Lecture at Fordham Corporate Law Center by William Dudley, President of Federal Reserve Bank of New York

William Dudley*
DEAN WILLIAM TREANOR: My name is Bill Treanor,¹ and I’m the Dean of Fordham Law School. It’s my privilege to welcome you to what’s a very special night for the Law School. It’s a real honor for us to have the President of the Federal Reserve Bank of New York, William C. Dudley, come here to speak to us.

Fordham Law School and the Fordham Corporate Law Center,² the sponsors of tonight’s program, are just thrilled to have everyone here for what I know will be an historic evening.

First, before I get into the introductions, I’d like to say a few words about some housekeeping matters and to give everyone a sense of how the evening will be organized.

Mr. Dudley will speak for approximately twenty to thirty minutes, and then he has most graciously agreed to have a question-and-answer period, which will be about fifteen minutes or so. Mr. Dudley will take questions from the audience. He won't entertain questions from the press, of course. I will serve as the moderator.

The procedure is as follows. Please raise your hand and wait to be recognized. We have four portable microphones and student members of the Fordham Corporate Law Journal will distribute the microphones. We ask that you identify yourself with name and affiliation — student, faculty, practitioner, etc.

As there's such a large audience tonight, the Law School has arranged for additional seating in one of our classrooms, with a live video and audio feed. For those guests index cards have been provided. The Corporate Law Journal students will bring these cards directly to me and I'll read the questions to Mr. Dudley.

We'll finish the question-and-answer period, depending on how long we run, by about 7:15. At that point we invite everyone to a reception in the Atrium outside.

I'd like to begin by recognizing our Corporate Law Center, which was formed in 2001 and which serves as a focal point for excellence and innovation in current and emerging issues in business law. The Center's cutting-edge programs, such as tonight's lecture, bring to Fordham Law School nationally and internationally recognized experts to offer their insight into and understanding of the complexities facing today's global business world.

The Corporate Law Center has developed a superb reputation through its public lectures, policy-related roundtables and symposia, whose speakers and panelists represent leading members of the bar, academia, regulatory agencies, and the judiciary. These programs offer opportunities for students to explore both the practical and theoretical issues affecting business law, business, and government today. The Corporate Law Center seeks to be at the forefront of identifying developing issues and proposing effective solutions.

At the end of this month, on October 28th, we hope that you will return to the Law School for the Tenth Annual A. A. Sommer, Jr. Lecture, when our speaker will be Commissioner Elisse Walter of the Securities and Exchange Commission.

Additional information about the Corporate Law Center and the student-edited Fordham Journal of Corporate and Financial Law is available on the registration tables in the Atrium.
If you’d like to receive future announcements, please stop at the registration table and leave us your name and contact information.

I’d just like to say I think our Corporate Law Center has really built on an incredible strength of the Law School and has helped established us, without any question, as really at the forefront of business law programs throughout academia.

The Corporate Law Journal is one of the most cited business law journals of any business law journal in the country. We’re very, very proud of both of them.

I’d like to thank the Corporate Law Center’s Dean’s Fellow, Zachary Slates, a recent Fordham Law School graduate, who has provided invaluable assistance with tonight’s lecture.

I’d particularly like to recognize Ann Rakoff, who’s the Director of the Corporate Center. We would not be here tonight without Ann, who really helped conceive of this, did every detail large and small, and has been very simply magnificent. I’d actually like to lead us all in a big round of applause for Ann.

Fordham Law School is quite fortunate to have both very loyal alumni and acclaimed dedicated faculty. I’d like to recognize the following leaders of our Corporate Law Center who are here tonight, the members of our Board of Advisors: our Chair, Paul Soden; Pamela Chepiga, Pierre Gentin, Bob Hollweg—all members of the Center Board; Howard Tuchman, member of the Center Board; and the person who really started it all, John Peloso. John was the one who really came up with the idea of the Corporate Law Center, and we’re all here tonight because of you. So thank you all to our Corporate Law Center Board.

I think you can get a sense of how important this program is to the Fordham Law faculty by the turnout that we have here tonight. I’d like to recognize—and I’m sure I’m going to miss someone because we have such a large turnout and my eyes are failing after a number of years—we’re joined by Professor Susan Block-Lieb, Professor Carl Felsenfeld, Professor Gus Katsoris, Professor Paul Radvany,

Professor Richard Squire,\textsuperscript{9} Professor Jeff Colon,\textsuperscript{10} Professor Eric Jensen,\textsuperscript{11} and Professor Andrew Kent.\textsuperscript{12} It's an extraordinary turnout and, again, represents how excited people are to hear you, Mr. Dudley.

I'd also like to recognize members of the Federal Reserve Bank of New York. We're joined by Deputy Chief of Staff Michael Schetzel, Assistant Vice President and Spokesperson Deborah Kilroe; and also by David Girardin, Jack Gutt, and Jeffrey Smith. Welcome, all, to Fordham.

Most of you probably know that William Dudley has had a most distinguished career in both the public and private sectors. Mr. Dudley began his career as an economist in the Financial Studies Section of the Federal Reserve Board in Washington, D.C., after receiving his Doctorate in Economics from the University of California at Berkeley in 1982.

Mr. Dudley then worked at J.P. Morgan as a regulatory analyst and was a co-author and editor of \textit{The Morgan Treatise on "Rethinking Glass-Steagall."}\textsuperscript{13}

Mr. Dudley next worked at Goldman Sachs for over twenty years. He became a Partner, Managing Director, and served as the Chief U.S. Economist and Senior Foreign Exchange Economist. His responsibilities included economic and interest rate forecasts for the United States and Canada and evaluation of the foreign exchange outlook. Mr. Dudley was a member of both the Technical Consultants Board to the Congressional Budget Office and the Economics Advisory Panel of the Federal Reserve Bank of New York. During 1994–95 he was also a senior economic advisor to Robert Rubin.\textsuperscript{14}

In 2007 Mr. Dudley was appointed Executive Vice President of the Markets Group at the Federal Reserve Bank of New York, where he managed the System Open Market Account for the FOMC. In this position his responsibilities included the implementation of monetary policy and, ultimately, the design and execution of the Federal Reserve's

\textsuperscript{10}Paul Radvany—Biography, http://law.fordham.edu/faculty/1132.htm.
\textsuperscript{10}Jeffrey Colon—Biography, http://law.fordham.edu/faculty/1083.htm.
\textsuperscript{12}Andrew Kent—Biography, http://law.fordham.edu/faculty/1113.htm.
response to the recent financial market crisis.

Mr. Dudley became the tenth President and Chief Executive Officer of the Federal Reserve Bank of New York on January 27, 2009. As President of the New York Fed, he also serves as the Vice Chair and is a permanent member of the Federal Open Market Committee, the group responsible for formulating the nation’s monetary policy.\(^\text{15}\)

I just note as a side note that I was very relieved to find, those of you who saw the movie “Diehard III”—I assume that’s pretty much everybody here—the central plot device is an attempt, a successful attempt I’m sorry to say, to take the gold from the Federal Reserve Bank of New York’s vault. I was shocked by how easy it was to do. [Laughter]

I know you’re all here because you want to hear what the Fed is going to do. I wanted to find out what they were taking to make sure that this doesn’t happen again, and Mr. Dudley assured me that in fact it is now all perfectly safe.

The Fed during the tenure of Mr. Dudley and his colleagues has been engaged in a number of initiatives that are unusual, if not unique, in American history. As Mr. Dudley told The Economist in an interview on June 4\(^\text{th}\) of this year, “We are learning by doing.”\(^\text{16}\)

I’m quite sure everyone here is anxious to know what has been learned and what new initiatives are being contemplated. As we’re all very much looking forward to hearing from Mr. Dudley, I’d like to turn the program over to him.

Please join me in welcoming tonight’s very distinguished speaker, William C. Dudley, President, Federal Reserve Bank of New York.

LECTURE

WILLIAM DUDLEY: Thank you very much for having me here to speak today. It is a real pleasure to have the opportunity to discuss the economic outlook and the challenges that face the Federal Reserve in terms of monetary policy going forward.

As always, my remarks reflect my own views and opinions and are not necessarily those of the Federal Open Market Committee or the Federal Reserve System.


With that out of the way, where do things stand? My assessment of where things stand today is mixed.

On the positive side, clearly the financial markets are performing better and the economy is recovering. In fact, the improvement in financial conditions that we have seen over the last few weeks and months has caused usage of the Fed’s special liquidity facilities to fall considerably. Consistent with their design, these facilities have become relatively less attractive as market conditions have improved.

Also, the Federal Reserve has begun to taper its rate of asset purchases. The Treasury purchase program will end this month and the agency mortgage-backed securities purchase program by the end of the first quarter of 2010.

On the negative side, the unemployment rate is much too high and it seems likely that the recovery will be less robust than desired. This means that the economy has significant excess slack and implies that we face meaningful downside risks to inflation over the next year or


19. Press Release, Board of Governors of the Federal Reserve, FOMC Statement (Sept. 23, 2009), available at http://www.federalreserve.gov/newsevents/press/monetary/20090923a.htm (“The Committee will gradually slow the pace of these purchases in order to promote a smooth transition in markets and anticipates that they will be executed by the end of the first quarter of 2010.”).


Also, there are those who express anxiety about whether the Fed has the tools and the will to raise the federal funds rate when the time is appropriate. I want to reassure you today that the Fed has the tools to tighten monetary policy regardless of the size of its balance sheet. Moreover, we have the will to do so in order to keep inflation in check.

Turning first to the developments in financial markets, there is little doubt that we have seen a vast improvement over the past six months, comparing today to where we were in March. The major equity indices have risen sharply, credit spreads have narrowed, and bank equity prices have shown a substantial recovery. Many large financial and non-financial firms have found it relatively easy again to tap the debt and equity markets.

The recovery in financial asset prices has been mirrored—albeit with a lag—in the economy itself. Industrial production has begun to rebound as the pace of inventory liquidation has slowed.

22. "Slack . . . should suppress wages and prices and keep inflation down. But if the Fed misreads the dimensions or significance of slack, it could unleash an unwelcome bout of rising prices." Id.

23. See, e.g., David Gaffen, Economics Group Slams Fed for Market Meltdown, With Firm’s Fate Implied, WALL ST. J., Mar. 22, 2008, at A12 (suggesting “that the failure of the Federal Reserve between 2003 and 2006 to adequately raise the federal-funds rate to a more normalized level in part contributed to the downturn the market is experiencing”).

24. The major financial markets have increased from March 9, 2009 to September 22, 2009 accordingly: the S&P 500 Index increased from 676.53 to 1,071.66; the Dow Jones Industrial Average increased from 6,547.0498 to 9,829.8701; and the NASDAQ increased from 1,268.64 to 1,516.52. BLOOMBERG DATA (on file with the Fordham Journal of Corporate and Financial Law).

25. “[C]redit spreads . . . narrowed and credit markets [are] more active.” See Joe Bel Bruno & Jessica Papini, Fixed-Income Units Likely to Drive Profits—Goldman Looks to Post Another Blowout Quarter as Morgan Stanley Appears Headed into Black, WALL ST. J., Oct. 9, 2009, at C3.

26. The major banks’ stock price increased from March 17, 2009 to September 15, 2009, for example: Bank of America increased from 6.27 to 16.79; Chase increased from 2.51 to 4.12; JP Morgan increased from 25.14 to 43.19; HSBC increased from 28.5 to 55.5; and Morgan Stanley increased from 23.81 to 28.74. BLOOMBERG DATA (on file with the Fordham Journal of Corporate and Financial Law).

27. George Hay & Richard Beales, Hedge Comeback, N.Y. TIMES, July 20, 2009, at B2 (claiming hedge funds had a strong first half in 2009 and changes in the debt and equity markets helped fuel this growth).

prices and activity have recovered somewhat—aided by the improvement in housing affordability and the first-time homebuyer tax credit. Fiscal stimulus is providing support to consumption and to state and local government infrastructure spending.

The vicious cycle we had a year ago—in which the deterioration in the financial markets led to economic weakness and that weakness reinforced the tightening of financial conditions—has been broken. In fact, to some extent, it has been replaced with a virtuous cycle. As financial markets have recovered, that has led to an improvement in business and consumer sentiment that, in turn, has helped to lift the economy, spurring further gains in financial asset prices.

In the same way that the improvement in market conditions is helping to support a sustainable economic recovery, the fact that the

29. Percentage change in inventories between September 2008 and September 2009 was -13.9%. Inventories decreased 2.6% between July 2009 and August 2009, while they actually increased 0.6% between August 2009 and September 2009. Timothy Winters et al., Manufacturing and Trade Inventories and Sales, U.S. CENSUS BUREAU NEWS, Nov. 16, 2009, http://www.census.gov/mtis/www/mtis_current.html (“Manufacturers’ and trade inventories . . . were estimated at an end of the month level of 1,303.3 billion, down 0.4 percent from August 2009 and down 13.4 percent from September 2008.”).


recovery in economic activity is a worldwide phenomenon helps mitigate the risk that we will experience the so-called "double-dip." The recovery in foreign demand should help to support the U.S. economy even if U.S. domestic demand grows more slowly than we hope or anticipate. Given these developments, the consensus forecast of about 3 percent annualized real GDP growth in the second half of this year appears quite reasonable.

However, even given that, I suspect that the recovery will turn out to be moderate by historical standards. This is a disappointing outcome, in that growth will likely not be strong enough to bring the unemployment rate—which is currently 9.8 percent—down very quickly.

I see three major forces restraining the pace of this recovery. First, households are unlikely to have fully adjusted to the net wealth shock that has been generated by the weakness in housing prices and in share prices that we have seen over the last couple years. Peak to trough, home prices nationwide have declined by 11.5 percent measured by

36. David Jolly, O.E.C.D. Cautious in Economic Forecast, INT’L HERALD TRIB., Nov. 20, 2009, at Finance 14 (discussing the fact that growth in Asia, led by China, as well as a leveling off of GDP decreases in the U.S. and Europe have created some outlook for growth).


40. BUREAU OF LABOR STATISTICS, DEP’T OF LABOR, LABOR FORCE STATISTICS FROM THE CURRENT POPULATION SURVEY (2009), available at http://www.bls.gov/cps/data.htm [hereinafter POPULATION SURVEY]. This is an increase from unemployment rates of 6.2% and 4.7% in September 2008 and September 2007, respectively. Id. In the first quarter of 2009, the number of discouraged workers rose to 717,000, a 70% increase from the first quarter of 2008. Bureau of Labor Statistics, Dep’t of Labor, Ranks of Discouraged Workers and Others Marginally Attached to the Labor Force Rise During Recession, ISSUES IN LABOR STATISTICS, Apr. 2009.


the Federal Housing Finance Agency index and by a whopping 32 percent according to the twenty-city Case-Shiller Index.

With respect to stock prices, the S&P 500 Index has recovered by more than 50 percent from the trough reached in March. But this needs to be put in context. The S&P 500 index is still about one-third below its recent peak in October 2007. Moreover, compared with its level ten years ago, the S&P 500 index is down by about 20 percent. So over the last ten years we’ve actually lost 20 percent.

The shock to household net worth seems likely to have several important implications for household behavior. The shock creates a risk that the household saving rate could increase further. For example, during the period from 1990–1992, the household saving rate averaged about 7 percent of disposable personal income. That’s considerably higher than the 4.3 percent average rate that we’ve seen during the first half of this year. If the household saving rate were to rise, then consumption would rise more slowly than income, and that would make it difficult for the economy to develop much forward momentum.

In addition, it seems likely that some workers will respond to the wealth shock by postponing their retirement. This suggests that the labor force participation rate may rise once labor market conditions begin to improve. This would tend to push up the unemployment rate,

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Estimates 0.3 Percent Price Increase from June to July (Sept. 22, 2009). Figure 3 indicates that from the peak in April 2007 to the low-mark in April 2009, the price decrease was between 10% and 12%.


44. In early March 2009, the S&P 500 stock index fell to $682.55, its lowest close since September 1996. Tom Lauricella, Dow Falls 281.40, Now Down 25% for Year, WALL ST. J., Mar. 6, 2009, at C1. As of September 30, 2009, the S&P 500 had risen to $1057.08. STANDARD & POOR’S INDEX SERVICES, 12-MONTH VALUES (2009) [hereinafter 12-MONTH VALUES]. This represents an increase of about 55%.

45. By the end of September 2007, the S&P 500 reached $1526.75. 12-MONTH VALUES, supra note 44. At $1057.08 by the end of September 2009, the drop was approximately 31%. Id. at 2.

46. At the end of September 1999, the S&P 500 measured at $1282.71. The September 2009 level was approximately 18% lower. Id.


48. From 1990-92, personal saving as a percentage of disposable income remained between 6% and 8%. Id. at 2.

49. The household savings for 2009 was approximately 4%. Id.
all else equal, and that would lead to more slack in the economy.

The second force that could restrain the recovery is the fiscal outlook. The fiscal stimulus that is currently providing support to the economy is temporary rather than permanent. This has to be the case if we are to ensure that fiscal policy is on a sustainable path over the longer run. This means that the positive impulse from fiscal stimulus will abate over the next year.

The third, and perhaps most important, factor that is going to restrain the recovery is that the banking system has still not fully recovered. Bank credit losses lag the business cycle, and those losses are still climbing. Thus, while banks’ access to the capital markets has sharply improved, banks are still capital constrained and hesitant to expand their lending. Most importantly, some significant classes of borrowers—namely commercial real estate and small business borrowers—are almost wholly dependent on the banking sector for funds, and those funds are not easily forthcoming.

The commercial real estate sector is under particular pressure because the fundamentals in this sector have deteriorated sharply and


51. As of November 12, 2009, about $210 billion remain in unspent TARP funds and a total of up to $120 billion will be repaid within 12 to 18 months. Deborah Solomon & Jonathan Weisman, White House Aims to Cut Deficit with TARP Cash, WALL ST. J., Nov. 12, 2009, at A4.


54. These smaller classes of borrowers are “most affected by credit reductions” since they have the “highest direct or indirect reliance on bank credit.” Ben S. Bernanke, Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression, 73 AM. ECON. REV. 257 (1983). As market inefficiencies increase, the costs of borrowing increase for borrowers. Id. at 257. Lending was further constrained for these classes when they couldn’t reach “alternative channels of credit;” however, these alternative channels were initially inefficient due to the cost associated with the methodical need to discriminate lending to this class of borrowers. Id. at 264-65.

because the sector is highly dependent on bank lending. In terms of the fundamentals, there are two problems.

First, the capitalization rate—the ratio of income to valuation—has climbed sharply.\textsuperscript{56} At the peak, capitalization rates for prime real estate properties were in the range of about 5 percent.\textsuperscript{57} What that means is that investors were willing to pay about $20 for $1 of income. Today, the capitalization rate appears to have risen to about 8 percent.\textsuperscript{58} That means that the same dollar of income is now capitalized as worth only $12.50. In other words, if income were stable, the value of a property would have fallen by 37.5 percent.

The second problem for commercial real estate is the income generated by commercial real estate has generally been falling rather than being stable.\textsuperscript{59} For example, as the recession has pushed up the unemployment rate, the demand for office building space has declined; as the recession has led to a reduction in discretionary travel, hotel occupancy rates and room prices have declined; and as retail sales have weakened, this has reduced the demand for prime retail property space.

The decline in commercial real estate valuations has created a significant amount of what we call “rollover risk” when commercial real estate loans and mortgages mature and need to be refinanced. The slump in valuations pushes up loan-to-value ratios. This makes lenders very wary about extending new credit, even in the case when these loans are performing on a cash flow basis.\textsuperscript{60} This means that more pain likely lies ahead for this sector and for those banks with heavy commercial real estate exposures.

For small business borrowers, there are three problems. First, the fundamentals of their businesses have often deteriorated because of the
length and severity of the recession, which has made them less creditworthy. Second, some sources of funding for small businesses—credit card borrowing and home equity loans—have dried up as banks have responded to rising credit losses in this area by tightening credit standards. And third, small businesses have few alternative sources of funds. They are too small to borrow in the capital markets and the Small Business Administration programs are not large enough to accommodate more than a small fraction of the demand from this sector.

All of these factors will tend to inhibit the pace of the economic recovery. Given that the recovery is starting with an abnormally large amount of slack and the pace of recovery is not likely to be robust, this means the economy is likely to have significant excess resources for some time to come. As a result, the balance of risks to inflation lies on the downside, not the upside, for at least the next year or two.

To see why this is the case, it is useful to note that inflation dynamics are driven mainly by two factors—the degree of capital and labor resource utilization relative to sustainable levels, and long-run inflation expectations. The degree of resource utilization is essentially driven by the business cycle and, to some extent, by the Fed’s success in achieving “maximum sustainable growth,” which is consistent with our dual mandate. Inflation expectations, on the other hand, are driven by a combination of actual inflation outcomes and the credibility of the central bank in terms of its commitment to price stability. If inflation is low and the central bank is credible, then long-run inflation expectations

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62. See Bernanke, *supra* note 54.


64. JAMES ANTHONY TREVITHICK & CHARLES MULVEY, THE ECONOMICS OF INFLATION 40-41 (1975).

65. Id. at 106-07.

are likely to remain well anchored.

Now, in practice, the relationship between the inflation rate and the level of resource utilization is very difficult to measure accurately. This stems, in part, from the fact that data on inflation and data on resource utilization are “noisy” and because sustainable levels of resource utilization are not directly observable. The fact is that there is often not much resource slack in the economy. That also makes it hard to discern a clear empirical relationship between the inflation rate and the level of resource utilization.

Unfortunately, in this episode, though, we don’t need to be very precise about the estimate of slack to be highly confident that the level of slack in the labor market is at or above the prior record of the post-World War II period. Although the headline unemployment rate of 9.8 percent is about one percentage point below its level at the end of the 1981–82 recession, other, more indicative measures paint a considerably bleaker picture.

For example, the prime age male unemployment rate is at a record high, and, by a significant margin. The labor market data released last Friday showed the September value for the prime age male unemployment rate of 10.4 percent, an increase of 6.5 percentage points from the


69. POPULATION SURVEY, supra note 40.

70. The October figures, released after this speech revealed a 10.2% unemployment rate, only 0.6% below the post-war record. Id.


72. POPULATION SURVEY, supra note 40 (Select “Top Picks” for “Labor Force Statistics including the National Unemployment Rate”; then retrieve data for “Unemployment Rate- 20 Yrs. & Over Men”; then change output option From: 1981) (last visited Jan. 30, 2010).

start of the recession. In contrast, in the 1981-82 recession the prime age male unemployment rate peaked at 9.3 percent, rising by 4.2 percentage points from the start of that recession. So we have a higher unemployment rate and a bigger increase in this recession.

Over the post-World War II period as a whole, it was only in the wake of the 1981–82 and 1990–91 recessions that the prime age male unemployment rate remained above even 6 percent for more than just a few months. So you can see in that context 10.4 percent is very high.

In addition, during all post-war expansions, the prime age male unemployment rate has fallen below 5 percent, even during the very short expansion that we saw in 1980–81. So, assuming that the future repeats the past, we’re a long way from full employment.

Currently, even under very optimistic forecasts for the economy, it appears very unlikely that the prime age male unemployment rate will dip below 6 percent before 2011.

Alongside the current unusually high degree of labor market slack, we also have a situation in which core inflation levels are quite low by historical standards. Continuing the comparison with the recession of 1981–82, it is worth noting that the core inflation rate today is almost five percentage points lower than it was toward the end of that episode. In addition, historical experience shows that the slack generated during a recession typically pushes core inflation lower during in the early stages of recovery. So far, this cycle looks little different. Inflation has

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74. POPULATION SURVEY, supra note 40 (Select “Top Picks” for “Labor Force Statistics including the National Unemployment Rate;” then retrieve data for “Unemployment Rate- 20 Yrs. & Over Men;” then change output option to “From: 1981”).

75. See Ayşegül Şahin et al., The Unemployment Gender Gap During the Current Recession 16, fig. 3 (Federal Reserve Bank of New York Working Paper), available at www.newyorkfed.org/research/economists/sahin/GenderGap.pdf.

76. “Although the term ‘core inflation’ has long meant an inflation series excluding food and energy price changes, alternative measures of core inflation have been proposed.” Robert Rich & Charles Steindel, A Comparison of Measures of Core Inflation, FRBNY ECON. POL’Y REV., Dec. 2007, at 19, 22.

77. For the most part, inflation has remained at levels under 5% and clearly below averages from the late 1970s and early 1980s. See id. at 24, chart 1. Compare current levels with 2004, 1999, and 1989 figures. See supra note 72 and accompanying text.

78. See supra note 72 and accompanying text.

79. “[I]nflation typically continues to decline for at least a year into a recovery . . . .” James C. Cooper, The Waning Threat of Deflation, BUS. WEEK, Oct. 26, 2009, at 14. Since 1958, on average, core inflation has fallen by 2 percentage points during the first two years after a recession ended. Rebecca Tonn, Colorado Springs Financial
declined over the past year.\textsuperscript{80}

As the degree of slack in the economy has climbed over the past year, measures of core inflation, particularly of core services inflation, have moderated.\textsuperscript{81} The tendency for service price movements to be persistent, coupled with the unusually large amount of slack in the economy, suggests that the core inflation rate is more likely to fall than it is to rise over the next twelve to eighteen months.

In summary, I believe the current balance of risks around the inflation outlook lie to the downside due to the very low level of resource utilization and the fact that long-run inflation expectations remain stable. This balance of risks is problematic because the current level of inflation is already so low. The core PCE (personal consumption expenditures) deflator has increased only 1.3 percent over the past twelve months.\textsuperscript{82} Thus, we would not need much of a decline in inflation to run the risk of outright deflation. Outright deflation, in turn, would be a dangerous development because it would drive up real debt burdens and make it much more difficult for households and businesses to deleverage.

So what are the implications of all this for monetary policy?

Well, the first implication is that the federal funds rate target is likely to remain exceptionally low for "an extended period."\textsuperscript{83} The desired policy outcome is a robust recovery in the context of price stability.


\textsuperscript{80} See \textit{BUREAU OF LABOR STATISTICS, CORE CPI INFLATION} (on file with the \textit{Fordham Journal of Corporate and Financial Law}).

\textsuperscript{81} See \textit{id.}


The second implication is that the Federal Reserve needs to ensure that market participants and the public understand that the Federal Open Market Committee (FOMC) has the tools to exit smoothly from the very low federal funds rate, and that it stands ready to do so when the time comes. On this point, let me be perfectly clear: An enlarged balance sheet and the high level of excess reserves in the banking system will not delay or prevent a timely exit.

The angst about the Fed’s ability to exit smoothly stems from the rapid growth that we have seen in the Fed’s balance sheet over the past year. In September 2008, on the eve of Lehman Brothers’ failure, the consolidated Federal Reserve balance sheet was about $900 billion. Today it is about $2.15 trillion, and it is likely to peak at around $2.5 trillion early next year.

Some observers are concerned that this expansion of the Fed’s balance sheet will ultimately prove to be inflationary. Proponents of this view say that the monetary base, the broad monetary aggregates, and total credit outstanding have historically tended to move together with inflation, at least over longer time periods. Thus, if the monetary base, which is just the sum of currency and reserves outstanding, is growing rapidly, as it has been over the past year, the argument is that this the growth in the monetary base will ultimately lead to inflation.

This concern is not well founded because the Federal Reserve now has the ability to pay interest on excess reserves—IOER is what we call it at the Fed—and this tool allows us to prevent excess reserves from leading to excessive credit creation. This ability to pay interest on excess reserves is extremely important in terms of assessing the

84. The Federal Reserve has doubled the size of its balance sheet over the past year. Scott S. Powell & David Lowry, Commercial Real Estate Crisis Threatens Recovery, ATLANTA J.-CONST., Sept. 16, 2009, at 17A.


implications of the Fed’s balance sheet for our ability to exist.

It works as follows. Because the Federal Reserve is the safest of counterparties, the interest-on-excess-reserves rate effectively becomes the risk-free rate.\(^8\) By raising that rate, the Federal Reserve raises the cost of credit because banks will not lend at rates below the interest on excess reserves when they can instead can hold their excess reserves on deposit with the Fed and earn the IOER rate. Because banks no longer seek to lend out their excess reserves and they are holding them with the Fed, there is no increase in the amount of credit outstanding, no increase in economic activity, and no risk that excessive credit creation will fuel an inflationary spiral.

Now, in the event that the ability to pay interest on excess reserves for any reason proved insufficient or the excess reserves themselves had unanticipated side effects—because they’ve only had the ability to pay excess reserves since October of 2008—if we did have side effects that the Fed wished to mitigate, we are developing a number of tools that can be used to drain reserves just in case. Two such tools are large reverse repos with dealers and other investors\(^9\) and term deposit facilities for banks\(^9\).

Finally, the Federal Reserve could always drain reserves the old-fashioned way, by selling assets. The vast bulk of the Fed’s portfolio is highly liquid—currently we hold $769 billion of Treasury securities, $692 billion of agency mortgage-backed securities, and $131 billion of

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89. Federal Reserve Bank of New York, Repurchase and Reverse Repurchase Transactions, Aug. 2007, http://www.newyorkfed.org/aboutthefed/fed04.html. The Fed uses repurchase agreements, also called “RPs” or “repos,” to make collateralized loans to primary dealers. In a reverse repo or “RRP,” the Fed borrows money from primary dealers. The typical term of these operations is overnight, but the Fed can conduct these operations with terms out to 65 business days.

Id.

90. The Term Auction Facility, known as “TAF,” is a credit facility that allows a depository institution to place a bid for an advance from its local Federal Reserve Bank at an interest rate that is determined as the result of an auction. Because the TAF allows the Federal Reserve to inject term funds through a broader range of counterparties and against a broader range of collateral than it can accomplish with its open market operations, the facility ensures additional liquidity. Board of Governors of the Federal Reserve System, Term Auction Facility Questions and Answers, http://www.federalreserve.gov/monetarypolicy/tafaq.htm (last visited Nov. 17, 2009).

You can see the amount of liquid assets we have is far greater than the amount of excess reserves. That means all the excess reserves could be mopped up by asset sales alone if that proved necessary.


These actions have been successful in mitigating the risks of financial collapse and a more severe contraction in economic activity. The financial system is now healthier and the economy is recovering.

But despite these successes, we need to be clear that what has happened to our financial system and the economy is wholly unsatisfactory, and that a broad range of regulatory policies and practices need to be recalibrated to address the shortcomings of our financial system. With inflation low and long-run inflation expectations stable, and our ability to remove monetary accommodation in a timely manner intact, our near-term focus should be to keep significant monetary accommodation in place for an extended period in order to achieve our dual objectives of maximum employment and stable prices.\footnote{See supra note 67.}

Thank you for your kind attention. I would be very happy to take a few questions.

QUESTIONS

DEAN WILLIAM TREANOR: I have to say what a great speech.
I think, again, the turnout is really a reflection of the excitement that people had. So we’re joined by, just in terms of our Board of Trustees, the Chair of our Board, John Tognino; Mark Tuohey, Member of the Board, who is also the president of our alumni association; T.J. Maloney of our Board; and also the Senior Academic Vice President of the University, Stephen Freedman. It’s really terrific that you’re all here.

Now we will have the opportunity to ask a few questions. Let’s start up in the corner there. Again, your name and where you’re from and your question for Mr. Dudley.

QUESTION: Yes. Thank you for the presentation. Donna Bogaton, a founder of Startupalpha.com and GB alum here at Fordham.

My question to you is: When I recently went in the bank to renew my CD, it was a very painful experience. So in the extended period of accommodation, in your thought process, does the negative impact on individuals who want to be conservative come into play, that as you’re accommodating markets or the economy individuals are negatively impacted, and when you’re doing your decision-making process, how does that impact your decision-making process?

WILLIAM DUDLEY: You’re absolutely right. The fact that savings rates are low is not irrelevant to, particularly, certain households that live on fixed incomes. We’re certainly aware of that.

At the end of the day, our goal is to try to ease financial conditions, to stimulate the economy, to get the unemployment down. One consequence of that can be lower rates on bank deposits, which obviously does have its own set of impacts that we have to be cognizant of. So we certainly are aware of it and that is definitely taken into consideration.

QUESTION: Thank you. Hi. My name is Michael Bloomfield. I’m a tax lawyer at a law firm. I used to do a lot of securitization work.

When I spoke to a cousin of mine who’s an economist, I said, “This horrible thing with all these securitizations, it’s not going on so much, isn’t that terrible for the economy?” He said, “No, it’s not so bad. They just do real estate and home mortgages and things like that.”

I’m wondering, what’s your take on the fact that the securitization markets are still so weak? Is that something that has to be addressed or is it not so important?

WILLIAM DUDLEY: I think the fact that the securitization markets are having trouble getting restarted is relevant to the outlook, because what it means is that the flow of credit to end borrowers is
somewhat impaired as a consequence.

It also puts more pressure on banks to take up the slack. One of the problems that we've experienced is the fact that we had a very big shadow banking system and relatively small banking sector, and that shadow banking system was, in part, involved with the securitization market. As that shadow banking sector has contracted, we've been asking the banks to sort of take up that slack. That's very difficult for the banks to do that quickly, especially when their credit losses are climbing because of the bad economy. So I think that the problems in the securitization market are exacerbating the constraints on credit availability, and that squeeze on credit availability does have its consequences for the pace of economic recovery.

Now, the Federal Reserve has been trying to do things that are helpful to lean against that. We're engaged in a very large mortgage-backed securities purchase program, which has helped bring down mortgage rates, which has helped improve the affordability of housing. And we've been engaged in the TALF, the Term Asset-Backed Lending Facility, which has actually helped restart securitization in the consumer asset-backed securities market. So we're trying to help.

But there are limits to what we can do. There are limits to what we can do because (1) there were things that happened in the securitization market that probably, with the benefit of hindsight, would be better if they hadn't happened; and (2) we can only do things that are within our charter. We have to be secured to our satisfaction when we lend. So there are limits to how far the Federal Reserve can go in terms of our activities in terms of supporting the securities market.

DEAN WILLIAM TREATNOR: Yes?

QUESTION: Thank you. My name is Ted Fine. I'm retired, after twenty years at Citibank.

94. Shadow banking refers to the securitization of debt and the subsequent sale of the securities to the public. In recent years, credit liquidity has become increasingly dependent upon the shadow banking system. See Tobias Adrian & Hyun Song Shin, The Shadow Banking System: Implications for Financial Regulation, Federal Reserve Bank of New York Staff Reports No. 382 1, 11 (2009), available at http://www.newyorkfed.org/research/staff_reports/sr382.pdf.


As I listen to the punditry, I can’t seem to get a consistent view of the impact of the deficit as we go forward. I’d be interested in your take on how important a factor that’s going to be.

WILLIAM DUDLEY: I think it’s not surprising that the deficit is large right now.\(^97\) We’ve had a pretty deep recession and there has been large amounts of fiscal stimulus supply. So I don’t think the deficit that we’re experiencing today should be such a large concern. We need that support for the economy.

But the real question is what’s the long-term path of the deficit and are we on a sustainable path? I think that down the road Congress and the Administration are going to have to take steps to ensure that the fiscal path is sustainable over the longer run.

What that means is, as I mentioned in my talk, the fiscal impulse that’s positive right now and supporting economic activity cannot continue indefinitely. That’s going to gradually wane. And so the consequences for the economy is that the fiscal side, which is providing support today, is not probably going to be able to provide support over the longer run.

DEAN WILLIAM TREANOR: Professor Katsoris.

QUESTION: Professor Katsoris. I’m on the faculty of the Law School.

Thank you so much for honors us with your presence here tonight.

One of the hot topics in Washington now is the excessive compensation of CEOs and the abuses of the past. It’s a legitimate topic and it should be addressed.

My fear is that we get some sort of rigid rules that are penny-wise and pound foolish. While Washington is discussing this, the day of reckoning is already here. Last week we had Ken Lewis resign in a month or two as CEO of Bank of America.\(^98\) I don’t have to tell you the size of Bank of America. It has the largest deposits. They have Blackrock, they have Merrill Lynch, they have Countrywide, they have a big stake in the Second Bank of China, etc. Big shoes to fill.

My problem is—and I think it’s on the mind of many stockholders—although we realize that there has to be reform in this area


because there have been abuses in the past—there's a search committee right now going on looking for a successor, as you well know. If you and I were on that search committee, where would we look; what type of person would we look for; what are we willing to pay to get somebody that can handle this job; and to what extent can we expect resistance from the Fed, since there's $45 billion worth of TARP money still out [to BOA]? It's not a trick question. It's a question that's on the minds of many shareholders today, because we want somebody in these positions that can handle the job and be legitimately paid.

WILLIAM DUDLEY: Well, I'm going to leave it to the Treasury to think about what the implications are of TARP money for compensation levels. Suffice it to say that the central banking community and the finance ministers have been very busy thinking about compensation issues from an international perspective.

Really, the focus is not so much a focus on level but ensuring that the compensation structure gives the right incentives for behavior so that people behave in a way that is consistent with the safety and soundness of the institutions that they're working for, rather than behaving in ways that create risks for the institutions that they're working for.

So the idea of having compensation that is deferred, having club acts in terms of compensation, things of that sort, that better align the interests of the shareholders with the interests of the people who are getting paid. So there's a lot of effort underway.

The Financial Stability Board has made a lot of progress on this front internationally. I think that's what we're going to be very involved with pushing forward.

DEAN WILLIAM TREANOR: Professor Kent.

QUESTION: Andrew Kent on the faculty here.

I have a question about the new authority that you mentioned to pay interest on the excess reserves. What is the nature of the reserves at the Fed that institutions can deposit with the Fed and then be paid for? Is it

99. Deborah Salomon & Dan Fitzpatrick, *BofA Repayment to TARP Hits Snag, Wall St. J.*, Oct. 26, 2009, at M12 (Bank of America was lent $45 billion by the federal government and, in October 2009, stated that it had raised $40 billion of new equity since May 2009 and was able to survive without government help).

100. Damian Paletta, *G20 Leaders Tout Progress on Bank Regulation, But Big Issues Remain, Wall St. J.*, Sept. 26, 2009, http://online.wsj.com/article/SB12539954972243719.html ("There is broad agreement among leaders that banks should hold more capital, but the split hinges on whether the largest banks should hold even more than everyone else, a position the U.S. holds.").
just strictly cash or other types of instruments that can be deposited?

WILLIAM DUDLEY: It is essentially cash, so at the end of each day banks have lots of balances with the Federal Reserve, $900 billion of balances with the Federal Reserve. Before October 2008, they got nada for that. That meant that they had very strong incentives to lend those funds out.

Now today, because the federal fund rate is so low, they get a little bit more than nada—they get twenty-five basis points.  But the fact is we now have the ability to change the rate that they get.

It strikes us as extremely unlikely that a bank being paid X percent on interest on excess reserves, where there’s no risk in that deposit with the Fed, would want to lend that money out at a lower interest rate to a private borrower. So that really basically allows us to control the level of interest rates faced by a broad range of borrowers in the economy. We didn’t have the ability before because we couldn’t pay interest on excess reserves. It’s banks’ deposits with the Fed. That’s what the excess reserves are.

DEAN WILLIAM TREANOR: Second row on the edge.

QUESTION: First of all, it’s an honor to meet you and have you here at Fordham Law.

My name is Jeanne Rosendale. I’m General Counsel and Director of Compliance for Muriel Siebert & Company.

The question that I have—we were appointed by the Fed to participate in the PPIP [Public Private Investment Program] program, which was a great honor to Ms. Siebert, and of course the other big advisors. My question to you—and I did in my past, in various positions as a GC and senior lawyer, work in securitization—what faith does the Fed truly have with selling these assets back to, for instance, private pension plans and things of that nature, because it’s a fairly large amount—your minimum investment has to be $25 million? Do you see this—I know it’s going to be a long haul for the return of the value of

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102. 12 U.S.C. § 5231a (2009 Supp.). “Using $75 to $100 billion in TARP capital and capital from private investors, the Public-Private Investment Program will generate $500 billion in purchasing power to buy legacy assets with the potential to expand to $1 trillion over time.” Department of Treasury, Public-Private Investment Program, Nov. 18, 2009, http://www.financialstability.gov/roadtostability/publicprivatefund.html.
these assets, but what is the Fed’s true faith in that?

WILLIAM DUDLEY: PPIP is a Treasury program rather than a Federal Reserve program, so we should be clear about that. What it’s designed to do is basically create a market for very illiquid, troubled assets. This program is just in the process now of getting ramped up. We’ll have to see how it performs.

But the idea is if private investors buy these assets that will be helpful in a couple of different ways: (1) it will allow troubled institutions who don’t want to hold these assets any longer to get these assets off their balance sheets; and (2) it will provide some price discovery in terms of what these assets are actually worth, which will probably help restore liquidity to these markets, because once you see where securities trade then it makes it more easy to create a two-way market.

The PPIP is just in the process of ramping up. I don’t think there have actually been any actual purchases yet. That will happen over the next few months. We’re hopeful that it will be a successful program that will help provide liquidity to the market for troubled assets.

DEAN WILLIAM TREANOR: In the back.

QUESTION: Hi. David Blankley. I’m in financial services. Over the past year, the Fed has skirted the line between fiscal and monetary policy, and it got somewhat blurred. Do you think that since then that line is being cleared up as where it is, and what regulations would you like to see in the future so that the Fed doesn’t need to take actions that come as close to the line?

WILLIAM DUDLEY: I don’t think we’ve actually engaged in fiscal policy. What we’ve engaged in is 13(3) lending—13(3) is the Section of the Federal Reserve Act that basically says we can only lend in unusual and exigent circumstances; also the Fed has to be secured to our satisfaction. If we didn’t have to be secured to our satisfaction, then I think you would be skirting over the line into fiscal policy. But since we have to be secured to our satisfaction, I don’t think the Fed has gone beyond the limits of our authority.

I think that the 13(3) lending is unusual. It requires a vote of five of the Governors. Since there are only five Governors right now, that means it has to be unanimous. And it’s not something that the Board of Governors undertakes lightly.

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103. See supra note 93.

104. Id.
But the 13(3) lending, I think, was very, very important in basically providing support to financial markets, especially during the fall, when a broad range of markets were not working properly. For example, the commercial paper market essentially shut down last fall following the failure of Lehman Brothers. The commercial paper funding facility, which was a 13(3) facility, I think, was very, very important in bringing that market back to life.\footnote{Id.}

I think at the end of the day it was hard for the Fed to take the steps that the Fed took, but taking those steps in my mind was very necessary in preventing the financial and economic climate from being even worse.

DEAN WILLIAM TREANOR: A couple more questions.

QUESTION: Alex Sellinger, Fordham Law student.

I have a question. Now that the Fed stands behind a lot of large, systemically important financial institutions, what interest is served by nondisclosure of the identity of the borrowers from the Fed?

WILLIAM DUDLEY: The Federal Reserve has done a tremendous amount in terms of the last two years trying to be transparent about what we’re doing and why we’re doing it. We published a whole range of data that we have never published before. We feel that we need to be accountable to the public and to Congress. It’s completely appropriate.

But the disclosure of individual borrower names very well may be a bridge too far, in the sense that if you disclose those names you may actually undermine the value of the facilities that you’re providing. If people know that their names are going to be disclosed, they might be less willing to use the facilities. And if they were less willing to use the facilities, then you would be actually undercutting the effectiveness of monetary policy.

So we have to be very careful about going that far, because the disclosure might stigmatize the use of those facilities and make them less effective. We need to be careful not to do that.\footnote{Id.}

DEAN WILLIAM TREANOR: Last question.

QUESTION: Hello. I’m Andrew Teitel from Moore Capital.

I was wondering, are you worried at all that the Fed’s focus on consumer prices, as opposed to asset prices, leaves the economy kind of...
perennially open to asset bubbles? And will the Fed in this cycle treat asset prices any different than it has in previous cycles, given the kind of booms and bust we’ve had over the last ten years?

WILLIAM DUDLEY: I think that different people at the Federal Reserve probably feel somewhat differently about this issue: (1) how much emphasis should the Fed place on asset prices, as opposed to goods and services prices; and (2) then how to respond to it.

I have spoken on this subject publicly. I have argued that the Fed should take asset prices into consideration in terms of how they conduct policy, but that monetary policy is not a particularly good instrument to use in terms of responding to asset prices. So I think asset prices are important and the Fed needs to take them into consideration, because they clearly affect financial conditions.

The problem is that the federal funds rate is probably not a great tool to use to address asset prices. And so I have argued that one potential solution is to come up with other tools, independent of the federal funds rate, to use to address asset prices. Now, this is a very controversial subject because it’s not obvious that asset bubbles are so easy to identify ex ante. Some people would argue that if they were so easy to identify ex ante then they wouldn’t happen in the first place.

So I think there is an ongoing debate on this subject. I think there is agreement that the monetary policy instrument isn’t a particularly good way to deal with asset bubbles. And then the question is: if that’s not a particularly good way, are there other alternatives? So that’s something that I think we need to work on.

DEAN WILLIAM TREANOR: We don’t have any questions from

108. Id.
109. Id.
110. See, e.g., Donald Luskin, in opposition to Dudley’s statements, claims that there are consistently many opinions as to what constitutes a bubble, and there is no way to know which ones are correct. Furthermore, Dudley’s example of the housing bubble of 2005 was too late to do any good. In order to be effective, bubbles must be identified well before they occur. Donald L. Luskin, Can the Fed Identify Bubbles Before They Happen?, WALL ST. J., July 30, 2009, at A17. See also Brai Odion-Esene & Stephen Sandelius, Fed’s Evans: Wants Proactive Targeting of Market ‘Exuberance’, MKT. NEWS INT’L, Nov. 13, 2009 (Chicago Federal Reserve President Charles Evans argued that “as long as we can’t detect bubbles with great confidence, it seems unwise to adopt fighting them as a policy objective . . . ”).
the other room. They’re totally onboard with everything you said.

We’ll take one more question. In the black T-shirt, black turtle-neck. I like to upscale it a little bit.

QUESTION: That’s why I wore it. I knew I was coming here.

My name is Ross [inaudible]. I’m a student here at Fordham Law.

My question does involve inflation. I know you mentioned that we really need not have a concern about rising prices in general. But my thought is: if the federal funds rate is kept as low as it is now and we want to encourage cheap credit and allow people to get access and money, then how is it that we can expect the amount of dollars in circulation to increase?

I think another concern that some commentators do bring up is that as confidence in the dollar is lost overseas, in other nations, particularly China, then the dollars that they have could very well flood back into our market, increasing inflation more, and then we’ll see that resulting in a rise in prices. So I’m somewhat skeptical in terms of how the Fed plans to deal with that if they’re going to keep interest rates so low.

WILLIAM DUDLEY: We’re going to keep interest rates low for an extended period, but that does not mean indefinitely. It obviously depends on the pace of economic activity and the consequences of that pace of economic activity on resource utilization and the consequences of the policy on inflation expectations. So as long as we have inflation expectations well anchored, which I think we will have as long as the Fed is viewed as credible, and as long as the economy isn’t growing so rapidly as to use up all the resources that are available, then I would argue that we are not going to have an inflation problem for quite some time to come.

Now, obviously, if we get to a point where we’ve actually pushed the unemployment rate down substantially and the amount of excess capacity has diminished substantially, then obviously at that point in time we’re going to have to remove the monetary policy accommodation.

The point I’m trying to make is that the amount of excess slack we have today in the economy is very large and the likely pace of recovery is only going to be moderate, so the amount of excess slack in the

111. The Dollar Adrift: A Global Vote of Non-Confidence, WALL ST. J., Oct. 9, 2009, at A18 ("The value of any currency is ultimately determined by the supply and demand for that currency. And the problem for the dollar at the moment is that there is a much larger supply of dollars than there is global demand for them. The solution rests not in Manila, Bangkok or Paris, but in Washington.").
economy is likely to persist for some time to come. So it’s going to take time for us to have sufficient pressure on resources for it to be timely to remove the monetary policy accommodation.

But, rest assured, we are going to remove the monetary policy accommodation at some point, and we’re going to do it in a timely way to prevent an inflation problem.

DEAN WILLIAM TREANOR: I have to say, again, the large crowd here was a testament to the interest that your talk generated. It really was extraordinary. It was clear and thoughtful. I learned a great deal from it, and I know we all did. So I’d like to lead us all in a big round of applause for Mr. Dudley. Thank you.
Notes & Observations