Reserve undertook a number of critical interventions designed to enhance the functioning of financial markets. I will go through



## Narayana Kocherlakota Speech

---

two of them in some detail. I will pay particular attention to the role that our experience as a bank supervisor played in the success of these interventions.

The first intervention is a traditional one. In any economy, one of the main jobs of the central bank is to make sure that both the quantity and allocation of liquidity are appropriate. In terms of the quantity of liquidity, the central bank's tool is a targeted short-term interest rate, like the federal funds rate. In terms of the allocation of liquidity, the central bank's tool is the discount window.

During the recent financial crisis, the Federal Reserve used the discount window in a truly massive way. On July 25, 2007, the Federal Reserve had 246 *million* dollars of discount window loans outstanding to depository institutions. At the end of 2008, the Federal Reserve had nearly 90 *billion* dollars of such loans outstanding—a 36,000 percent increase.

But even this enormous increase is really a vast underestimate. In late 2007, the Federal Reserve became concerned that the traditional discount window was being underutilized. It opened what was known as the term auction facility—the TAF—which allowed depository institutions to bid on loans from the Federal Reserve. Through this facility, at the end of 2008, the Federal Reserve had 450 billion dollars of loans outstanding to depository institutions. The combined total of 540 billion dollars of loans to financial institutions from the TAF and the discount window represented a 200,000 percent increase over July 2007.

We do not know the impact of this lending on the financial sector with certainty. However, it seems reasonable to presume that it was essential in keeping solvent financial institutions afloat during the height of the financial crisis. There is compelling supporting evidence for this view in aggregate loan data. Total liabilities for U.S.-chartered commercial banks grew by 1.2 trillion



## Narayana Kocherlakota Speech

---

dollars from the third quarter of 2007 to the fourth quarter of 2008. Loans from the Federal Reserve account for nearly half of this increase.

Now, it is important to emphasize that the Federal Reserve did not use these facilities to simply hand out money to banks. In a financial panic, public policy has two goals. One is to make sure that illiquid but solvent firms survive. The other is to make sure that truly insolvent firms do in fact fail. For this reason, the Federal Reserve only made loans to sufficiently high-quality financial institutions. This kind of selective intervention requires the Federal Reserve to have good information about any financial institution that is a prospective borrower.

Under our existing regulatory system, the Federal Reserve could turn to its own supervisors for this information and the ability to evaluate that information. But suppose instead that, as has been proposed by some in Congress, the Federal Reserve had no supervisory authority. How would the discount window or TAF have worked? Given any financial institution that wanted to borrow, the Federal Reserve would have had to call that financial institution's regulator and ask for information about that financial institution's quality. I see two distinct problems with such an arrangement. The first is purely logistical. During a crisis like 2007-09, this other regulator would necessarily face huge resource demands in terms of obtaining and sharing information about a financial institution's quality. Getting the phone answered in a timely fashion about a given financial institution might well be extremely challenging.

But the bigger problem is one of incentives. Under the current system, if the Federal Reserve makes a bad loan through the TAF or through the discount window, that loss appears on its balance sheet. It has every incentive to do a good job in assessing the borrower quality.

Now suppose instead that some other agency were responsible for providing this information to the Federal Reserve. What exactly are this other agency's incentives to provide the



## Narayana Kocherlakota Speech

---

Federal Reserve with the best possible information? This other agency is not going to suffer a loss for making a bad loan—the Federal Reserve is. Indeed, one can readily imagine that in the politically charged circumstances of a financial panic, this other agency’s objective might be to keep as many banks alive as possible. In these circumstances, the Federal Reserve would have no way to obtain reliable information from this other regulatory body and would have no way to make appropriately targeted loans. As it is, the Federal Reserve has not lost any money on either TAF or discount window loans made during this period.

Let me talk next about a less traditional intervention: the Supervisory Capital Assessment Program—that is, the bank stress test. Through March and April of 2009, the Federal Reserve and other federal bank supervisors conducted an assessment of the capital needs of 19 large bank holding companies under a benchmark macroeconomic scenario and a hopefully unrealistically adverse scenario. The study released bank-level information about risk exposure of various kinds. It was extremely valuable in restoring market confidence in the viability of the large American banks.

The Federal Reserve played the leading role in the implementation of the stress test. In part, this leading role arose because, from a legal perspective, the Federal Reserve was the primary regulator of the various bank holding companies. But there is also a more fundamental reason for its taking the lead. By its very nature, a good central bank needs expertise in a wide range of areas: supervision, monetary economics, financial markets, and macroeconomics. The stress test required this same range of expertise. Playing the leading role in the stress test was an intrinsic outgrowth of the Federal Reserve’s multitasking role in the economy.

Now suppose that the Federal Reserve did *not* have supervisory authority over banks. Then, no institution in the government would have the kind of collective expertise to orchestrate a stress test for the large banks. My guess is that the stress test would never have taken place. Along these



## Narayana Kocherlakota Speech

---

lines, it is worth noting that countries with divisions between supervision and monetary policy did *not* undertake exercises similar to the stress test.

Indeed, one could go further. Suppose that the Federal Reserve had had responsibilities for systemic risk regulation, as has been proposed in the House financial regulation bill. My belief is that under this proposed regulatory structure, the stress test would have been better in terms of both its form and its timing. In terms of form, the May stress test studied the 19 target institutions in a parallel but entirely separate fashion. The test did not gauge the institutions' interactions with each other or with other financial entities. A stress test done by a systemic regulator would have included those critical elements.

In terms of timing, the stress test took over two months from inception to finish. In late 2008, the speed of events was such that two months seemed like an eternity. If the Federal Reserve had been a systemic regulator, the stress test would have been much less resource-intensive, because it would have been a natural outgrowth of the Federal Reserve's obligations. It is not difficult to imagine that this cheaper stress test would have taken place in October or November of 2008. At that point in time, interbank lending markets were still significantly dislocated. At least some of these stresses were attributable to lenders' lacking good information about the portfolios of potential borrowers and their financial connections. My own view is that a November stress test, with its associated release of bank-specific information, would have been enormously helpful.

Discount window lending and the stress test are but two of the interventions that the Federal Reserve undertook in response to the financial crisis. I hope that I have convinced you that these interventions would have been significantly more difficult, if not actually impossible, in a world in which the Federal Reserve did not have a supervisory role.



## Narayana Kocherlakota Speech

---

The Federal Reserve undertook a number of other broad-based market interventions to provide liquidity to solvent firms. Here, I should emphasize that I am *not* talking about the targeted injections of funds into Bear Stearns or AIG. These injections were designed to achieve objectives other than the provision of liquidity. Rather, I am talking about interventions like the Term Asset-Backed Securities Loan Facility, under which the Federal Reserve purchased a broad range of asset-backed securities from a large number of sellers. I won't go into detail about these other lending facilities, except to note that all of these interventions were highly complex. The Federal Reserve's expertise in banking supervision was essential in their design and implementation.

Would we have had Depression 2.0 without the Federal Reserve's using this range of policies? We will never know for sure. However, it is clear to me that these policies worked as intended: They kept illiquid but solvent firms alive during the course of the financial crisis, while letting truly insolvent firms fail. In so doing, these policies eliminated the *possibility* of Depression 2.0

Small banks had relatively less exposure to the types of financial assets that initially propelled the recent financial crisis. As a result, the Federal Reserve's response was targeted more toward larger financial institutions than smaller ones. This recent history has led some in Congress to conclude that even if the Federal Reserve does supervise larger financial institutions, it can safely be stripped of its role as a supervisor of small banks. I believe that this conclusion shows a dangerous lack of imagination. Yes, the last financial crisis was centered in larger banks and financial institutions. But this hardly means that the next crisis could not come from smaller institutions. Indeed, even now, the collective exposure of many smaller banks to commercial real estate may be exerting a significant drag on the overall economic recovery.



## Narayana Kocherlakota Speech

---

I predict that ensuring that the Federal Reserve has insight into smaller banks will be of particular importance over the next 10 to 15 years. I expect the government to respond to the recent crisis by ratcheting up the supervisory and regulatory constraints on larger financial institutions. Inevitably, these constraints will lead risk-taking to move from large financial institutions to smaller ones, and will increase the probability of a financial crisis in the small institutions. The Federal Reserve's ability to ensure that such a crisis did not generate a Depression-like outcome would be compromised if it did not retain supervisory authority over smaller banks.

My remarks have focused on the Federal Reserve's ability to stop a financial crisis from creating a Great Depression. I've done so because I believe that this ability is critical. Don't get me wrong—we can and should do a better job of financial regulation so that we minimize the likelihood of a financial crisis ever taking place. In the 2000s, the Federal Reserve made some significant mistakes along these lines—as did the FDIC, the OCC, the OTS, and regulators in many other countries. As the Minneapolis Federal Reserve has been urging for over 30 years, politicians and regulators need to create incentives that will lead financial firms to avoid risks that end up costing taxpayers.

However, no financial regulatory scheme will ever be perfect. Whatever we do about financial regulation, at some point in the future, investors and regulators will again confuse the unlikely and the impossible. Their mistake will create the next financial crisis. Right now, our regulatory system has the ability to prevent those crises from generating 30 percent falls in output and unemployment rates of 25 percent. When changing the system, we have to make sure that it doesn't lose that ability. Stripping the Federal Reserve of its role in supervision is a step in the wrong direction. Making it the systemic risk regulator is a step in the right direction.



## Narayana Kocherlakota Speech

---

I have talked at some length about the reduction in economic uncertainty over the past 18 months. But what are the prospects for the economy going forward? In my view, as you will see, prospects are somewhat subdued. After all, we have just experienced an unprecedented recession, unlike anything we've encountered since World War II. From the third quarter of 2008 through the second quarter of 2009, the United States experienced four consecutive quarters of negative growth in real gross domestic product. There is no other such sequence in the postwar period, and as I will describe in a moment, some uncertainties about the economy persist.

Not only was the length of this recession unparalleled, it was also largely unanticipated. Most economists did not see this coming. I mention this, in part, as a means of handicapping the forecast you are about to hear. The Romans used to cut up birds to make their economic forecasts. Our methods have improved—somewhat—but just like in Roman times, it's very much caveat emptor with economic forecasting.

Having said that, even very bad recessions come to an end, and a recovery is under way and I expect it to continue. However, my own forecast is that the recovery in GDP and especially unemployment will be slow because of uncertainties relating to various legislative initiatives and problems in the banking sector. I do think the news is mostly good on the inflation front, although the need for careful policy choices is even more critical than usual.

Why do I say that a recovery is under way? Real GDP began to grow again in the third quarter of 2009. In fact, that growth rate accelerated to a seasonally adjusted annualized rate of 5.9 percent in the fourth quarter. My own prediction is that the National Bureau of Economic Research will declare this recession to have ended sometime in the second half of last year. However, GDP is not the whole story. It is true that, as measured by unemployment, the economy is still stuck in a trough. I will have more to say about that in a few minutes.



## Narayana Kocherlakota Speech

---

Will this turnaround in GDP continue in the coming months and years? The minutes of the January Federal Open Market Committee meeting included summary measures of the forecasts of the presidents of the 12 Federal Reserve banks and the governors of the Federal Reserve System for real GDP for 2010 and 2011. Their predictions are roughly around 3 percent growth for 2010 and around 4 percent growth in 2011. These predictions seem to be in step with many private sector forecasts.

My own forecast is closer to 3 percent per year over the next two years, not 3.5 percent. This pessimism derives from two sources. First, our statistical forecasting model at the Federal Reserve Bank of Minneapolis is predicting that GDP growth over this period will be around 2.5 percent per year. The model is a simple one in many ways, but its forecasting track record is surprisingly good. And, unlike the Romans, our forecasting model leaves the surrounding eagle population intact.

However, my relative pessimism is grounded in more than the statistical model's forecast. I see two areas of concern. First, there is a great deal of uncertainty related to major policy initiatives under consideration in Washington. Congress is considering proposals for enormous changes in health care and in the structure of financial regulation, a part of which I described earlier. These proposals have generated a great deal of ambiguity, for the capricious winds of politics seem to change them on a near-daily basis. I view this kind of political uncertainty as problematic for the prospects of rapid recovery.

Second, financial markets have largely healed from the traumas of 2007-09. But the banking sector faces ongoing problems. Banks with large amounts of commercial real estate risk-exposure face a correspondingly elevated risk of failure. This threat could well lead to continued declines in bank lending, which would curtail the recovery. Even worse, as we saw in the thrift crisis of the



## Narayana Kocherlakota Speech

---

1980s, in the presence of deposit insurance, banks that are near failure have strong incentives to make poor loans. This outcome would be even worse for the economy.

To this point in my forecast, I have been discussing broad factors that can affect GDP growth. However, as I indicated earlier and as we all well know, GDP does not tell the full story of the impact of recessions. I'm speaking, of course, about unemployment. Over the past 15 years, more and more macroeconomists have begun studying household-level data on variables like earnings and consumption. (Much of this work, by the way, was done by researchers and consultants at the Federal Reserve Bank of Minneapolis.) These data have given us a greater appreciation for the unequal impacts of recessions. Over the fourth quarter of 2008 and the first quarter of 2009, GDP fell by about 3 percent per person. If this fall had been spread uniformly across all people in the United States, it would have been equivalent to everyone's losing between three and four days worth of income. This would be difficult, but probably not a cost that would have led Congress to contemplate the redesign of the entire financial regulatory system.

The point, though, is that the fall is not spread uniformly across all people. Some workers—those who lose their jobs—suffer much bigger falls in income. For this reason, many macroeconomists now believe that the true cost of a recession is not the fall in GDP per se, but the associated increase in the risk of people becoming, and staying, unemployed.

Unemployment is currently 9.7 percent. It has been higher in the post-World War II period—it reached 10.8 percent in the bleak fall of 1982. However, in the 25-year span between January 1984 and January 2009, unemployment never topped 8 percent. It is safe to say that those born after 1968 have never experienced an economic episode of this kind in their working lives.

The outlook for unemployment is not comforting. Though unemployment has fallen somewhat, forecasts remain uniformly troubling. Unemployment is notoriously slow to recover, and



## Narayana Kocherlakota Speech

---

it has been especially slow to decline after the last two milder recessions of 1990-91 and 2000-01. I would be highly surprised if unemployment were below 9 percent by the end of 2010 or below 8 percent by the end of 2011.

Looking at data on job flows is even more disturbing. Much has been made in the media about how employment losses are stabilizing, as if this portends inevitable job growth. However, the source of this stabilization is problematic. Beginning in the fall of 2007, unemployment started to rise. This increase in unemployment came about because firms started to cut back on hiring, and so workers could not find jobs. Firm hiring rates continued to fall and hit their low point in early 2009, where they have remained. Why then have employment losses slowed? The reason is that the rate of layoffs and quits—what economists call the separation rate—has slowed. But declines in the separation rate cannot be viewed as a robust source of employment growth. To get a true expansion in employment and in the economy, the hiring rate has to pick up—and we have yet to see evidence that it will do so in the immediate future.

Let me end this portion of my talk on a more positive note, with a caveat to follow, of course. The positive news in this economy is that inflation has been relatively tame. From the fourth quarter of 2007 to the fourth quarter of 2009, PCE inflation has averaged slightly less than 1.5 percent per year. Over that same period, core PCE inflation (subtracting food and energy) averaged around 1.7 percent per year. The Fed is keeping inflation at levels consistent with good long-run economic performance.

Here's the caveat: Deposit institutions are holding over a trillion dollars of excess reserves (that is, over 15 times what they are required to hold given their deposits). These excess reserves create the *potential* for high inflation. Suppose that households believe that prices will rise. They would then demand more deposits to use for transactions. Banks can readily accommodate this



## Narayana Kocherlakota Speech

---

extra demand, because they are holding so many excess reserves. These extra deposits become extra money chasing the same amount of goods and so generate upward pressure on prices. The households' inflationary expectations would, in fact, become self-fulfilling.

Why might households expect an increase in inflation? The amount of federal government debt held by the private sector has gone up by over 30 percent since the beginning of 2008. This debt can only be paid by tax collections or by the Federal Reserve's debt monetization (that is, by printing dollars to pay off the obligations incurred by Congress). If households begin to expect that the latter will be true—even if it is not—their inflationary expectations will rise as well.

I hasten to say—and I want to stress—that I view this scenario as unlikely. For it to transpire, we would need a combination of bad monetary policy and poor fiscal management. I do not foresee this combination as likely to occur. Nonetheless, good policy requires good choices, and policymakers at the Federal Reserve and in Congress need to keep this scenario in mind when making their decisions. I can assure you that we in the Federal Reserve have every intention of keeping our end of the bargain.

So, to summarize my economic forecast, I do think that the economy is on the mend and should continue to recover over the next two years—in terms of both GDP and unemployment—but at slower rates than we would like. The outlook for inflation is basically promising, as long as the Federal Reserve and Congress work together appropriately. And finally, speaking of Congress: Its choices on financial reform will have long-lasting effects on economic outcomes. As a country, we don't want to be regretting these choices in a decade or two. Stripping the Federal Reserve of its supervisory authority over either small or large financial institutions would be a potential source of exactly that kind of regret.



## Narayana Kocherlakota Speech

---

I want to close by saying a few words about the vice chairman of the Board of Governors, Don Kohn. He has submitted his resignation from the Board to the president of the United States, effective June 23, 2010. He served the Federal Reserve System well for over 40 years. His departure is a huge loss for the Board, the FOMC, and the country. At a personal level, I've learned a lot from him over the past five months—and I'm disappointed that I won't have the opportunity to continue to do so. Unlike the rest of my speech, I can safely say that I speak for the entire Federal Reserve System when I say that we wish him well in his future endeavors, whatever they might be.

Thank you very much for this opportunity. I have discussed a number of topics today, and I'm sure that you have questions on these and other matters, and I look forward to hearing them.