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110th Year

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President and Chief Executive Officer
Federal Reserve Bank of New York

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Introduction

Chairman Terry J. Lundgren

Welcome to the 470th meeting of the Economic Club of New York in our 110th year. I'm Terry Lundgren, Chairman of the Economic Club and Executive Chairman of Macy's Inc. The Economic Club of New York is the nation's leading nonpartisan forum for speeches on economic, social and political issues. More than 1,000 prominent guest speakers have appeared before this Club over the last century and have established a very strong tradition of excellence. I'd like to take a moment to recognize our now 252 Club members of the Centennial Society, who are seated in our front rows. And this group has, these individuals in this group have contributed at least $10,000 – in many cases more than that – on a one-time basis to become part of this Club and they've become the financial backbone to allow us to do so many other events that are of interest to our members. So we thank them for that. Also a special welcome to the students who are joining us today from Manhattan College and Baruch College as well as the members of the 2017 Economic Club of New York pilot class of fellows who are here as well. Welcome. (Applause)

It is a great pleasure for me to introduce my good friend and former chair of the Economic Club of New York, and President and Chief Executive Officer of the Federal Reserve Bank of New York, Bill Dudley. Bill had a big announcement this morning – if you haven't already heard – that he will step down from his role once a successor fills his major role that he plays. But, certainly it's going to be for a while now so we'll have plenty of time to work with Bill over the next several months into the middle of next year. Bill became the 10th President and Chief Executive Officer of the Federal Reserve Bank of New York on January of 2009, of course right after the financial crisis had begun. And in that capacity, he serves as Vice Chairman and a permanent member of the FOMC, the Federal Open Market Committee, the group responsible for formulating the nation's monetary policy.

Previously, he served as Executive Vice President of the Markets Group at the New York Fed, where he also managed the System Open Market Account for the FOMC. The Markets Group oversees domestic open market and foreign exchange trading operations and the provisions of account services to foreign central banks. Prior to joining the bank, in 2007, Bill was a partner and Managing Director at Goldman Sachs and Company and was the firm's Chief Economist for a decade. He received his doctorate degree in economics from U.C. Berkeley and bachelor's degree from New College in Florida.

In 2012, he was appointed Chairman of the Committee on the Global Financial System of the Bank for International Settlement, the BIS. Previously, he served as Chairman of the Committee on Payments and Settlements of the BIS and is currently a member of the Board of Directors of the BIS. And that's no BS...(Laughter) Sorry, but I just had to say that...(Laughter) I'm sure I could have restrained, but I just couldn't. I just felt like I needed to say it.

So, as a reminder – and I should have reminded myself – this is on the record today. (Laughter) I should have said that first before I...But on a serious note, I do want to, as I welcome Bill to the podium to give his remarks and then our questioners will ask questions, I do want to thank you, Bill, for the service you did, not only to the Fed, but to our country, in a time of need, particularly the time you served following the financial crisis and all the work that you and your team helped us get through. Thanks very much. Bill. (Applause)

William C. Dudley

President and Chief Executive Officer

Federal Reserve Bank of New York

So I'm going to the BIS this week, maybe I should try that out. (Laughter) So it's great to have the opportunity to be here and speak again at the Economic Club of New York. The timing is perfect as I did announce my plans to retire from the Fed next year this very morning. As Terry said, I began my career in January 2009, so by rule I have to leave January 2019. And I'm probably going to leave a little bit earlier than that because I thought about it hard and I thought, gee, retiring to play golf in January, that doesn't make a lot of sense. So we started the search process at the New York Fed and to do a search it has to be public and so it's public now as of today.

So what I want to do today, as we mark the 10th anniversary of the onset of the financial crisis, I want to draw some lessons from that harrowing experience and consider what the implications of those lessons are for regulatory policy going forward. As always, what I have to say reflects my own views and not necessarily those of the Federal Open Market Committee or the Federal Reserve System.

The first lesson is that financial crises can have grave consequences for the economy and the nation that can linger for many years. The toll from the financial crisis was severe, with nine million jobs lost and eight million housing foreclosures amid the deepest economic downturn since the Great Depression.

Moreover, the road back has been long and slow. Despite economic policies oriented toward supporting recovery, it has taken eight years to push the unemployment rate down to a level consistent with the Federal Reserve's employment objective. Other residual impacts include the large size of the Federal Reserve's balance sheet; significantly higher public debt; and substantial damage to public trust in the nation's government and financial institutions.

The second lesson follows from the first. We need to ensure that we do have a resilient financial system. To that end, we must put in place safeguards in response to the crisis. We must ensure that they are fully appreciated and respected. But, it also means that we must finish the job – for example, by building out a fully workable regime for resolving a complex, global firm if one were to become insolvent. We need to ensure that our financial system can continue to provide critical services not just during good times, but also during periods of stress.

I think these objectives are particular relevant today, when reopening the Dodd-Frank Act and modifying our regulatory framework are under consideration. While it's appropriate to evaluate adjustments that might improve our regulatory regime, it's critical that we don't forget the hard-earned lessons of the crisis and – in our haste to reverse course – undermine the robustness and resiliency of the financial system.

At the heart of the crisis was the U.S. housing boom and bust. Between 1997 and 2006, U.S. home prices nearly doubled in real terms – in other words, on an inflation-adjusted basis – on a nationwide basis. Then, when the boom turned to bust, real home prices reversed course, declining by 40% on a national basis, with larger price declines in several states. The magnitude of the national price declines was unprecedented during the postwar period. The evolution of the financial crisis illustrates a number of key issues, including the potential hazards of financial innovation, the procyclicality of the financial system, and the importance of confidence in sustaining effective financial intermediation.

The housing boom resulted from several factors. Innovations in subprime mortgage lending enabled moderate-income households to purchase homes with negligible down payments. This led to an increase in the demand for housing, which helped to push up home prices. Home price appreciation masked the potential riskiness of such lending and that, in turn, sustained the wisdom of easier underwriting standards. As long as home prices were rising, sub-prime borrowers could either refinance their loans or sell their homes when their initial teaser rates expired. Thus, losses on subprime and other mortgage lending were low, reinforcing the belief that these loans were, in fact, safe.

Easier mortgage underwriting practices were also supported by the ability of mortgage originators to pool their mortgages into collateralized debt obligations, which transformed low-quality assets into triple-A-rated securities. Investors, including banks, relied too heavily on credit ratings and they didn't do sufficient due diligence on the underlying quality of the assets and the assumptions that underpinned the triple-A ratings. Implicit in these ratings was the assumption that a large, national decline in home prices was extraordinarily unlikely.

The rise in home prices led to a surge in construction activity, which helped to sustain the housing boom for a time. This effect was particularly powerful in some states such as Arizona, California, Florida, and Nevada. Rising home prices also bolstered the economy by supporting consumption, as households monetized these gains by cash-out refinancings and drawing on home equity lines of credit.

The housing boom was also supported by an accompanying financial boom. The financing activity associated with the surge in mortgage originations and securitizations pushed up the earnings of the major banks and securities firms. These strong earnings created incentives to ease underwriting standards further.

But, as housing supply responded to the increase in home prices, housing starts rose from 1.5 million in mid-2000 to a 2.3 million annual rate in early 2006. Once that happened, the positive feedback loop began to run in reverse. Home prices began to soften, subprime borrowers found it more difficult to refinance, and mortgage loans defaults and delinquencies rose. As the bust got underway in earnest, residential investment declined and consumer spending was undercut as home equity levels fell.

The housing boom and bust underscores several important lessons. First, the financial system is not only a very complex system, but also one that can be inherently stable. In other words, subject to excess, and then sharp reversal. This is especially the case when an important innovation occurs and market participants don’t fully appreciate the powerful feedback loops that first sustain the boom and then contribute to a bust when the process runs in reverse. This means that we, as regulators, must continually evaluate the financial system and monitor the landscape for new developments and innovations that, if they’re taken too far, could lead to excess and put the system at risk.

Second, when there are potential excesses that could threaten financial stability, we should look to temper them. For example, in the run-up to the financial crisis, macroprudential tools, such as requiring larger down payments or more closely evaluating the incomes of home buyers, could have been implemented to help limit the demand for housing. If such an approach had been followed and had been successful, home prices would not have risen so dramatically, and the subsequent bust would have been less severe. Another approach would have required financial intermediaries to build stronger capital and liquidity buffers as protection against a housing bust and an economic downturn.

Prior to the financial crisis, unfortunately, the conventional wisdom was that asset bubbles could not be identified in real time – rather, they could only be cleaned up after they burst. While there are significant challenges to identifying asset bubbles, it’s clear that cleaning up only after the burst does not always work out so well in practice.

Third, we need to carefully monitor the incentives that govern the behavior of borrowers, savers, and financial intermediaries. During the crisis, some examples of bad incentives that sustained the boom included, and this is not an exhaustive list by any means: compensation practices at financial firms that rewarded volume and short-term performance over longer-term, sustainable returns; the conflict of interest inherent in the willingness of credit rating agencies to designate tranches of subprime mortgages triple-A in exchange for fees; the ability of Fannie Mae and Freddie Mac to use their implicit government support to take on large amounts of mortgage risk with very little capital backing; and, the ability of AIG to use its triple-A rating to provide credit protection to banks and securities firms against complex mortgage obligations with little direct capital support or an adequate liquidity backstop.

Once the housing bust got underway, stress on the financial system increased sharply as asset prices fell and bank earnings plunged. In the spring of 2008, such pressures forced the sale of Bear Stearns to JP Morgan Chase. Later in the year, the government placed Fannie Mae and Freddie Mac into conservatorship. In September, Lehman Brothers failed. And a day later, AIG was rescued in order to protect the rest of the financial system against further losses and even broader contagion. With confidence in financial markets and financial intermediaries badly frayed, the Federal Reserve and the U.S. government intervened and provided a range of liquidity backstops, debt guarantees, and capital infusions in order to forestall a complete collapse of the financial system and the U.S. economy.

The bust exposed many structural flaws in the financial system that exacerbated its instability. Without being exhaustive, these included the instability of the tri-party repo system, which supported the nation's short-term funding markets; the risks of runs in the money market mutual fund industry; and the risk of contagion caused by the huge volume of outstanding over-the-counter derivative obligations between the major financial intermediaries.

The tri-party repo system was centered on two of the major U.S. banks. The system matched investors and borrowers each day – with the investors lending cash, secured by Treasuries and other collateral, to the major securities firms. But, the system was unstable. In times of stress, clearing banks could be faced with very large single-firm exposures of potentially hundreds of billions of dollars on a particular day. Not surprising, when such counterparties became troubled, the clearing banks were less willing to take on these large intra-day exposures.

As a result, repo investors who were primarily worried about getting repaid every morning, were motivated to simply withdraw from the market. As short-term investors withdrew funding, the liquidity buffer of the troubled securities firm was quickly exhausted, particularly as other counterparties to that firm demanded additional collateral to secure their own exposures.

Structural weaknesses in the money market mutual fund industry, which was a major source of short-term wholesale funding to the securities industry and various non-bank financial corporations, also exacerbated the crisis. When Lehman Brothers failed, the value of its outstanding short-term obligations collapsed. The Reserve Primary Fund broke the buck and investors rushed to withdraw their funds from prime institutional money market mutual funds. This was a modern day version of a bank run. The funds generally did not have sufficient cash available to meet these runs because they offered overnight liquidity at par value against a portfolio of assets with weighted average maturities that were considerably longer.

Another important source of instability was the large volume of bilateral over-the-counter derivative positions outstanding among the major firms and the right of a firm to immediately close out such positions if their counterparty became insolvent. For example, when Lehman Brothers failed in September 2008, counterparties to Lehman terminated over-the-counter derivatives in which the contract was in the money – that is, Lehman owed money to the counterparty – and these firms then liquidated the collateral held against these obligations. But they kept open obligations in which the exposure went the other way, from them to Lehman. Not only did this create an imbalance in risk exposures at the failed firm, but it also generated significant market churn and risk as firms scrambled to rebalance their own risk exposure. The contagion generated by a complex web of outstanding bilateral OTC derivative exposures significantly worsened the crisis and was responsible for much of the losses Lehman incurred in its bankruptcy.

The near collapse of the U.S. financial system underscores three critical lessons. First, financial institutions must be robust to stress. In particular, they need to have enough capital to be considered solvent even after sustaining significant losses, so that they can maintain their market access needed to recapitalize themselves. They also need sufficient liquidity buffers so that they can respond to shocks without having to sell illiquid assets. The forced sale of illiquid assets can push asset valuations far below their fundamental value and that can increase insolvency risk. And, it’s important that they not be overly reliant on short-term wholesale funding, because as we saw during the crisis, this can evaporate during times of stress.

Second, when we identify potential sources of instability that could amplify shocks, we need to make structural changes to the financial system to reduce or eliminate them. For example, the financial crisis made it clear that changes were needed in how the tri-party repo transactions were unwound each day, how the net asset values were calculated for prime money market mutual funds, and how over-the-counter derivatives obligations were cleared, settled, and risk-managed.

Third, there should be a viable and predictable resolution regime. We need to be able to resolve a large, systemically important bank or securities firm in a way that limits contagion and stress on the rest of the financial system, while at the same time protecting the taxpayer against loss.

Meanwhile, central counterparties – through which now most standardized over-the-counter derivatives must now be cleared – they need to be open for business for the financial system to operate effectively. Hence, the emphasis here should be on ensuring that these financial utilities can be open for business every day, including the day after one or more of their participants fails. Credible resolution regimes for large banks and securities firms and credible recovery regimes for CCPs and other financial market utilities, that's what we need to help support confidence during times of stress.

These measures would make the financial system less prone to booms and busts. Financial intermediaries would be more robust to stress when busts inevitably occur, and contagion to the broader system would be reduced when a systemically important firm fails. Such changes should reduce the likelihood of a failure of a large, systemically important firm and the negative consequences of such a failure on the broader financial system. We really want to do both. These steps should help ensure that credit flows can be sustained throughout the business cycle.

So, where are we relative to what's needed? As I see it, there has been considerable progress. The nation's largest banks are much safer as a result of substantially higher capital and liquidity requirements, as well as robust stress tests. This enhanced resiliency has been achieved without a significant negative impact on the broad availability of credit – recognizing that it is now more difficult for households with low credit scores to obtain a mortgage. Most importantly, improving the capacity of such firms to continue to lend during times of stress should make the overall economy more stable.

We've also made significant progress in addressing many of the structural weaknesses uncovered by the financial crisis. Money market reform has made prime money market mutual fund industries both smaller and safer. The elimination of the net asset value convention for institutional prime money market mutual funds has made these funds smaller and less prone to runs during times of crisis. The tri-party repo system has been made more stable as intra-day exposures of the large clearing banks have been dramatically reduced in size. This means that they have much less reason to back away from a firm if it were, in fact, to become troubled. And, firms are generally much less reliant on short-term wholesale funding which can run.

We've also reduced the amount of risk in the system by requiring that most standardized over-the-counter derivatives be cleared through CCPs, where multilateral netting occurs. In a centrally cleared regime, major intermediaries have net exposures to individual CCPs that replace much larger bilateral gross exposures to other financial intermediaries. Now, of course, this means that we're putting a lot more eggs in the CCP basket. So, it's particularly important now to closely watch that basket.

Greater oversight of CCPs is necessary to ensure that they have good governance, sound risk management, robust technological infrastructures, and adequate liquidity support. In addition, we made considerable progress in developing a viable resolution regime for large, systemically important banks and securities firms.

Yet, we should not be complacent, as there are important areas where our work is not yet complete. Relative to other countries, the United States has a limited ability to implement effective macroprudential tools. That's because the oversight is shared by several different entities, and the power to implement macroprudential tools in the United States is very constrained. Another challenge is the diverse structure of the U.S. financial system, in which non-banks and capital markets play a substantial role in the credit intermediation process. Although the Financial Stability Oversight Council could conceivably play a greater role here, whether it will be able to do so effectively remains uncertain.

Another issue that needs attention is the ability to resolve large, complex financial firms that operate on a global basis. The framework of requiring such firms to hold a large buffer of debt that could be converted into equity at a time of non-viability, that is an important step forward.

But, the task of operationalizing this in a global way that's fully credible to those firms' customers and counterparties, that has not yet been completed. Achieving clarity about the roles and responsibilities of home and host country authorities is still a work in progress.

The Federal Reserve's lack of authority to lend to a major securities dealer that gets into difficulty is another outstanding issue. The Dodd-Frank Act narrowed the Federal Reserve's authority under Section 13(3) of the Federal Reserve Act. No longer can the Federal Reserve lend to an individual securities firm or non-bank financial intermediary. Now such authority might not be necessary given that the FDIC has the power to lend under Title II of the Dodd-Frank Act and firms are required to have sufficient resources to support their resolution plans if they get into difficulty. But, I would prefer having such a tool available in extremis given the potential need to buy time for coordination and critical decision-making. I think it's important to ensure that we always can get to the weekend. Finally, the work needed to ensure that CCPs can always recover has not yet been completed. This is an issue of an increased importance given their role in the financial system has become much more prominent.

At the same time, there are some areas where the pendulum may have swung too far, where the costs of regulation – including compliance costs and the potential impact of these costs on the provision of services – are likely to exceed the benefits. In this vein, I favor regulatory relief for smaller banking organizations.

First, such firms individually are not systemically important, and therefore I don't think they pose a significant risk to the viability of the U.S. financial system. Second, the regulatory burdens on smaller firms can be heavy because they don't have the scale over which compliance and other regulatory costs can be spread. Regulatory requirements should be appropriately calibrated so we can avoid inadvertently creating a competitive advantage for larger financial firms.

I also think that the Volcker rule could be modified so that its implementation would be less burdensome. As I see it, regulators could review the criteria for permissible market-making. Trading activity should be viewed as market-making when it's customer-facing and inventories are not excessively large or stale. Market-making serves an important function, and it's important that trading desks can intervene and buy during flash crashes or sell during flash surges. Permitting this could provide greater liquidity and stability to financial markets. I would also exempt smaller banking institutions from the Volcker rule since they rarely, if ever, engage in proprietary trading.

Many speculate that Congress will make changes to the Dodd-Frank Act. If the scope is confined mainly to small bank relief and adjusting how the Volcker rule is applied, I have no objection. But, because the Dodd-Frank addresses many of the key lessons of the crisis, I think it's appropriate that changes be made carefully – with a paring knife, rather than with a meat cleaver. Here, I would underscore the importance of preserving higher capital and liquidity requirements for systemically important banks – Title VII, which mandates the central clearing of standardized over-the-counter derivatives, and Title VIII, which gives the Federal Reserve an oversight role for financial market utilities that are systemically important, and which helps promote more uniform risk management standards.

While Title II gives the FDIC the authority to resolve a large, complex financial firm by converting its debt into equity and establishing a new holding company, I don't think this is necessarily the only way to have a viable resolution regime. However, if Congress were to eliminate Title II, then I think the Bankruptcy Code would need to be bolstered.

There are two essential requirements: the ability to initiate an effective resolution strategy over the weekend, and a government entity – be it the Federal Reserve or the FDIC – that can provide a credible liquidity backstop to the recapitalized entity when it opens for business on Monday morning. If resolution cannot be accomplished in this timeframe, confidence would suffer and there would be contagion. Without a credible liquidity backstop, clients and counterparties would run, making it much more difficult for the recapitalized firm to conduct its business and to stay in operation.

I would also preserve the authority of the Financial Stability Oversight Council to designate non-banking firms as systemically important and subject to supervision by the Federal Reserve. As I see it, the designations of GE Capital and AIG were successful in two important respects. First, Federal Reserve supervision resulted in improved corporate governance and risk management at these firms. And second, it created incentives for the firms to alter their operations to become less systemically important in order for these firms to become de-designated. We should also retain this designation tool because we can't predict which firms and activities may emerge and become systemically important in the future. After all, I don't think many of us were focused on or worried about the activities of AIG's Financial Products Group several years before the financial crisis, though in retrospect these activities were obviously systemically important. That part of the firm should have been better supervised and regulated.

So, in conclusion, as we reflect on potential changes to the U.S. regulatory system, we should not lose sight of the horrific damage caused by the financial crisis, including the worst recession of our lifetimes and millions of people losing their jobs and homes. We had a woefully inadequate regulatory regime in place, and while it's much better now, there still is work to do. We should finish the job as quickly as possible, and we should do no harm as we adjust our regulatory regime to make it more efficient. Thank you for your kind attention. (Applause)

QUESTION AND ANSWER PERIOD

CHAIRMAN TERRY J. LUNDGREN: Thank you, Bill, for your comments, for the look-back, and for some of the lessons learned that you've provided. We now have our questioners who are drawn from our membership. And we have today, Pat Foulis, who is the New York Bureau Chief for *The Economist*, and we have Tom Keene, who is Editor-at-Large for Bloomberg. Tom, you're up first.

TOM KEENE: Terry, thanks so much. It is an honor to be here with Bill Dudley, of course, and to listen to these important comments. What I found interesting in lessons from the financial crisis, President Dudley, is you lived it. You lived it before at Goldman Sachs and then through it at the Fed. I'm going to call this the weekend speech. Is that okay? You mentioned getting to the weekend and trying to get to Monday morning as well. I would suggest maybe you lived that. What I learned last week in an amazing news flow is so many people were analyzing these institutions and the lessons you learned without crisis. It was a time of calm, like a VIX at 9 and the Dow at 23,000. If we have a four standard deviation move in T-bill, if we see the Dow drop 15%, 21%, we have a chairman nominee who will have to fall back on PhDs from Berkeley. How will these institutions work given Chairman Powell? How will these institutions work under crisis given this new structure for the Fed? How will he work with the PhDs?

PRESIDENT WILLIAM C. DUDLEY: Well, I think that the Fed will do just fine because the financial system is much, much stronger today – much more capital liquidity. I think firms are better risk-managed, cleaner balance sheets. So, I think the financial system can handle much, much more stress today than it did back in 2007 and in 2008. The second thing is I think the economy is on a much more even keel. I don't see any housing boom in process that's likely to lead to kind of the ups and downs that was a factor putting so much stress on the system. I understand from your question, Tom, that there is a lot of change at the Fed, but I think what people, I think, miss is, first of all, the people that have been named are really high quality people. I'm a big fan of Jay Powell and Randy Quarles, two of the new people at the Federal Reserve. So, the first thing, we have really, really high quality people taking the reins. The second thing is that it's not just about the people at the top. If you remember the film, "Too Big to Fail", if you watched that movie, there were just the principals around the table. That's not really how it works. You know, there's hundreds and hundreds of people that come up with ideas and good analysis that inform the principals. The principals are not making this all up on their own, and that really good staff is still going to be there. The third thing I would just say is that the mission of the Fed doesn't change. The objectives of the Fed don't change. And so you get new people but they're going to still follow the same set of objectives. And the last thing I would say is I think that, you know, the current committee is really very much of the same mind, so there's not a lot of discord going into this transition. So, I think it's going to be a very, very smooth transition. I think Governor Powell and Chair Yellen are very well aligned. So, I think this is going to be very evolutionary. So I think it's going to be a very smooth transition. Does that answer your question?

TOM KEENE: It was close...(Laughter)

PAT FOULIS: A satisfied customer. President Dudley, you emphasized the importance in your speech of macroprudential tools and probably the most important is the stress test the banks face.

When you look at financial conditions right now, they're clearly quite exuberant. And yet, the message from the banks to the investors is that they expect the stress test to be relaxed. And you can't mention individual firms, but I can, so for example, Citigroup, a few weeks ago said the outlook for the CCAR test was very encouraging. JP Morgan's guidance is that its capital ratio could well fall. So, my question is: how would you respond to the idea that there's less capital in the system going forward, particularly given this is a moment when financial markets are exuberant and you might expect the rules to be tightened?

PRESIDENT WILLIAM C. DUDLEY: Well, I certainly agree with the tenet of your question that we shouldn't be relaxing the stress test because we're in a pleasant economic environment. And I don't think we are going to relax the stress test. I think the stress tests are going to remain very stressful. (Laughter) I think that, I think that the stress test, I think, have been a very, very important innovation because it really puts capital requirements on a more forward-looking basis. It's not how much capital you have today, it's how much capital you would have after a very stressful period, both in terms of the macro-economy and also in terms of the trading book, what happens to the value of assets? So, I think there's a strong consensus that the stress tests are a really good idea. And one of the things that was so valuable to the United States during the financial crisis is we did the first stress test in the spring of 2009 and it was credible. The fact that we did a stress test that was credible, I remember coming to the office the next day and I got a piece published by a major hedge fund, and the headline of their piece was, "We Agree." And I knew that that was hugely important because if people thought that the stress test was credible, we probably were really over the hurdle of starting to rebuild confidence in the financial system. So I don't think there's anybody that thinks that the stress test should be rolled back in terms of, you know, their rigor. I think it's possible that you could sort of ask yourself the question: the stress tests, could they be done in a more efficient way in terms of, you know, how much data you collect and need to reach those conclusions? But I don't think there's any sentiment to roll back the stress test in any significant way.

TOM KEENE: President Dudley, you get right to it in paragraph 2. You talk about residual impacts. You talk about significantly higher public debt, substantial damage to the public trust. I think of Robert Hormat's work linking our fiscal policy into his foreign policy. Let's link it into your regulation. You wrote in a book a few years ago. There's not a moment to lose on fiscal policy. Then it was $8 trillion of national debt, now it's in the vicinity of $20 trillion. Can we overlay a tax reform/tax cut $1.5 trillion on to the deficit? And will the new team at the Fed led by Chairman Powell, will they be fiscal policemen as well?

PRESIDENT WILLIAM C. DUDLEY: Well, it's up to Congress and the administration to decide the path of fiscal policy and the Fed is not going to opine on that. That said, I mean, I think we do need to think about the fiscal sustainability of the United States and where's the debt going over the medium to longer run. I mean it's interesting to me that this last year the deficit was 3.5% of GDP for the last fiscal year. That compares to 1.1% of GDP back in fiscal 2007. So we're at pretty close to full employment and we have a deficit that's quite a bit larger than it was prior to the last economic downturn. So I think that suggests that maybe we don't have a huge amount of fiscal capacity that we should use at this particular time. But, that's completely a decision for Congress and the administration to address, and I'm sure they'll debate it quite intensely in the coming weeks and months.

PAT FOULIS: President Dudley, you described the role of OTC derivatives in the crisis and how important they were. Obviously, we've moved to a system in which the vast bulk of those derivatives, credit derivatives and interest rate derivatives are cleared centrally. And we basically have a situation where most of the derivatives in the western world pass through a tiny number of utilities. Those utilities have very little capital and liquidity, certainly by the standards of banks. There seems to be some concern around, as Gary Cohn said last month, that they were a new systemic problem. One of the supervisors last month also talked about an Armageddon scenario. So I wondered if you could talk a bit about the risks in those utilities and how they might be mitigated.

PRESIDENT WILLIAM C. DUDLEY: Well, the first thing is Title VIII of the Dodd-Frank Act gives the Federal Reserve some authority in terms of actually supervising and overseeing these financial market infrastructures that are deemed systemically important in the United States. I think that's a really, really important power to have because I think, I agree with the tenet of your question. A lot of these financial market utilities that clear this vast bulk of over-the-counter derivatives, they are systemically important. And, as I said in my remarks, we need to really watch that basket very closely. One of the things I was involved with very intensively earlier on in my career at the New York Fed was I chaired the Committee for the Payment Settlement Systems and we published, as part of that, *The Principles for Financial Market Infrastructures*, which was a whole host of essentially standards that financial market infrastructures should be held to around the world. And one of the things that I think that's been very gratifying to me is to watch those principles for financial market infrastructures actually be accepted on a global basis and be used as a standard of regulation for these CCPs. So I think, you know, there is some risk there, but I think we're cognizant of that risk. That's why we're continuing to do a lot of work on the recovery of these CCPs. What would happen if there actually was a failure of one or two of the largest counterparties? How could we be absolutely guaranteed that that CCP could open for business the next morning? Because these are essential infrastructures. If some of these infrastructures go away, you don't have well-functioning financial markets. So, it's not about resolution, it's about recovery for these CCPs. So I absolutely agree with you. They are critical to the system and that's why we have Title VIII of the Dodd-Frank Act and that's why we need to keep that Title.

TOM KEENE: I want to thank you for footnoting Mark Twain, the American economist, in your speech this morning. And within that, in the broader scheme of lessons from a financial crisis is what we hear from too many guests on our programming, and particularly those to the right, which is your world of regulation is dampening GDP, dampening investment spirit. How do you respond to the lessons we've all learned, the application, the initiation of these regulations over the next five or ten years? How do you bring that over to what it will do to our gross domestic product? What it will do to investment that creates jobs?

PRESIDENT WILLIAM C. DUDLEY: Well, I think it's really hard to, as an economist, to sort of say, okay, if I just turn this dial on regulation, what's actually going to happen to the real GDP because there's isn't a regulatory dial. There's literally hundreds and thousands of different regulations across different regimes. So, I think it's really uncertain about what would happen to growth if you actually were to dial back regulation. I think, you know, all regulations should be subject to sort of a cost benefit analysis of like what's the benefits you're getting from the regulation versus what's the cost. And second, I think all regulation, we should be thinking about how can we accomplish the same end in a more efficient way. So, I think that, you know, my view is the debate shouldn't be about no regulation or more regulation, the debate should be about what regulatory changes can we make to make the regulatory regime more efficient in achieving our objectives.

PAT FOULIS: You've been almost a decade, I think, at the New York Fed. Your predecessor, Tim Geithner, said when he arrived on the job he was struck by two things. One was that the New York Fed was famous for almost being blown up by Jeremy Irons in the movie Die Hard With a Vengeance. The second thing that struck him was, to quote his memoirs, "The President was often viewed as the servant of the financial establishment." How much has the role of the New York Fed changed over the last decade? And what would you highlight?

PRESIDENT WILLIAM C. DUDLEY: Well, it's for others to judge, rather than me to judge, how we're perceived in the world. I've really tried to make a very strong effort to talk about things that are completely removed from the financial sector. So, for example, what's happening to income ability. The second thing, we spend a lot of time traveling about the region trying to understand what's working and what's not working, for example, Upstate New York, which is starting to have a stronger recovery. You know, at the end of the day, we're not here for Wall Street. We really aren't. I mean I sat down with CEOs and said, look, there are some points where our convergence are going to be compatible. Like, you know, you want to have your firm survive, I want you firm to survive. But, there are some places that it's just going to diverge significantly. I don't care about what happens to your stock price, for example. And if things have to happen like more capital, more liquidity, and that depresses your stock price, so be it. So, I think that, you know, it's not, again, one or the other. But we've definitely tried to underscore the fact that, you know, we're here for Main Street. We're not here for Wall Street. And I've tried to live that every day in my stewardship of the presidency of the New York Fed, but it's for others to judge whether I've been successful in that mission.

CHAIRMAN TERRY J. LUNDGREN: One more from each questioner.

TOM KEENE: Tell us about the empty chairs at the Fed. You're in the grind, 70, 80 hours a week. I'm stealing this, a good question from Patrick, but tell me about the empty chairs at the

Fed, and the new and many empty chairs that we see. What does that mean to the give and take of the Federal Open Market Committee?

PRESIDENT WILLIAM C. DUDLEY: Well, the Federal Open Market Committee, as people know, consists of the Board of Governors, which at full staff is seven, and the 12 reserve bank presidents, of which five at any one time are voting members of the Federal Open Market Committee. So, we don't have any shortage of people to vote on monetary policy. All that's happened is that there is a little bit more weight for the Presidents right now and a little bit less weight for the Federal Reserve Governors. I think this has no implication whatsoever for policy right now. If you look at the last couple of rounds of policy, if you look at the rollout of the balance sheet normalization, completely broad support from both Presidents and Federal Reserve Governors. So I just don't think that this is a big issue. I think, you know, the key issue going forward is the quality of the appointments to fill the unfilled positions at the Board of Governors. I think, you know, if I look at what I've seen so far, I'd say so far so good. Keep it up. Keep appointing people like Jay Powell and Randy Quarles. I mean, you know, I'm sad that I'm going to be stepping down and, you know, I'm sad to see Janet stepping down. Janet's done a superb job as Chair of the Fed. But, you know, it's not just us. There's lots of other people behind them supporting the mission as well, all the staff people, all the people that work, you know, their 70, 80, 90 hours supporting the principles. So, I think it's going to be, you know, it's going to be fine. And this is all happening, I think, in an environment where there's broad consensus among the FOMC about what's supposed to happen next in an environment where the economy is pretty darn stable. So I think this is, if you were going to have a transition, this is a heck a lot better time to have a transition than in 2007 or 2008.

PAT FOULIS: This is the problem. I think people in those empty seats might have to face, not you, but in several recent speeches, you talked about the role that technology might have in answering the puzzle, why is inflation relatively low? And you've talked about price comparison sites that might allow consumers to shop around. You've also talked about e-commerce platforms that might reduce the pricing power of brands. Can you give us more of a sense of how big this effect might be and how you expect it to change inflation over the next few years?

PRESIDENT WILLIAM C. DUDLEY: I wish I knew the answer to that question. You know we've been a bit surprised by inflation this year. You know towards the end of last year inflation was drifting up very close to our target for the personal consumption expenditure deflator. And then as we went to the spring, it came back down. And we're surprised by this because we think the economy is pretty close to full employment, and so we would expect this to eventually drive up wages and that ultimately drive up prices. So we're not seeing quite what we were expecting to see. Now, this is not completely bad news as people, you know, wring their hands about this. The fact is it may even suggest that we can run the economy and even more people having jobs, which is a really good thing. So, I wouldn't want to overstate, you know, how concerned I am about all this, but there is a puzzle. We don't know, is the inflation lower today because of temporary factors? Or is it lower today and it's going to be higher tomorrow just because there's lags between the tightening of the labor market and how it shows up in higher prices? So that creates a bit of uncertainty about the best course going forward. My own view is I continue to expect that inflation will drift up over time. I do believe in the Phillips Curve, that if you run the economy tight enough, it will drive up wages and that will ultimately get into prices. But, you know, as they always say about monetary policy, there are long and variable lags, and so it could take a while for this to actually to translate into higher inflation. I think the important thing to recognize, as the Federal Reserve moves forward, whether we tighten monetary policy in December or not, 2% inflation is not a ceiling. We're not trying to hit 2% and the rest of the time stay below it. We want to hit 2% on average. So, even if we were to decide in December to go ahead with a rate hike with inflation below that 2% objective, we still have that 2% objective, and we'll probably need to go a little bit above 2% if we're actually going to keep inflation expectations well anchored at 2% over time. But, it's a bit of a puzzle, and I'm hoping that as the data comes out over the next few weeks and months, we'll get a little bit more evidence about whether this is something that's just temporary, transitory, or whether it's something more secular and structural. The more it's secular and structural, the more we'll be able to allow the economy to operate at a fuller level of resource utilization. The more it's temporary and transitory, then that will lead to a little bit more early tightening of monetary policy. So we'll see how the story is resolved.

(APPLAUSE)

CHAIRMAN TERRY J. LUNDGREN: First, thanks to Tom and Pat for your excellent questions to help dig a little deeper on Bill's subject matter. And, Bill, of course, thank you for, particularly for spending this very important day for you and for the New York Fed, and spending it with the Economic Club of New York. We really appreciate it. Thank you again. (Applause) And I'm also pleased to report that this coming Thursday, we have, the next act, we have the Secretary of the Treasury, Steve Mnuchin, will be here. And this was a late-breaking addition so some of you may not be aware of that, so we still have tables to fill and to buy. So, please go to our website. That's this Thursday, the 9th of November. We also, just behind that, have Ginni Rometty, the CEO of IBM, on the 15th of November. IBM just had the biggest increase in their – I know you don't care about stock prices, I do – had the biggest increase in stock price on their earnings announcement just last week and so there's a lot that she's going to be able to talk about. On November 21, we have Doug McMillon, which is, Walmart, of course, the CEO of Walmart, doing some fantastic things and the business has really turned for them and obviously their stock price is growing rather significantly as well. And then finally, on the 29th, actually just for our luncheon series, these are all luncheon serious events, we have Randall Stephenson, the CEO of AT&T. And, of course, they're in the process of a major acquisition. Lots of interesting things happening there. And then finally, December 5, Dr. Henry Kissinger, will join us for a dinner. So lots of exciting things. Tables still to be sold and bought by all of you and other members. And we look forward to having you at these events as well. For now, please enjoy your lunch. Thanks everyone. (Applause)