

Keynote Remarks

Robert Rubin

**Cochairman, Council on Foreign Relations
and former U.S. Treasury Secretary**

Presented at the Federal Reserve Bank of Atlanta

2015 Financial Markets Conference

Stone Mountain, GA

March 31, 2015

**FEDERAL RESERVE BANK OF ATLANTA
FINANCIAL MARKETS CONFERENCE
MARCH 31, 2015
ATLANTA, GA**

Thank you for your kind introduction. Last night you heard from Stan Fischer, one of the world's most highly-respected and deeply-experienced experts on central bank issues. Tonight, I was asked to discuss my views as a practitioner on major issues you face: monetary policy, systemic risks, regulation and shadow banking. These views are the product of 26 years at Goldman Sachs, where I had responsibility for some, and then all, of the firm's trading and arbitrage activities; 6-1/2 years in the Clinton Administration and my present work advising several investment organizations and as a continuing participant in national policy dialogues.

All of your issues involve judgments about future economic and market conditions, economic and financial responses to policy actions or systemic risk. That is all made more complex and uncertain at the current time, in my view, by the risks emanating from QE3 and by the rapid growth of shadow banking as it increasingly displaces traditional banking and investment. I'll return to these topics shortly.

But, first, let me start with my views on decision-making in the economic and financial arena, based on my experience in high-stakes decisions in the investment and policy worlds.

To state the obvious, all of these decisions are about probabilities, not absolutes or single-point answers. But, as Stan Fischer once said to me, while anyone who is thoughtful recognizes that decision-making is probabilistic in nature, few people truly internalize that and operate in a way that reflects that understanding.

Judgments about probabilities ultimately get expressed quantitatively, but it is critical to always remember that those are judgments – with all of the fallibility and uncertainty that

judgments inevitably involve, even when made by the best-informed and most savvy decision-makers. Being as well-informed as practical is critical. President Clinton, who was as good at decision-making as anyone I've ever been exposed to, put great emphasis on informing his judgments to the fullest extent practical, including hearing the points of those who disagreed with him, and, even when no one disagreed, pushing the people around him to present the full range of opposing arguments on every issue.

However, even with the best decision-making process and extremely effective decision-makers, all judgments and decisions should be treated as having a great deal of uncertainty about them. For example, judgments about the probabilities of various economic scenarios or policy responses involve highly-uncertain variables like the psychology of business, consumers, and the markets; the actions of political systems and political actors; international and geopolitical events; and much else that is complex and may not even be visible in advance. And, of course, developments will occur after judgments are made that will affect probabilities. Moreover, even if the judgments on the probabilities turn out to be right, what actually happens may turn out to be on the low end of the probability spectrum rather than the expected value or the most likely outcome.

Thus, uncertainty, in my view, should be a major factor in investment and policy decisions. Once you recognize that uncertainty, you have to decide whether to bet on one side or the other of the expected value or of the most likely outcome. Right now, for example, to state the obvious, the Fed has to make some judgment as to how much slack there is in the labor market and what probabilities to put on various views. But, given the uncertainty about whether whatever judgments are made being are correct, do you want to take more risk of acting too soon or more risk of acting too late? Similarly for investors, whatever judgments you might have on

the probabilities that there are excesses in markets, once again, recognizing the inherent uncertainties of those judgments, you can lean more than those judgments would suggest towards protecting yourself or lean more towards capturing further market improvements.

One deeply-troubling conundrum for investors and policymakers is how to deal with tail risks. For example, I am Co-Chairman of the Council on Foreign Relations, and I have an office there, as well as a business office elsewhere. In the environment at the Council, there is deep concern about the geopolitical threats that face our country and the damage that could cause. On the other hand, the markets don't reflect geopolitical risk at all, as far as I can see. Other possible tail risks – hopefully thin tails, though I am concerned that they may not be so thin – are serious destabilization in the Eurozone, the existence of market excesses which at some point unravel, and the ever-present risk of the entirely unforeseen.

There is no good answer as to how investors or policymakers should deal with tail risks. These risks can overpower expected value calculations, due to their severity, and thus probably don't lend themselves to inclusion in those approaches. A variant would be protecting yourself sufficiently to avoid serious damage should the tail risk materialize, but that approach can carry large opportunity costs if far more likely scenarios occur. My best answer, as an investor, has been to recognize the risks, and modulate exposure to some degree. Severe events would still be very harmful, but not as severe or even financially fatal.

One very troubling aspect of our current situation, from a policy perspective, is that if geopolitical or other tail risks should materialize, we do not have a lot of macroeconomic resilience or unused capacity. Interest rates are obviously already exceedingly low, limiting what the Fed could do, and our debt/GDP ratio has doubled since just prior to the 2008 crisis, presumably reducing fiscal potential even if we had the political will to act.

That takes us to econometric and financial models. I am not quantitatively trained, but I have spent my adult lifetime around people who are and around the application of highly sophisticated models. My view is that they can help inform decisions, but that they do not begin to capture the complexities of reality, including the psychological, the political, the financial, and much else. Otherwise, every private and public sector institution, including the Fed, that could afford sophisticated models and highly-capable people, would have a high level of accuracy in predicting future economic conditions and the effects of policy. That is certainly not the case. Obviously, models can be adjusted to reflect assumptions about psychology, finance and anything else, but those are still just assumptions.

Fischer Black, who I recruited to Goldman Sachs from MIT, and then worked closely with for years, expressed his skepticism relating to the underpinnings of models, in a famous article entitled “Noise”, written after some years at the firm. He also famously said, and this is a paraphrase, the markets looked different from the banks of the Hudson than they had from the banks of the Charles.

That takes us to quantitative easing.

The first program of quantitative easing was a courageous and effective response to the acute phase of the financial crisis. Some say QE2 and QE3 were warranted by high unemployment and the absence of other policy due to government dysfunction. Clearly, our high unemployment, the number of discouraged workers, long-term unemployment and stagnant median real wages were, and are, vital economic issues. The right criterion for action, however, is not the absence of alternatives, but the balance of risks and rewards.

There are widely held questions about how much benefit QE2 provided, and even more about the benefits of QE3. But, whatever your views are on those benefits, the risks were real,

and they continue even though quantitative easing is over. And, those risks are at least twofold. First, QE2 and QE3, independent of whatever the actual effects may have been on longer-term rates, and my guess is that these effects were quite limited, created comfort on the part of politicians and even more on the part of markets that the Fed could and would keep rates down. In the political arena, that may have reduced pressure on politicians to act on the difficult policy issues we face. In the financial arena, that same comfort almost surely heightened the already-existing tendency to reach for yield further out on the risk curve because of low Treasury rates, increasing the possibility of excesses and subsequent destabilization. Second, I believe that possible economic and market effects of unwinding the Fed's vast increase in its balance sheet – from under \$1.0 trillion before the financial crisis to \$4.5 trillion now – and the commensurate increase in liquidity, could have substantial impacts whenever that unwinding occurs and however it is accomplished.

To turn to the unwinding risks first, monetary policy decisions always involve large uncertainties. And those uncertainties were almost surely heightened with such great increases, creating unprecedented conditions.

In some circles, the greater concern about navigating these uncharted waters is inflation. But my view is that there is at least an equal chance monetary action could push the economy into a downturn.

There is a perspective that these risks can be avoided by holding bonds until maturity, and tightening by increasing interest rates on excess reserves or by using reverse repos. But, it seems to me that there is no magic wand. Vast increases in liquidity have been created that banks have not lent out but instead deposited with the Fed as excess reserves.

When credit demand picks up substantially, however far in the future that may be, banks can draw the reserves down at will to extend credit. The increased capital requirements involved would not prevent lending, but would simply be part of a bank's risk/return calculation. And, there is no way to reliably predict the behavior of creditors, borrowers, lenders and markets to this unprecedented situation, or the use of untried instruments. Thus, nobody knows how much rates would have to be increased to accomplish the desired tightening, what the effects might be on the yield curve and on other markets, how much volatility might be affected, and what the economic effects might be. The only point I would make with some confidence is that judgments on these effects can be usefully informed by econometric models, but that those models, as I have already said, are far from able to capture all of the variables that will affect what actually happens. So, experienced and practical judgment by decision-makers, drawing on these models as one input but going way beyond them, is critical. Moreover, whatever those judgments might be, great uncertainty should be attached to them, and that uncertainty should be a key consideration in decisions, including on monetary policy.

Now, I'll turn to excesses, the likelihood of future financial crises, and systemic risk in shadow banking.

I don't have a view as to whether the extensive reaching for yield that I have already mentioned, exacerbated by QE2 and even more by QE3, has led to excesses. But, that is a realistic possibility, with the U.S. stock market at roughly all-time highs, the revival of covenant light and even non-covenanted lending, the vast increase in fixed income EFTs, Eurozone sovereign debt in the troubled countries selling at what to me, at least, are inexplicable yields on a risk-adjusted basis of under 1%, and much else.

Moreover, even if markets are not, on the whole, in excess relative to long-term fundamentals now, they will be periodically in the future. In my view, markets are a psychological phenomenon in the short term, oscillating between the fear and greed rooted in human nature, while on average reflecting fundamentals over the longer-term. Market-based financial systems over the centuries have always experienced periodic excesses on the upside, and then in reaction, over-short on the downside, when excesses, inevitably fall of their own weight. And, I don't see reason to think that all of human history with market-based financial systems should change now. Thus, I think there is a high likelihood of periodic future crises.

Moreover, future crises may begin – and almost by definition, will begin – in unexpected places. Goldman Sachs was almost destroyed by the unexpected bankruptcy of Penn Central in 1970. We then put in place measures to prevent any similar situation posing such a dire threat again. But, I have never forgotten the comment of, John Whitehead, one of our senior partners. He said that our actions would prevent a future Penn Central-type crisis for our firm, but that the next crisis would come from some totally unexpected place and that there would surely be future crises. And, if you look to the history of financial crises, that is what has happened repeatedly.

I don't believe that regulation will ever succeed in preventing excesses, and therefore, significant market cyclicity. But, it can and should try to reduce the probability of excesses, the likely severity of excesses, and the market and economic effects of downturns when they occur as through various types of leverage constraints, reducing the vulnerability of organizations involved with the financial system.

The reforms put in place in response to the financial crisis have presumably in large measure accomplished those purposes with respect to banks. But, as you have discussed at your conference, the shadow banking system has long existed, and now many functions of traditional

banks are rapidly and massively gravitating towards the shadow banking world, in part because of the increased constraints on banks and because of the uses of dramatic changes in technology.

For example, market making, and therefore market liquidity, has always been greatly facilitated by market-makers creating project-seeking constructions around positions acquired through the market-making functions. With proprietary trading now barred for banks, and the impossibility of distinguishing between market making and proprietary trading, bank market making and liquidity have declined substantially. And both market making and now at an incipient level, provision of capital to meet primary issuance demand is moving to multiple other platforms, including hedge funds, broadly defined.

Similarly, the increase in capital requirements has deterred various kinds of smaller and medium-sized loans by banks, and this regulatory constraint, plus the capacity for credit evaluation and for interaction with borrowers created by big data and other technological developments, is leading to rapid growth of this type of credit extension by non-banks, including private equity funds and organizations established for these purposes.

More broadly, the shadow banking world involves a vast array of institutions, asset classes, and activities, and, as I have already said, it is growing with great rapidity. And, there seems almost a limitless potential for systemic risk in this world. Let me just briefly mention a few examples. If excesses develop in asset classes held by hedge funds, sooner or later, those asset prices will destabilize and hedge funds, many of which are highly sensitive to short-term results, could engage in a rush to the exit with those assets, and even with good assets in order to increase liquidity. And, that could trigger global financial market duress. Moreover, while leverage obviously exacerbates the pressure to liquidate, that can occur even when leverage is limited.

Another example is the vast increase in the size of fiscal income ETFs that promise daily liquidity. However, the assets of those funds could not be liquidated in an orderly fashion in times of significant market stress and heavy redemptions, which could thus lead to highly destabilizing market dumping. As just one more example, there are new regulations with respect to derivatives, and while they are useful, I don't think they get to the heart of the matter. The outstandings in all types of derivatives are incredibly vast. Under normal conditions, that all works. But, in times of market stress, correlations move in all kinds of unpredictable ways, and many participants find that they have risks different than, and immeasurably greater, than they had expected. And, this can lead to unexpected credit failures and serious market and economic duress. I wrote a book in 2003 in which I suggested that margin and capital requirements be greatly increased for all users of derivatives, and I still think that is imperative to reduce derivative use, to provide a larger cushion, and to protect better against systemic risk.

I could go on endlessly listing assets classes, types of organizations and activities in shadow banking that could generate systemic risk. Moreover, that is not limited to the U.S. In today's instantaneously interconnected world, systemic risks in shadow banking abroad can rapidly and profoundly affect us.

One regulatory answer put forth in response to this systemic risk in shadow banking is macro prudential regulation. However, the reality, as Martin Feldstein and I wrote in a *Wall Street Journal* op ed last year, is that there seems currently to be little practical reality to this concept. While there is work going on with respect to some aspects of shadow banking, in very large measure, as far as I can see, this challenge still needs to be met. In my view, meaningful macro prudential regulation requires meeting three hugely complex and highly time-consuming challenges:

1. Creating a comprehensive catalogue of the shadow banking world, including asset classes, types of organizations, and types of activities. Today, to the best of my knowledge, no one comes close to having identified the full reach of shadow banking, or the systemic risks it poses. And, while this project would be a monumental undertaking for the U.S. alone, it should also, at least at some point, include the significant shadow banking systems elsewhere.

2. Developing a menu of tools to address possible systemic risks posed by the shadow banking world. At best, these tools will be quite imperfect, given the complexities. I would focus especially on shadow banking activities. Asset classes and organizations are also important, but systemically risky activities can occur within sound institutions and cause havoc in the financial system. For example, a large asset manager could be strong enough to withstand very large shocks but have derivative activities, hedge funds, ETFs or money market funds that could, under stressful conditions, trigger or contribute to serious risks for the financial system.

3. Devising a plan for effective implementation and coordination of macro prudential regulation, once the first two challenges are met. This third challenge is daunting, given our large number of regulatory institutions and FSOC's limited powers. And, it becomes even more daunting once shadow banking outside of our borders is considered.

In theory, the Office of Financial Research housed in the Treasury Department, is empowered to undertake these studies. But, as a practical matter, far greater resources will be needed, and the Fed is best equipped to do this. Perhaps the best way forward is to first recognize the imperative to do this, and then have FSOC develop a collaborative plan to get it done.

I think the timeframe for accomplishing this project will be long at best. And, even a strong program will provide far from perfect protections, given the wide swath of shadow

banking, the enormous complexities with respect to each of the three steps, and the unpredictable.

Thus, until such a program is developed and implemented, and probably permanent, I believe, contrary to the views of many, that the Fed should take systemic risk into consideration in monetary policy decisions, even though excesses are impossible to identify with high convictions except *ex poste*. That doesn't mean that the formal criteria should be expanded from the current two, combating inflation and promoting full employment, but simply that systemic risk should be considered.

I'll conclude by saying that one of the advantages of our regional Federal Reserve Bank system is that its Boards can bring business, financial market and consumer experience to the functions and deliberations of the Federal Reserve System. And, the combination of the perspectives drawn from this experience with the professional expertise of economists and regulators seems to me the right mix for meeting the complex and vitally important challenges you face with respect to monetary policy and regulation. Thank you.