Prefatory Note

The attached document represents the most complete and accurate version available based on original files from the FOMC Secretariat at the Board of Governors of the Federal Reserve System.

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CLASS I FOMC – RESTRICTED CONTROLLED (FR)

DECEMBER 10, 2009

MONETARY POLICY ALTERNATIVES

PREPARED FOR THE FEDERAL OPEN MARKET COMMITTEE
BY THE STAFF OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

RECENT DEVELOPMENTS

SUMMARY

Financial market conditions became somewhat more supportive of economic growth over the intermeeting period, but banks apparently continued to tighten the terms of credit. The expected path of monetary policy moved lower, on net, as did yields on most fixed-income securities. Broad equity indexes rose amid generally positive economic data, and the dollar was mixed against the major currencies. Consistent with a continued return toward normal functioning in funding markets, borrowing from Federal Reserve facilities edged down further.

Corporate bond and equity issuance was solid in November, but the level of commercial bank credit continued to decline, albeit at a slower pace than in recent months. Asset-backed security (ABS) issuance picked up in November, and, with the support of the Term Asset-Backed Securities Loan Facility (TALF), the first commercial mortgage-backed security (CMBS) issuance in nearly 18 months came to market. Domestic nonfinancial sector debt is projected to expand in the fourth quarter at an annual rate of about 1½ percent, weighed down by a continued contraction in the debt of both households and businesses.

MONETARY POLICY EXPECTATIONS AND TREASURY YIELDS

Implied rates on federal funds and Eurodollar futures have moved lower since the November FOMC meeting.[1] Although the decision to keep the target range for the federal funds rate unchanged at that meeting and to retain the "extended period" language in the accompanying statement was largely anticipated, market participants

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[1] The effective federal funds rate averaged 0.12 percent over the intermeeting period, and the intraday standard deviation averaged 3.3 basis points.

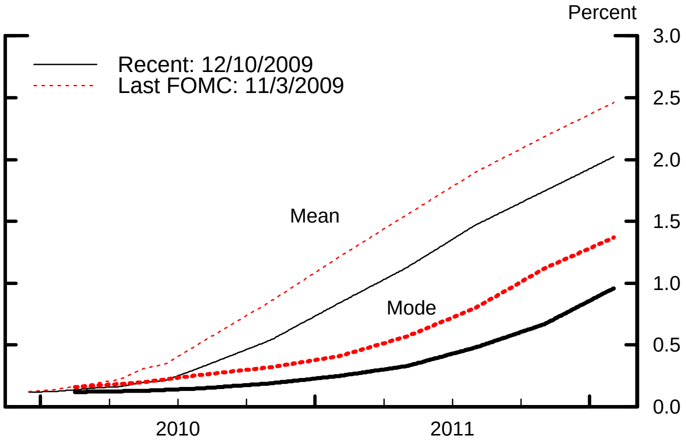
took note of the Committee's explicit enumeration of the factors that are expected to continue to warrant this policy, and Eurodollar futures rates fell a bit on the release. Market participants' perception that the federal funds rate will likely remain near its current level for an extended period appeared to be reinforced by subsequent Federal Reserve communications, most notably Chairman Bernanke's speech on November 16. Incoming economic data were, on balance, somewhat better than expected, but their net impact on interest rate expectations appeared to be small. Consistent with a net reduction in realized and implied volatility in short-term rates, staff models suggest that a decrease in term premiums may also have contributed to the decline in futures rates since early November.

Under the staff's usual term-premium assumption of 1 basis point per month, the path of the federal funds rate implied by futures quotes now lifts off from the current target range in the third quarter of 2010 and reaches about 2 percent by the end of 2011. That expectation apparently prices in some low-probability scenarios that would entail substantial rate increases. Quotes from the market for interest rate caps suggest that the most likely path of the federal funds rate—that is, the mode of the distribution, rather than the mean—does not move above 25 basis points until around the beginning of 2011 and rises by about 70 basis points over the subsequent year (Chart 1).

The readings from financial-market quotes are roughly consistent with results from the December survey of primary dealers, according to which about two-thirds of respondents expect the first rate increase to occur by the end of 2010, a slightly larger fraction than in the October survey. Dealers generally do not anticipate major changes to the FOMC statement at the upcoming meeting, although several do expect some revision to reflect an improvement in the economic outlook. In a new question, dealers were asked how many meetings in advance of the first increase in the target

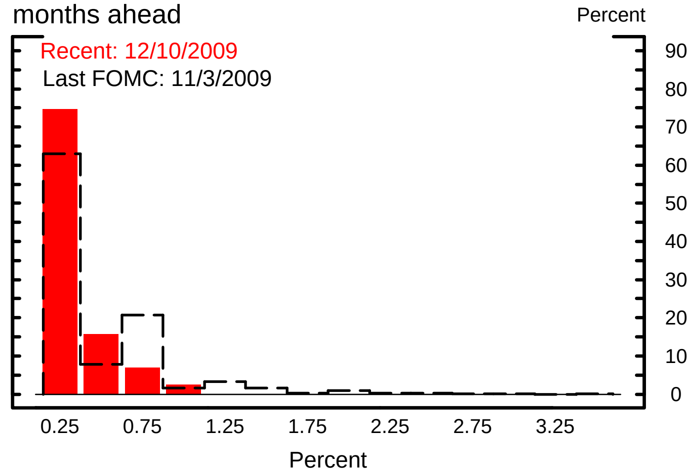
Chart 1
Interest Rate Developments

Central tendencies of the expected federal funds rate



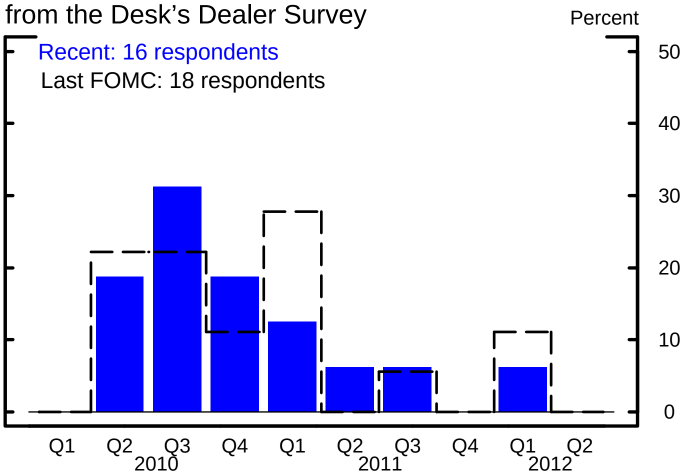
Note. Mean is estimated from federal funds and Eurodollar futures. Mode is estimated from distribution of federal funds rate implied by interest-rate caps. Both include an allowance for term premiums and other adjustments.
Source. CME Group.

Implied distribution of federal funds rate six months ahead



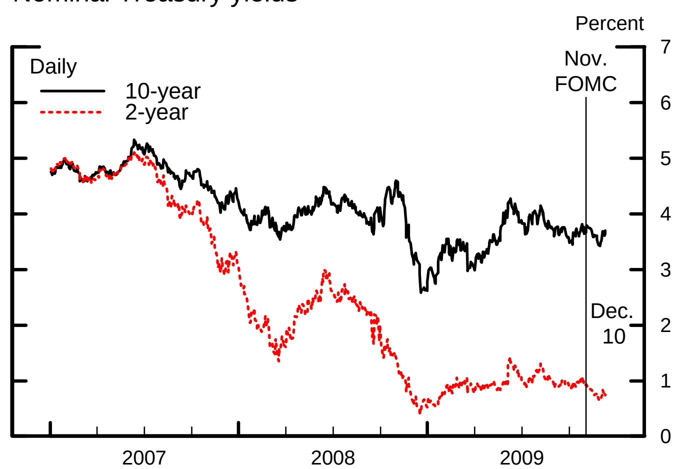
Note. Derived from options on Eurodollar futures contracts, with term premium and other adjustments to estimate the distribution of the federal funds rate.

Distribution of expected quarter of first rate increase from the Desk's Dealer Survey



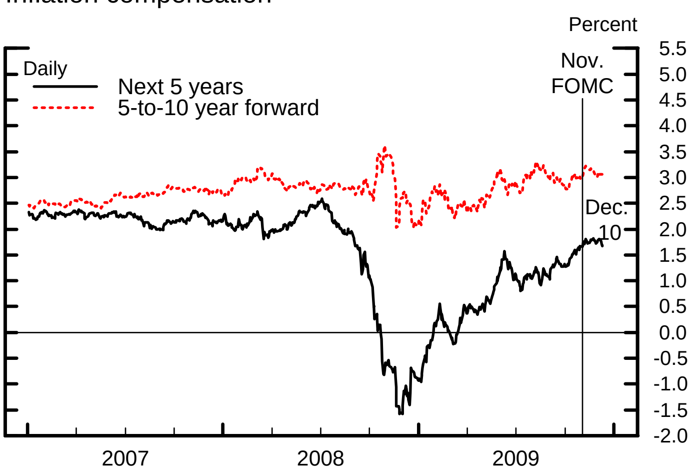
Source. Federal Reserve Bank of New York.

Nominal Treasury yields



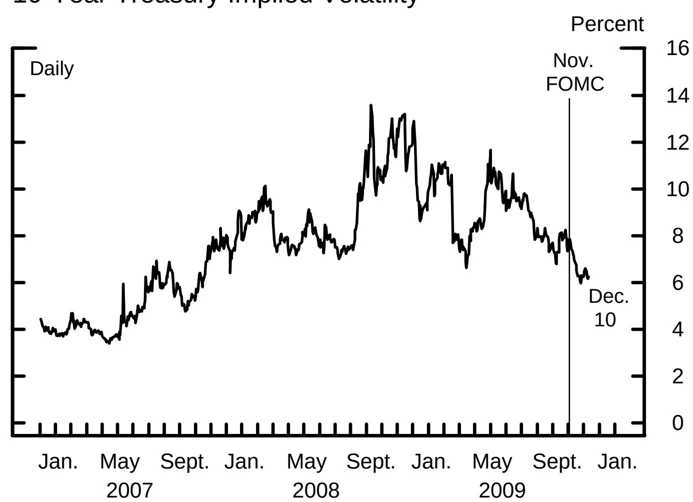
Note. Par yields from a smoothed nominal off-the-run Treasury yield curve.
Source. Staff estimates.

Inflation compensation



Note. Estimates based on smoothed nominal and inflation-indexed Treasury yield curves and adjusted for the indexation-lag (carry) effect.
Source. Barclays, PLC., and staff estimates.

10-Year Treasury Implied Volatility



Note: 10-year Treasury note implied volatility derived from options on futures contracts.
Source: Bloomberg.

rate they expected the phrase "extended period" to be removed from the statement. Although responses varied considerably, most clustered around three.

Consistent with the decline in short-term interest rates, yields on two-year nominal off-the-run Treasury securities fell 18 basis points over the intermeeting period; ten-year yields were down only slightly. Trading volumes in nominal issues remained within their recent range, and measures of liquidity in the coupon market were roughly stable. TIPS yields fell slightly more than their nominal counterparts, on net, leaving inflation compensation up a few basis points across the term structure. Five-year inflation compensation five years ahead remained near the upper end of its historical range. Some of the decline in TIPS yields may owe to the Treasury Borrowing Advisory Committee's recommendation that total TIPS issuance for 2010 be increased to between $70 and $80 billion—a significantly smaller amount than traders had expected. Survey measures of short-term inflation expectations declined a little, while changes in survey measures of longer-term expectations were mixed.

The Treasury auctioned approximately $270 billion in nominal coupon debt of various maturities over the intermeeting period. The auctions were generally well received, with bid-to-cover ratios mostly at the upper end of their recent ranges. Trends in indirect participation in these auctions, as well as anecdotal reports, continued to suggest resilient foreign demand for Treasury securities. In its quarterly refunding statement on November 4, the Treasury announced the discontinuation of 20-year TIPS and the re-introduction of 30-year TIPS, actions that were broadly in line with market expectations. As of December 9, debt subject to limit was only about $80 billion below the statutory debt ceiling of $12.1 trillion. Although the debt limit is looming and may become binding in the near term, as in the past, the Treasury will likely be able to employ accounting tools, if necessary, to continue to make payments as scheduled for some time after the turn of the year.

CAPITAL MARKETS

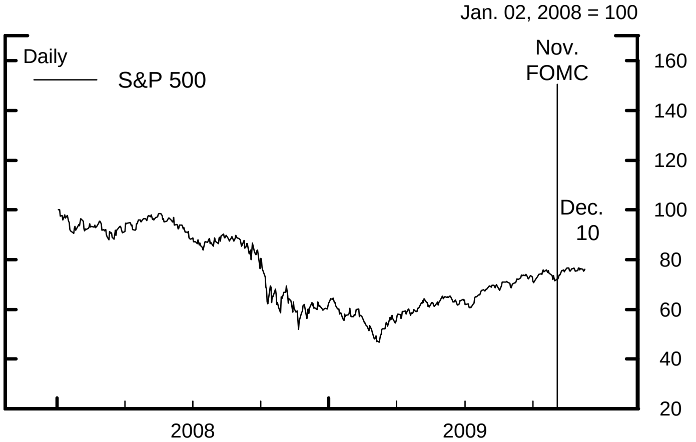
Broad equity price indexes rose about 5 percent over the intermeeting period, partly in response to a somewhat improved economic outlook (Chart 2). Also contributing to the increase were third-quarter earnings for S&P 500 firms, which logged another solid gain, and upward revisions to analysts' expectations of year-ahead earnings for S&P 500 firms. In addition, the implied volatility of equity prices, as gauged by the VIX index, declined. Meanwhile, the equity premium—as measured by the staff's estimate of the expected real return on equity over the next ten years relative to the real 10-year yield on Treasury securities—remained about unchanged at a relatively high level.

Financial-sector shares, on the whole, underperformed the broader market since the November FOMC meeting as investors continued to express concerns about the future profitability of the banking industry. Indeed, third-quarter Call Reports show continued broad deterioration in measures of loan quality at commercial banks, suggesting that loss provisioning will remain a drag on earnings for some time. Nonetheless, equity prices of both large and smaller banks moved higher over the period, and spreads on credit default swaps (CDS) for large bank holding companies fell a bit. Although U.S. bank stock prices retreated somewhat on the news of the standstill on Dubai World debt, these moves were partially reversed as it became clear that domestic banks' direct exposures were low.

In the corporate bond market, yields on investment-grade and speculative-grade issues fell a little more than those on nominal Treasuries, leaving their spreads a touch narrower. In the secondary market for leveraged loans, bid prices changed little after a run-up over the previous several months. On balance, the credit quality of nonfinancial firms appears to have remained steady over the period. Based on data through November, the pace of nonfinancial corporate ratings downgrades by

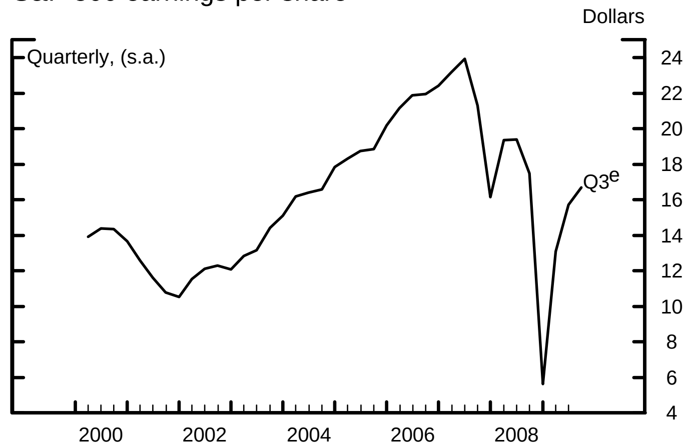
Chart 2
Asset Market Developments

Equity prices



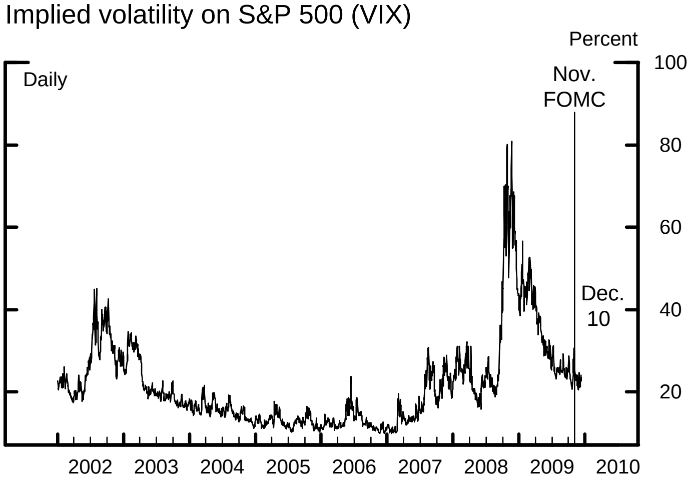
Source. Bloomberg.

S&P 500 earnings per share



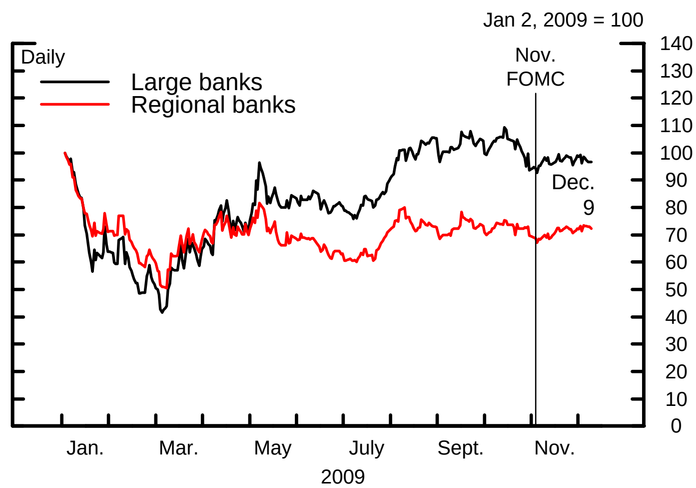
e Estimated.
Source. Thomson Financial.

Implied volatility on S&P 500 (VIX)



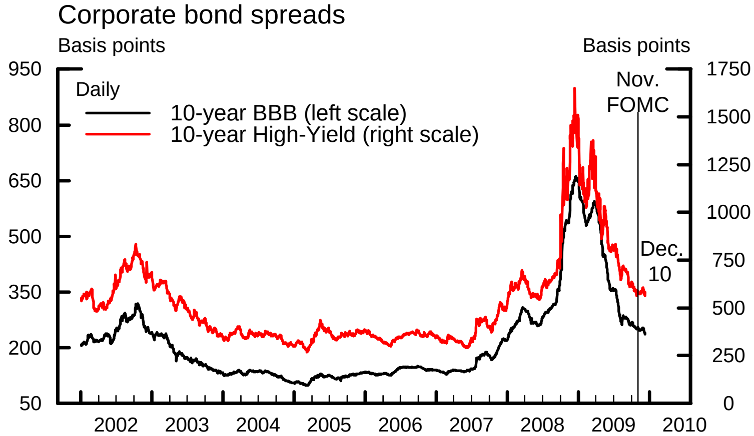
Source. Chicago Board Options Exchange.

Bank ETFs



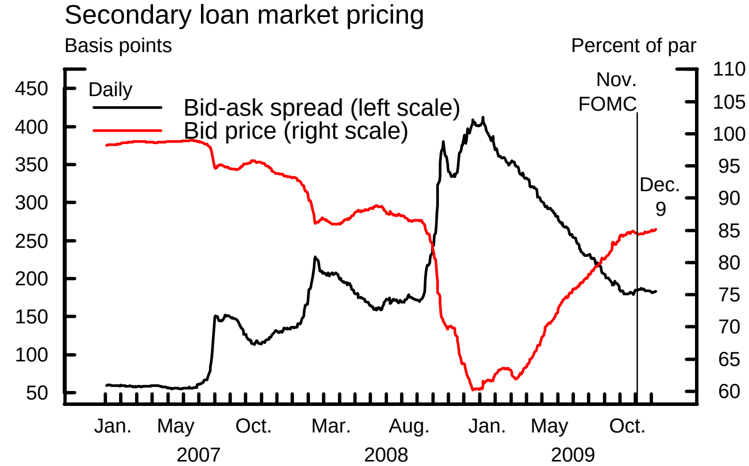
Note. Large banks ETF includes 24 banks. Small banks ETF includes 51 banks.
Source. Bloomberg.

Corporate bond spreads



Note. Measured relative to a smoothed nominal off-the-run Treasury yield curve.
Source. Merrill Lynch and staff estimates.

Secondary loan market pricing



Source. LSTA/LPC Mark-to-Market Pricing.

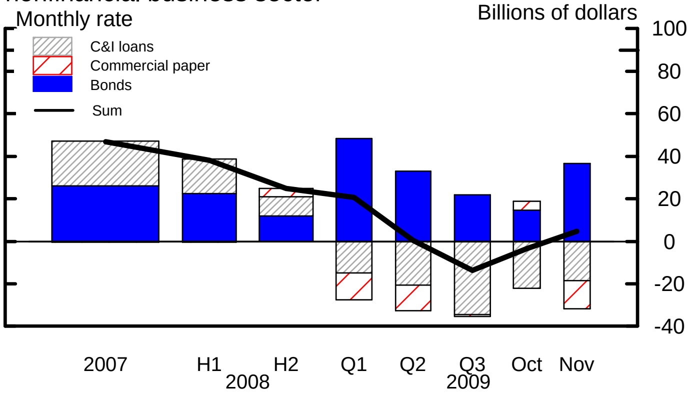
Moody's is estimated to have been moderate in the fourth quarter. The pace of upgrades picked up notably in November, although bonds of a single domestic automaker accounted for most of this change. The year-ahead expected default frequency for nonfinancial firms from Moody's KMV was little changed in November; this measure of default risk has declined sharply from the peak reached early this year but is still elevated by historical standards.

Gross issuance of investment-grade bonds by nonfinancial corporations rebounded in November following a lull in October, and speculative-grade bond issuance maintained its solid third-quarter pace (Chart 3). In the primary market for syndicated leveraged loans, signs of a recovery emerged, with issuers trickling back to the market and in some cases completing successful syndications. By contrast, both commercial paper outstanding and commercial and industrial (C&I) loans on banks' books contracted again in November. Gross public equity issuance by nonfinancial firms remained solid in November, supported by the continued strength of initial offerings. The recent weakness in announcements of new share repurchase programs persisted, while announcements of mergers and acquisitions continued to rebound. For financial firms, gross bond issuance slowed somewhat further following the October 31 expiration of the FDIC's Temporary Liquidity Guarantee Program. Financial firms' equity issuance was again sluggish in November, but Bank of America issued nearly $20 billion of common-equivalent shares in early December in conjunction with its repayment of $45 billion in funds received through the Troubled Asset Relief Program.[2]

[2] On December 10, CIT confirmed that it had emerged from bankruptcy, having satisfied the conditions of its prepackaged reorganization plan. The distribution of CIT's new debt and equity took place in accordance with the plan, and the new common stock commenced trading on the New York Stock Exchange.

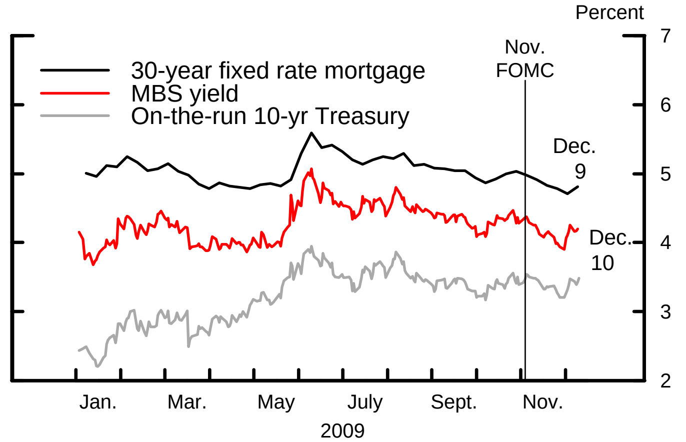
Chart 3
Credit Market Developments

Changes in selected components of debt of the nonfinancial business sector



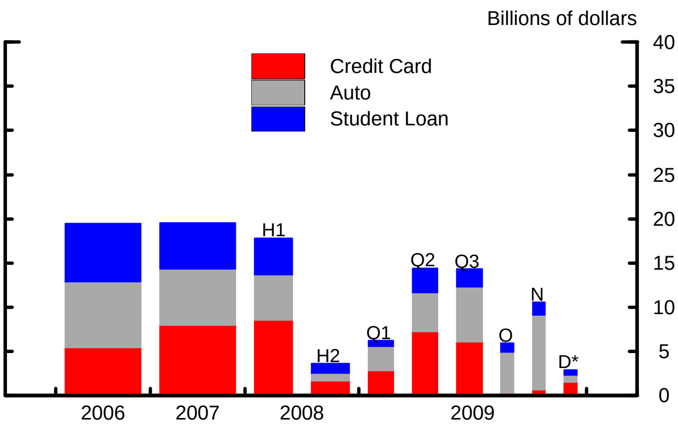
Note. CP and C&I loans are seasonally adjusted; bonds are not.
Source. Depository Trust & Clearing Corporation, Thomson Financial, and Federal Reserve H.8 release.

Select interest rates



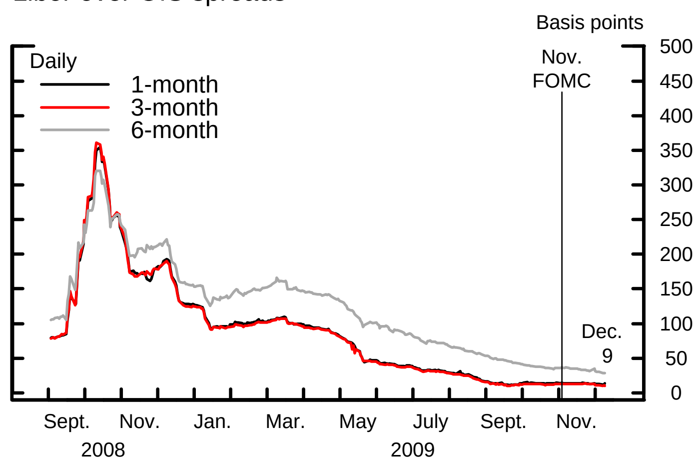
Note. Data are business daily except for the 30-year fixed rate mortgage which is weekly.
Source. Bloomberg.

Gross ABS issuance



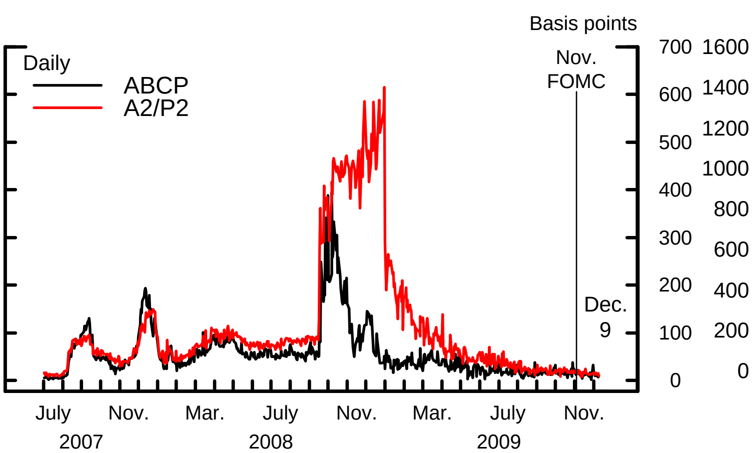
*Actual issuance as of October 23, 2009.
Note. Auto ABS include car loans and leases and financing for buyers of motorcycles.
Source. Inside MBS & ABS, Merrill Lynch, Bloomberg, and the Federal Reserve.

Libor over OIS spreads



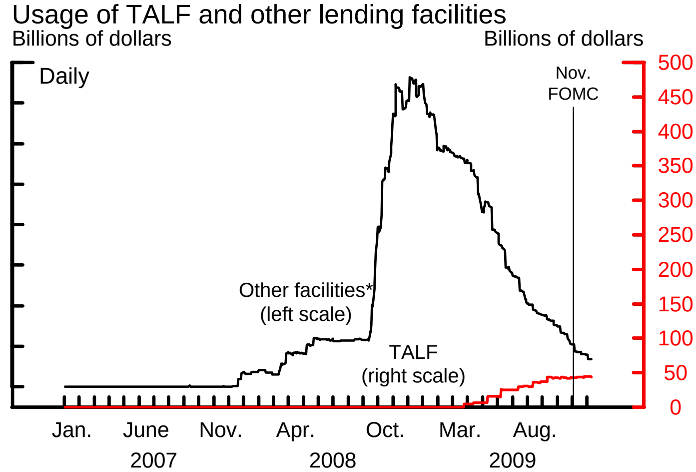
Source. British Bankers' Association and Prebon.

Spreads on 30-day commercial paper



Note. The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.
Source. Depository Trust & Clearing Corporation.

Usage of TALF and other lending facilities



* Includes primary, secondary, and seasonal credit; TAF; PDCF; dollar liquidity swaps; CPFF; and AMLF.
Source. Federal Reserve.

Municipal bond issuance remained robust in November, and the ratio of yields on such instruments to comparable-maturity Treasury securities was about unchanged. Newly acquired ratings data from Moody's show that credit quality in the municipal sector deteriorated over the first three quarters of 2009, a trend that, until recently, had been obscured in the ratings data from Standard and Poor's as a result of a gradual shift in its rating methodology for this sector.

The average interest rate on 30-year conforming fixed-rate mortgages fell to 4¾ percent over the intermeeting period, and the spread between the mortgage rate and the 10-year Treasury yield narrowed. Yields on agency mortgage-backed securities (MBS) decreased, on balance, and net issuance of MBS by Fannie Mae and Freddie Mac remained sluggish in October amid relatively strong demand for FHA loans. Led by auto-loan securitizations, consumer ABS issuance increased in November. While credit card ABS issuance was very low in October and November, it is set to pick up substantially in December as a result of interim FDIC guidance that clarifies how the FDIC would handle these securitizations for a bank in receivership.[3] (See box entitled "Effect of FAS 166 and FAS 197 on Commercial Banks.")

The announcement in the FOMC statement that the Federal Reserve would purchase only about $175 billion of agency debt securities had not been generally anticipated, and spreads on those securities widened a few basis points following the release. Market participants noted further tapering of the MBS purchase program and the apparent onset of tapering in the agency debt purchase program. Investors have

[3] Market participants have reportedly also expressed considerable concern about a provision in the regulatory reform bill as recently reported out of the House Financial Services Committee that would allow the FDIC to impose haircuts of 20 percent on the assets of secured creditors, including parties in repurchase agreements, during the resolution of systemically important non-bank financial institutions. Amendments have been proposed that would limit this provision. It is unclear at this time how this issue will ultimately be resolved by the House of Representatives.

The Effects of FAS 166 and FAS 167 on Commercial Banks

Last June, the Financial Accounting Standards Board published two new accounting standards—commonly referred to as FAS 166 and FAS 167—that will change the basis for determining whether firms are required to consolidate securitized assets (as well as the associated liabilities and equity) onto their balance sheets.[1] The new standards focus on the degree of control that the firm exercises over the assets, whereas the previous standards were more focused on the firm's credit exposure to the assets.

Board staff believes that most credit card securitizations and asset-backed commercial paper conduits will need to be consolidated, as will the portion of private label mortgage-backed securitizations and other term securitizations for which the originator retains both servicing rights and an economic interest in the securitization.[2] Most banks will apply the new standards as of the March 31, 2010 Call Report. Industry analysts estimate that the amount of assets that will be brought onto banks' balance sheets at that time is likely to exceed $1 trillion, with the amount highly concentrated at a handful of large banking institutions.

The consolidation of these assets is likely to significantly reduce the regulatory capital ratios of several large banks that are heavily involved in securitization, particularly monoline credit card banks.[3] Rating agencies reportedly have already been evaluating capital adequacy on the basis of the firms' combined on- and off-balance sheet assets, so the accounting change is not expected to have adverse implications for banking institutions' credit ratings. Moreover, the Supervisory Capital Assessment Program incorporated estimates of the effect of the consolidation for most securitizations, and staff estimate that the regulatory capital ratios of each highly affected bank will remain above key regulatory thresholds even after implementing FAS 166 and 167. Even so, it is possible that some banks may respond to the decline in their reported capital ratios by restricting lending in order to offset at least some of the effect of the consolidation. Partly in response to

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[1] Statement of Financial Accounting Standards No. 166 (FAS 166), *Accounting for Transfers of Financial Assets (an amendment to FASB Statement No. 140)*; and FAS 167, *Amendments to FIN 46R, Consolidation of Variable Interest Entities*. FAS 166 and 167 must be implemented with firms' first financial reporting period that begins after November 15, 2009.

[2] A small fraction of ABCP conduits failed to meet the requirements for off-balance-sheet treatment under the old accounting rules. In those situations, the banking agencies' regulations allowed the sponsoring firm not to consolidate the conduits for the calculation of risk-based capital ratios. The agencies are in the process of eliminating this exemption.

[3] Some banks' leverage ratios will be affected more than their risk-based capital ratios because they provided support to their credit card securitization structures over the past year and thus were required to report higher risk-weighted assets in their 2009 regulatory filings.

these concerns, the Division of Banking Supervision and Regulation is working with the other bank regulatory agencies on a final rule that would phase in the effect of the accounting changes on risk-based capital ratios over as much as one year.[4]

The changes in accounting treatment have also led the FDIC to reconsider its handling of securitized assets in receiverships; the specific details of the new rules the FDIC is developing in this area could have significant consequences for the recovery of securitization markets. Prior to the accounting changes, the FDIC granted securitized assets that qualified for off-balance-sheet treatment a safe harbor under which the assets would not be subject to stays or seizure in receivership, thereby providing investors with assurance of timely payment of principal and interest on the debt. The FDIC recently announced that securitizations completed before March 31, 2010 that comply with the old accounting rules for off-balance-sheet treatment will continue to be granted this safe harbor treatment. FDIC staff is consulting with staff members at the Board and the other supervisory agencies in their effort to develop new safe harbor provisions for securitizations completed after March 2010.

[4] The regulatory leverage ratio is designed to be a GAAP-based assessment of the balance sheet as a supplement to the risk-based capital rules. Because the affected banks' leverage ratios are expected to remain above regulatory minimums, the agencies decided to retain the strict GAAP focus and require banks to recognize the effect of the consolidations on the leverage ratio immediately.

reportedly continued to express some uncertainty about several matters related to the GSEs over the coming weeks, including the expiration of the Treasury's GSE liquidity facility at year-end, the extent of the Treasury's authority to provide additional capital going forward, the termination of the Federal Reserve's and Treasury's large-scale asset purchase programs, and the portfolio reductions required of the agencies under the terms of their conservatorship. To date, these concerns do not appear to have put substantial pressure on agency debt or MBS prices.

MARKET FUNCTIONING AND FEDERAL RESERVE PROGRAMS

Conditions in short-term funding markets were little changed over the intermeeting period. One- and three-month Libor-OIS spreads were flat, while six-month spreads edged down somewhat further. Spreads on A2/P2-rated commercial paper and AA-rated ABCP were little changed, remaining at the low end of their ranges over the past two years. There were few signs of significant year-end pressures in the commercial paper market or in bank funding markets. In the Treasury bill market, however, year-end pressures were more evident, with high demand for bills maturing just past December 31 pushing yields on several such bills to zero. The relative scarcity of Treasury bills has been exacerbated by the recent reduction in supplementary financing bills. The combination of scarce collateral and abundant liquidity is also reportedly putting downward pressure on term general collateral repo rates. Separately, the Federal Reserve Bank of New York announced that it would conduct a series of small-scale triparty repurchase agreements to ensure the operational readiness of this tool, and it carried out four such operations in early December. Neither the announcements nor the operations themselves elicited material price action.

Indicators of how well other markets are functioning also showed no recent deterioration. Bid-asked spreads on corporate bonds, Treasury securities, and leveraged loans moved sideways, and the average range of CDS dealer quotes was about unchanged. In Treasury coupon markets, on-the-run premiums and yield-curve fitting errors stayed within their recent ranges.

Supported by the TALF, ABS issuance picked up in November and $400 million of CMBS came to market—the first CMBS issuance since June 2008. (See box entitled "Balance Sheet Developments.") Two other single-borrower CMBS deals came to market without TALF support, reflecting improved investor appetite for the asset class.

FOREIGN MARKET DEVELOPMENTS

On net, the dollar depreciated about ½ percent on a trade-weighted basis against both the major currencies and the currencies of our other important trading partners over the intermeeting period (Chart 4). The dollar declined early in the period, apparently due in part to a continued normalization of risk attitudes. Additionally, the dollar fell broadly after the meeting of the G-20 ministers over the weekend of November 7-8, with market participants noting that the meeting's communiqué failed to mention concern over the dollar's recent depreciation. Late in the period, however, the dollar reversed course and appreciated sharply following the release of the stronger-than-expected November employment report. The U.S. dollar depreciated another 3 percent against the yen over the intermeeting period, and Japanese officials have voiced unease over the yen's strength. Several emerging economies, including Brazil and Korea, intervened to stem the appreciation of their currencies, while others are reportedly contemplating tightening capital controls. Foreign stock markets generally rose on net, with notable gains in Brazil and Mexico, amid increasing commodity prices and a better-than-expected Mexican GDP report. China's stock market climbed 4 percent, in part due to strong trade data, while European equity indexes rose by 2 percent. Japanese equities were unchanged on

Balance Sheet Developments during the Intermeeting Period

Since the November FOMC meeting, the Federal Reserve's total assets have edged up to about $2.2 trillion.[1] As a result of ongoing asset purchases, securities held outright increased by $89 billion, which more than offset a $71 billion decline in lending through liquidity and credit facilities.

The Open Market Desk purchased $9 billion in agency debt securities and $80 billion in agency mortgage-backed securities (MBS) during the intermeeting period.[2] In contrast, most of the System's liquidity and credit programs contracted further, consistent with continued improvements in global bank funding markets. Term auction credit declined $53 billion, foreign central bank liquidity swaps declined $15 billion, and primary credit declined $3 billion.[3] Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF) declined slightly to $14 billion. Lending under the Primary Dealer Credit Facility (PDCF), loans extended under the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), and securities lent through the Term Securities Lending Facility (TSLF) all remained at zero.[4]

The Term Asset-Backed Securities Loan Facility (TALF) expanded slightly in size to $44 billion. Three subscriptions were conducted during the intermeeting period, two of which have settled. The first loan subscription, totaling $1.1 billion, financed the issuance of asset-backed securities (ABS) collateralized by credit card, equipment, floorplan, small business, and student loans. The second subscription included $1.4 billion in loan requests to finance purchases of legacy commercial mortgage-backed securities (CMBS) and $72 million in loan requests to finance purchases of the first newly issued CMBS since June 2008. About three-fourths of the newly issued TALF-eligible CMBS were purchased by non-TALF investors. The third subscription, which settles December 10, garnered loan requests totaling $3.1 billion and will finance the issuance of ABS collateralized by credit card, equipment, floorplan, servicing advances, small business, and student loans.[5] More

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[1] These data are through December 9, 2009.
[2] The figures for securities holdings reflect only trades that have settled. Over the intermeeting period, the Open Market Desk committed to purchase, but has not yet settled, an additional $113 billion of MBS, on net.
[3] On November 17, 2009 the Federal Reserve Board announced a reduction in the maximum maturity of primary credit loans at the discount window to 28 days, effective January 14, 2010. There was no market reaction to the announcement.
[4] Securities lent through the TSLF do not affect the level of Federal Reserve assets because the Federal Reserve retains ownership of the securities lent.
[5] On November 19, 2009, the assets and liabilities of TALF LLC were consolidated with the assets and liabilities of the Federal Reserve Bank of New York, consistent with generally accepted accounting principles.

than half of the ABS brought to market with this subscription were financed through TALF, a substantial pickup from recent months. The subscription included student loan and credit card ABS, which tend to be more heavily financed through TALF. Approximately $1 billion of TALF loans were prepaid over the intermeeting period.

In conjunction with the restructuring of the government's support for American International Group (AIG) announced on March 2, 2009, the Federal Reserve Bank of New York received $25 billion of preferred interests in two special purpose vehicles, AIA Aurora LLC and ALICO Holdings LLC on December 1 and reduced the balance and amount available of revolving credit provided to AIG by a commensurate amount. These two limited liability companies were created to hold all of the outstanding common stock of American International Assurance Company (AIA) and American Life Insurance Company (ALICO), two life insurance subsidiaries of AIG.

On the liability side of the Federal Reserve's balance sheet, the U.S. Treasury's general account decreased $25 billion, and the Treasury's supplementary financing account remained unchanged at $15 billion. Reserve balances of depository institutions increased $41 billion over the intermeeting period.

Currently, the LLC has only about $270 million in assets, funded by a commitment fee paid by the Federal Reserve Bank of New York and initial funding from the TARP.

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (12/9/2009)	Maximum level	Date of maximum level
Total assets	**21**	**2,190**	**2,256**	**12/17/08**
Selected assets:				
Liquidity programs for financial firms	-72	122	1,247	11/06/08
Primary, secondary, and seasonal credit	-3	19	114	10/28/08
Term auction credit (TAF)	-53	86	493	03/11/09
Foreign central bank liquidity swaps	-15	17	586	12/04/08
Primary Dealer Credit Facility (PDCF)	0	0	156	09/29/08
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	152	10/01/08
Lending through other credit facilities	+0	58	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-1	14	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	1	44	45	11/26/09
Support for specific institutions	1	111	118	04/02/09
Credit extended to AIG, net	-23	21	91	10/27/08
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	25	25	25	12/09/09
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-1	65	75	12/30/08
Securities held outright*	89	1,787	1,787	11/24/09
U.S. Treasury securities	+0	777	791	08/14/07
Agency securities	9	156	156	12/09/09
Agency mortgage-backed securities**	80	854	856	11/24/09
Memo: Term Securities Lending Facility (TSLF)	0	0	236	10/01/08
Total liabilities	**23**	**2,137**	**2,213**	**12/04/08**
Selected liabilities:				
Federal Reserve notes in circulation	7	883	883	12/09/09
Reserve balances of depository institutions	41	1,107	1,169	11/27/09
U.S. Treasury, general account	-25	55	137	10/23/08
U.S. Treasury, supplementary financing account	0	15	559	10/22/08
Other deposits	1	2	53	04/14/09
Total capital	**-2**	**52**	**55**	**12/01/09**

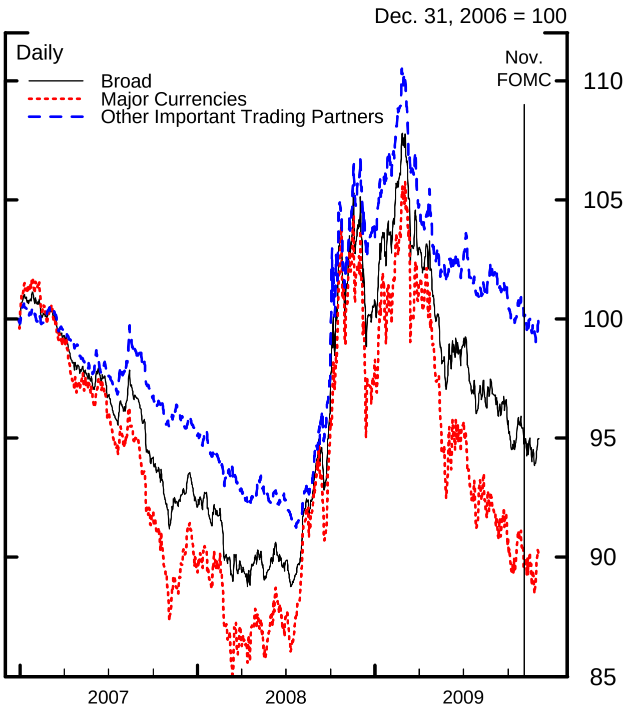
+0 (-0) denotes positive (negative) value rounded to zero.

* Par value.

** Includes only mortgage-backed security purchases that have already settled. Over the intermeeting period, the Open Market Desk committed to purchase an additional $113 billion of MBS, on net. Total MBS purchases are about $1,071 billion.

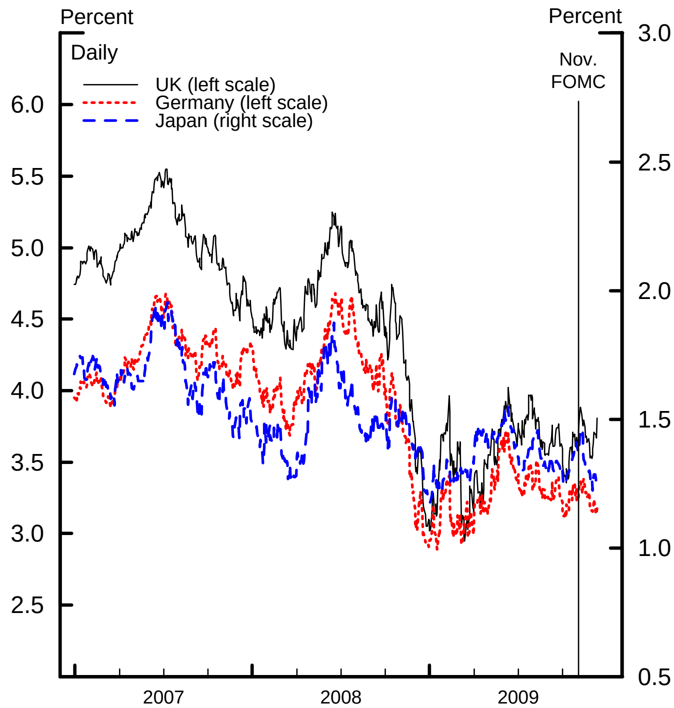
Chart 4
International Financial Indicators

Nominal trade-weighted dollar indexes



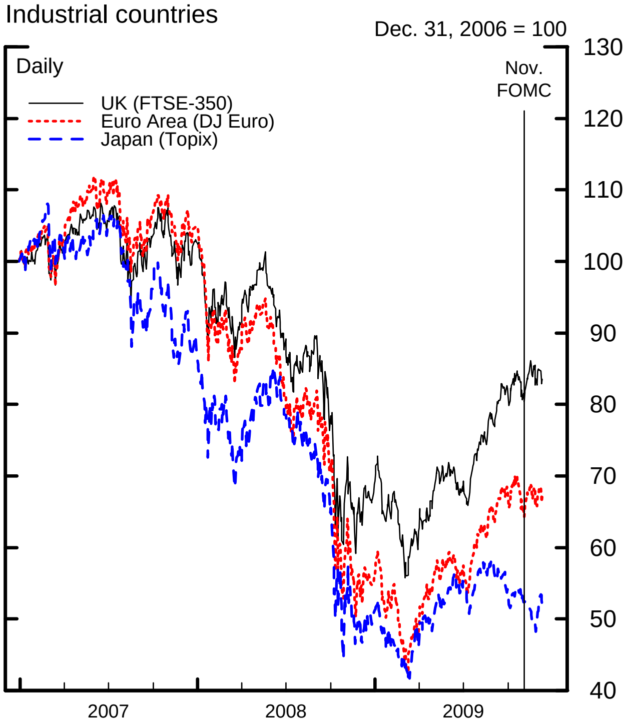
Source. FRBNY and Bloomberg.

Nominal 10-year government bond yields



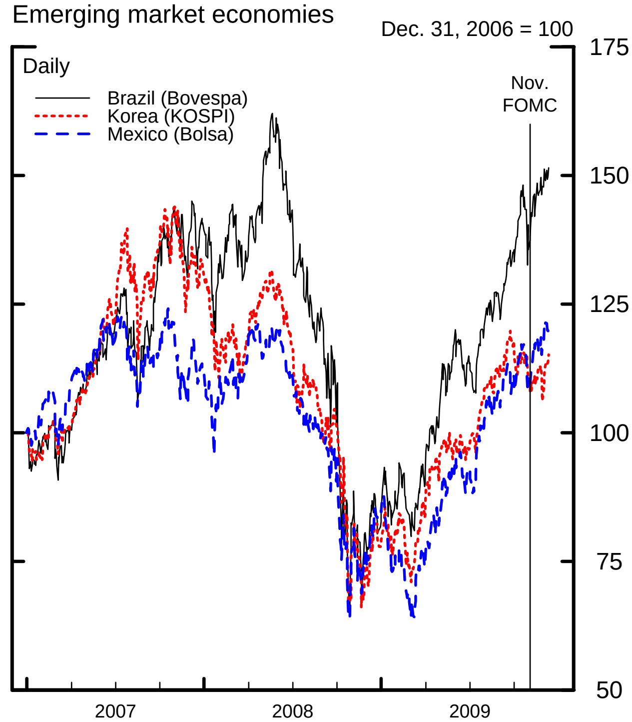
Source. Bloomberg.

Stock price indexes
Industrial countries



Source. Bloomberg.

Stock price indexes
Emerging market economies



Source. Bloomberg.

Note. Last daily observation is for December 10, 2009.

balance. Foreign sovereign yields generally declined since the November FOMC meeting.

Although the central banks of the major foreign industrial economies kept policy rates on hold, there were some noteworthy changes to other policy measures. The Bank of England increased its Asset Purchase Facility by a somewhat smaller-than-expected £25 billion to £200 billion. The European Central Bank took some initial steps toward scaling back emergency lending by announcing that the upcoming one-year refinancing operation on December 16 will be its last of that tenor and that funds will be offered at a rate equal to the average of the benchmark rates set in the weekly main refinancing operations over the life of the operation. Amid concerns about deflation and the strength of the yen, the Bank of Japan announced an additional ¥10 trillion three-month secured lending facility at an unscheduled meeting on December 1, but this move is not expected to have substantial effects.

News that the Dubai government had requested a standstill on debts owed by Dubai World, a government-owned corporation, temporarily roiled financial markets. Global equity markets and sovereign bond yields fell immediately following the announcement, while the dollar rose roughly 1 percent, as investors pulled back from riskier investments on concerns that problems in Dubai could have knock-on effects elsewhere. However, these movements subsequently eased somewhat as investors concluded that Dubai World's difficulties were likely to be isolated and not spill over to other markets. Concerns about the potential for default by some sovereign nations also rose over the period, most notably for Greece, whose sovereign debt rating was lowered because of long-standing concerns over its public finances.

DEBT, BANK CREDIT, AND MONEY

The level of private-sector debt is projected to have fallen slightly in the fourth quarter on a further decline in household debt and a tick down in nonfinancial business debt (Chart 5). The growth of federal government debt slowed somewhat from its recent rapid pace, while state and local government debt continued to expand at a moderate rate. All told, the growth rate of domestic nonfinancial-sector debt is projected to have declined from an annual rate of 2½ percent in the third quarter to about 1½ percent in the fourth quarter.

Commercial bank credit is estimated to have decreased further in November, although the pace of decline slowed relative to October. Total loans contracted in November at an annual rate of about 4 percent while securities decreased at a pace of about 2½ percent. (See box entitled "Commercial Bank Loan Growth and Bank Health.") C&I loans fell at a 16 percent rate, likely reflecting weak demand and a continued tightening of terms. The Survey of Terms of Business Lending (STBL) conducted in November indicated that the average C&I loan rate spread over comparable-maturity market instruments rose for the fifth consecutive survey; the increase was broadly apparent across most loan categories.[4] The decline in commercial real estate loans continued, consistent with the further weakening of fundamentals in that sector. On the household side, a slowdown in loan sales to the GSEs resulted in a 5½ percent increase in on-balance-sheet holdings of closed-end residential mortgages in November. However, home equity loans fell again. Consumer loans originated by banks also declined sharply as credit card loan originations dropped.

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[4] The average spread is weighted by loan size, with a maximum size of $25 million, and adjusted for changes in non-price loan characteristics.

Chart 5
Debt and Money

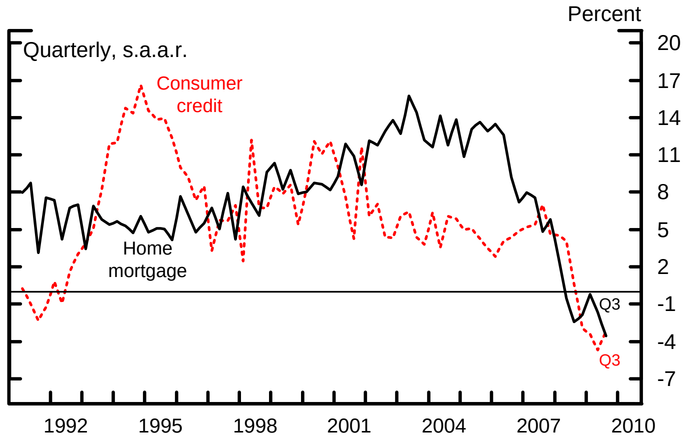
Growth of debt of nonfinancial sectors

Percent, s.a.a.r.

	Total	Business	Household	Government
2007	8.7	13.4	6.7	6.1
2008	5.9	5.2	0.3	17.5
H1	4.4	7.1	1.7	5.6
H2	7.2	3.1	-1.1	28.6
2009				
Q1	4.3	0.5	-1.2	17.9
Q2	4.5	-2.2	-1.6	22.0
Q3	2.8	-2.6	-2.6	16.9
Q4 p	1.7	-0.7	-1.9	9.3

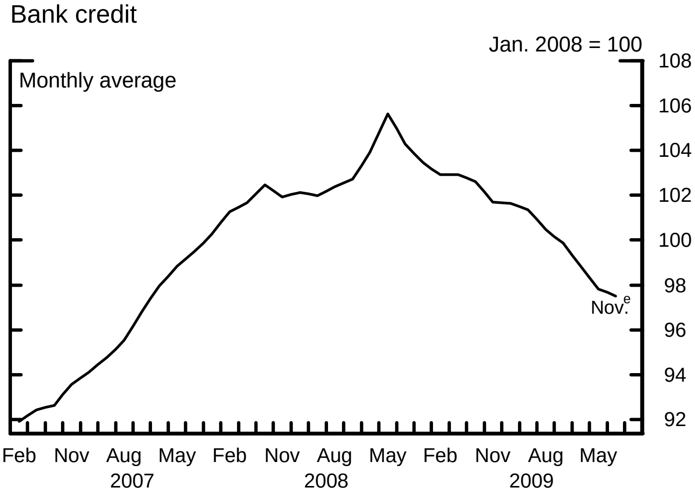
Source. Flow of Funds.
p Projected.

Growth of debt of household sector



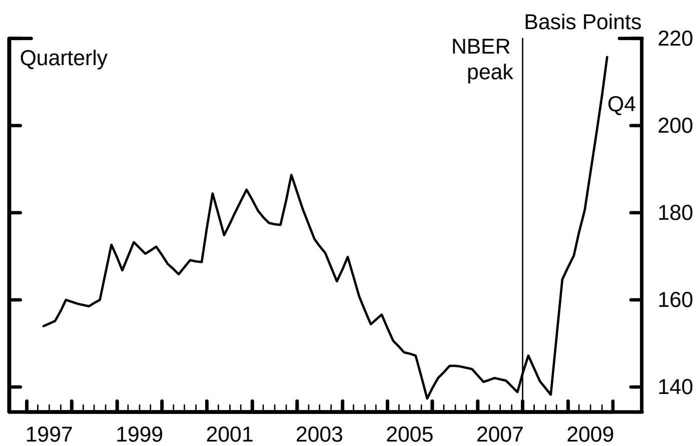
Source. Flow of Funds, Federal Reserve G.19 release.

Bank credit



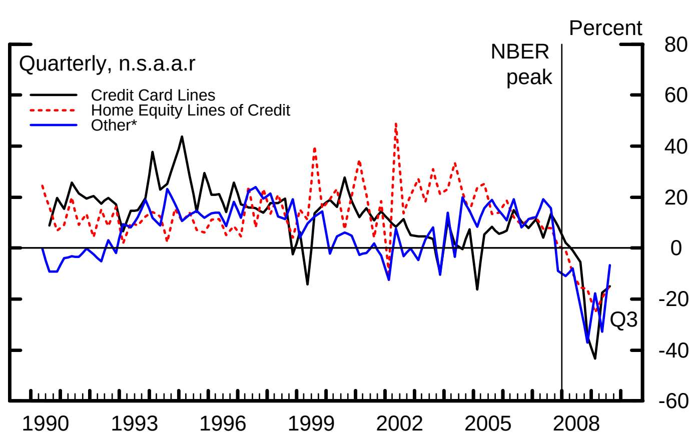
Source. Federal Reserve.
e Estimated.

C&I loan rate spread*



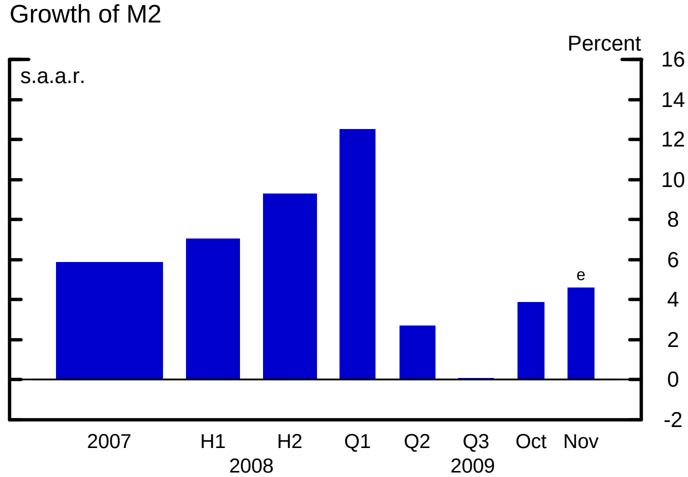
Source. Survey of Terms of Business Lending.
*Weighted-average spread over market interest rates on comparable-maturity instruments, adjusted for changes in nonprice loan characteristics.

Growth in Unused Commitments



Source. Call Report data, adjusted for the effects of merger and failure activity involving large thrift institutions.
*Total unused commitments excluding home equity and credit cards.

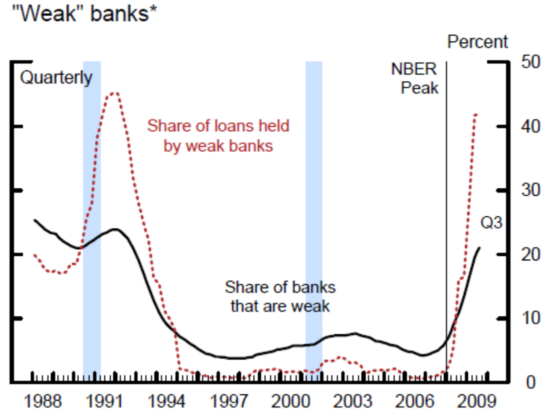
Growth of M2



Source. Federal Reserve.
e Estimated.

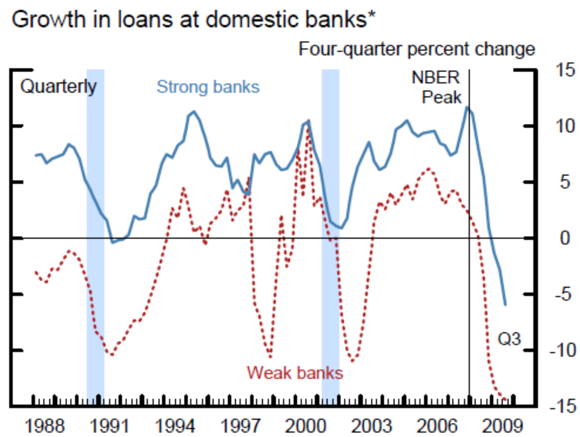
Commercial Bank Loan Growth and Bank Health

Decomposing the change in total loans and leases on the books of domestic banks into two components – the change at "strong" banks and the change at "weak" banks – reveals that in 2009, unlike in 1990-1993, loan portfolios have contracted at strong as well as weak banks.



*Classified according to CAMELS ratings at the beginning of the quarter.

Strong banks are defined here as banks with CAMELS ratings of 1 or 2 and weak banks as those with ratings of 3, 4, or 5.[1] Over the past two years, CAMELS downgrades have been widespread, and as the top figure shows, at the beginning of the third quarter, weak banks held more than 40 percent of all loans outstanding, nearly as large a share as in the early 1990s.[2]



*Classified according to CAMELS ratings at the beginning of the quarter.

As shown in the second panel, the growth rates of loans at strong and weak banks generally move in parallel, with the growth rate at weak banks consistently running well below that at strong banks. This difference presumably is a result of greater concerns about asset quality and the high cost of funding at weak banks, which may cause such banks to constrain lending. It may also reflect the relatively poor condition of the customers of weak banks, and their resulting lower demand for loans.

The panel at the top of the next page puts these pieces together, showing the four-quarter percent change in total loans held by all domestic banks (the black line) as well as colored vertical bars representing the contributions to the aggregate growth rate from strong (blue) and weak (red) banks (that is, the percent change of loans at banks in each category multiplied by the share of loans held by banks in that category). As can be seen, during the early 1990s, the sharp contraction in loans at weak banks accounted for the bulk of the runoff in aggregate loans, while lending at strong banks contracted only slightly.

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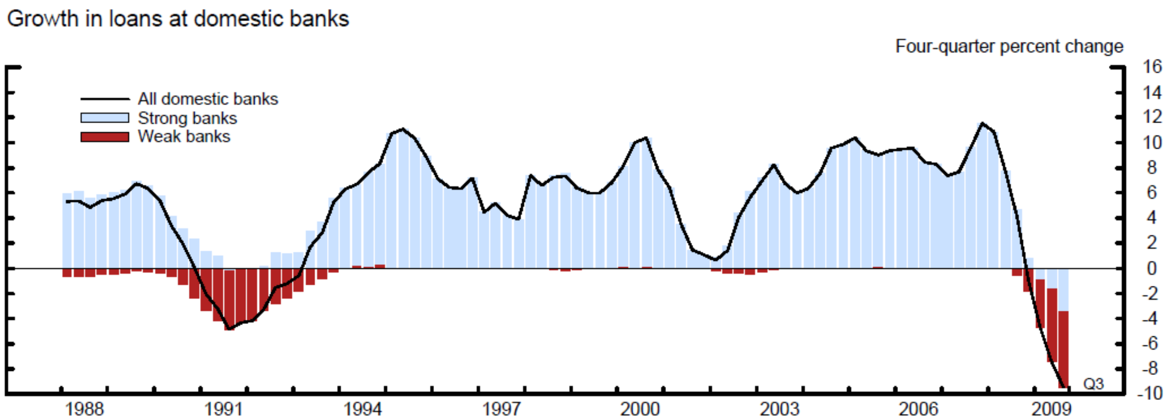
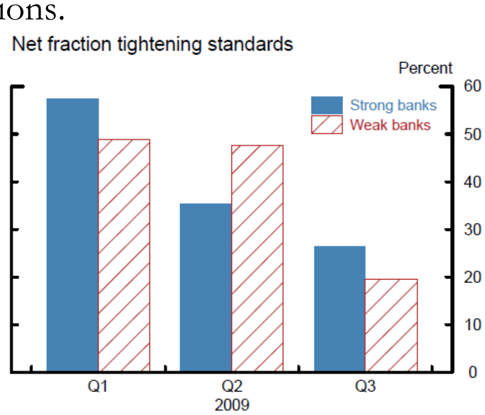
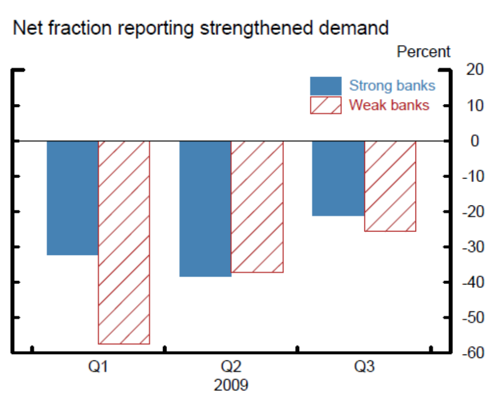
[1] This classification of weak banks may differ from other classifications, including the FDIC's "problem bank" classification, which includes banks with ratings of 4 or 5.
[2] However, in the recent period a number of strong banks received government assistance, such as TARP funds, which likely contributed to regulators' favorable assessment of their health.



Similarly, in the current period, the significant increase in the fraction of industry loans held by weak banks and the substantial contraction in loans held at those banks have accounted for much of the decline in U.S. bank loans. In addition, in the current period strong banks have contributed importantly to this contraction. The declines at both strong and weak banks in the current episode suggest that a confluence of factors is affecting lending across the industry. These factors include widespread weakness in loan demand from creditworthy borrowers as a result of the sharp economic slowdown, and reduced loan supply, perhaps reflecting concerns about the economic outlook and balance sheet constraints.

The significance of supply factors is evident in recent Senior Loan Officer Opinion Surveys. Similar fractions of strong and weak banks tightened lending standards during the first three quarters of 2009.[3] This was also the case during the early 1990s.[4] This similarity across weak and strong banks indicates that deterioration in the condition of banks is only one factor inducing banks to tighten their lending standards. In contrast, demand reportedly fell more at weak banks in the first quarter of 2009, which may explain part of the larger decline in loans observed at those institutions.





[3] We average responses to questions on lending standards for different loan categories at the bank level, and then across strong and weak banks.
[4] The SLOOS panel contained 6 or fewer weak banks between 1993Q4 and 2008Q4, making it difficult to make comparisons during that period.

According to Call Report data, the aggregate profitability of the banking sector edged into positive territory in the third quarter, but most of the increase was due to a few large institutions that reported significant decreases in loan-loss provisioning, even as industry-wide measures of credit quality appeared to worsen. Regulatory capital ratios increased further in the third quarter as banks received equity infusions from their parent holding companies and shrank their balance sheets. Unused loan commitments contracted for the seventh consecutive quarter, though the rate of decline slowed, especially for commitments to lend to businesses.

M2 expanded at a 4½ percent annual rate in November, in line with its modest growth in September and October. As has been the case in recent months, liquid deposits grew rapidly, while small time deposits and retail money market mutual funds continued to contract, albeit at slightly slower paces. Currency ran off at a 5 percent annual rate in November, likely reflecting weak demand for U.S. banknotes from abroad, consistent with the continued stabilization in most global financial markets. The monetary base expanded at an annualized pace of about 50 percent last month, reflecting the continued strong growth in reserve balances due to ongoing large-scale asset purchases, which more than offset the decreased usage of liquidity and credit facilities.

ECONOMIC OUTLOOK

Information received over the intermeeting period has been largely consistent with the staff projection provided in the October Greenbook. As a result, the staff has made only modest changes to its forecast, with the trajectories for output and inflation revised up a bit. The staff continues to expect that the expansion of real GDP will outpace the rise in potential output, causing the output gap to narrow over the next couple of years. As was the case in the last forecast, the expected level of the unemployment rate declines over time as the output gap narrows, but it ends the projection period slightly higher than in the previous projection because the staff has raised its estimates of the boost to labor force participation from extended and emergency unemployment benefits. The rates of core and total PCE inflation are expected to slow appreciably further over the next two years, with both running a little above 1 percent in 2011.

The staff assumes that the federal funds rate will remain in its current range for the next seven quarters and then begin to rise in the last quarter of 2011, a slightly earlier start to policy tightening than in the October forecast. No significant changes have been made to the assumptions regarding the sizes or timing of the Federal Reserve's LSAP programs.[5] Fiscal policy is expected to add about 1 percentage point to real GDP growth in 2010, the same as in the current year, but to impose a slight drag on growth in 2011. House prices are projected to decline over the next year as foreclosure activity continues, but then to rise a bit in 2011.

[5] Purchases of $300 billion in Treasury securities were completed at the end of October. Purchases of $1.25 trillion in agency MBS and $175 billion in agency debt are projected to be finished by the end of the first quarter of 2010.

The rates on 30-year fixed-rate mortgages and longer-term Treasuries are projected to rise through 2011, with the spread between them widening a bit as the Federal Reserve completes its purchases of agency MBS. By contrast, yields on investment-grade corporate bonds are expected to edge down as risk spreads narrow considerably further against a backdrop of continued improvements in financial markets and the economic outlook. With the equity risk premium also expected to narrow, stock prices are projected to rise briskly at an annual rate of around 15 percent over the next two years. Bank lending conditions for firms and households are anticipated to ease over time but to remain tight by historical standards. The real foreign exchange value of the dollar is assumed to fall at about a 2¼ percent pace, on average, over 2010 and 2011. Based on readings from futures markets, the staff expects oil prices to rise over the forecast period to about $86 a barrel at the end of 2011, little changed from the October Greenbook.

Against this backdrop, the staff expects real GDP to grow at an annual rate of just over 3 percent in the second half of 2009, about 3½ percent in 2010, and about 4½ percent in 2011, very close to the October projection. The unemployment rate is projected to be at its peak of around 10 percent this quarter and early next year before declining slowly to about 9½ percent at the end of 2010 and 8¼ percent at the end of 2011, similar to the trajectory in the last Greenbook, and well above the staff's 5¼ percent estimate of the NAIRU. In light of the current and prospective level of economic slack, the staff projects core PCE inflation to slow to around 1½ percent in the fourth quarter of this year and to just over 1 percent in 2010 and 2011. Total PCE inflation remains slightly higher than core inflation.

Looking further ahead, the staff assumes that the federal funds rate will rise steadily starting in the fourth quarter of 2011, climbing to about 3¾ percent in late 2014. The staff forecasts that real GDP will expand at nearly a 4¾ percent pace in

2012 and 2013 before decelerating in 2014. Potential output is forecast to rise at an average pace of almost 3 percent per year from 2012 through 2014, and so with real GDP growth outstripping that of potential, the unemployment rate falls rapidly for a time, but then levels out in 2014 at just under 4¾ percent, a bit below the staff's estimate of the NAIRU in that year. Longer-term inflation expectations remain stable, and, as the output gap nearly closes, total PCE inflation slowly rises to just under 1¾ percent by 2014, still somewhat below the central tendency of policymakers' long-run projections for inflation.

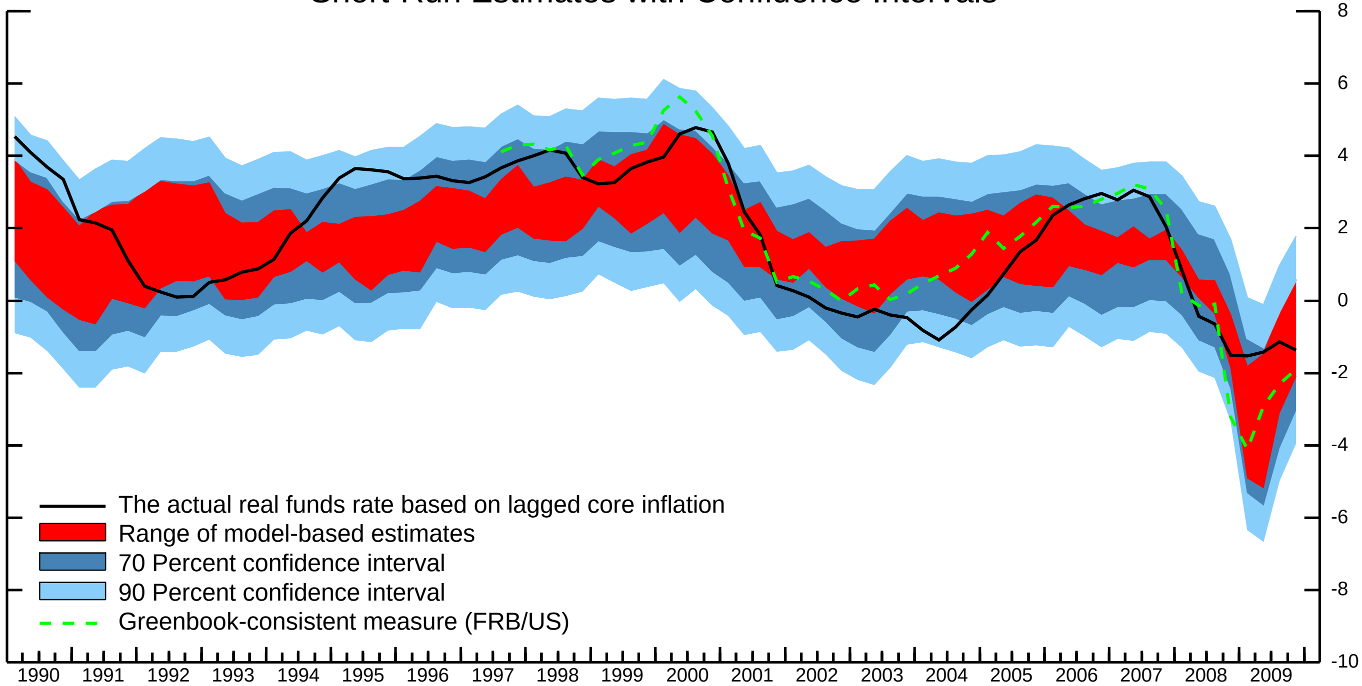
MONETARY POLICY STRATEGIES

Chart 6 shows various estimates of short-run *r**, defined as the real federal funds rate that, if maintained over time, would bring output to its potential level at a horizon of twelve quarters. Greenbook-consistent short-run *r**, estimated using the FRB/US model, edged up 10 basis points from its October Bluebook value. The estimate is now -1.9 percent, about 50 basis points below the actual real federal funds rate. The Greenbook-consistent measure from the EDO model rose about 40 basis points, but at -3.3 percent remains well below the actual funds rate. The increases in these measures largely reflect the modest upward revisions that the staff has made to its projection for GDP over the next two years.

The other four measures of *r** shown in the chart are based on models that condition on information only through last quarter. Primarily as a result of the nearly 1 percentage point downward revision to third-quarter real GDP growth since the October Bluebook, these models now generally indicate somewhat lower short-run values for *r**. In particular, the estimates of *r** from the single-equation model and the small structural model are about 20 basis points lower than in October, and the FRB/US model-based measure is 10 basis points lower. All three of these estimates are at or below the actual current level of the real rate of -1.4 percent. In contrast, the EDO model-based estimate of *r** edged up since the last Bluebook because this model's estimate of slack narrowed a touch in response to the incoming data. At ½ percent, the EDO estimate of *r** is well above the actual real rate, reflecting the model's projection of a robust recovery in real activity.[6]

[6] Conditioning the four model-based estimates on information through the fourth quarter by starting the simulations in 2010Q1 would have the additional effect of moving the twelve-quarter window further into the economic recovery, thereby boosting measured short-run

Chart 6
Equilibrium Real Federal Funds Rate



Short-Run and Medium-Run Measures

	Current Estimate	*Previous Bluebook*
Short-Run Measures		
Single-equation model	-1.9	*-1.7*
Small structural model	-1.4	*-1.2*
EDO model	0.5	*0.4*
FRB/US model	-2.1	*-2.0*
Confidence intervals for four model-based estimates		
70 percent confidence interval	-3.0 to 0.6	
90 percent confidence interval	-3.9 to 1.8	
Greenbook-consistent measures		
EDO model	-3.3	*-3.7*
FRB/US model	-1.9	*-2.0*
Medium-Run Measures		
Single-equation model	1.2	*1.3*
Small structural model	1.8	*1.9*
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.6 to 2.5	
90 percent confidence interval	-0.2 to 3.0	
TIPS-based factor model	2.0	*2.0*
Memo		
Actual real federal funds rate	-1.4	*-1.2*

Note: Appendix A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is based on lagged core inflation as a proxy for inflation expectation. For information regarding alternative measures, see Appendix A.

Chart 7 shows the results of optimal control simulations of the FRB/US model. These simulations use the extended staff baseline projection—embodying liquidity and credit actions by the Federal Reserve—as a starting point. Policymakers are assumed to place equal weight on keeping core PCE inflation close to a 2 percent inflation goal, on keeping unemployment close to the NAIRU, and on minimizing changes in the federal funds rate. As in recent Bluebooks, optimal monetary policy under these simulations is constrained by the effective lower bound, and the nominal funds rate does not depart from this bound until the second half of 2012 (black solid lines). Under this policy, the unemployment rate would be projected to remain well above the NAIRU, and core PCE inflation to stay appreciably below the 2 percent goal, until 2013.

Chart 7 also displays the optimal control results that are obtained if we assume that the nominal funds rate is not constrained by the effective lower bound (blue dashed lines). With the resulting more-accommodative stance of monetary policy, real activity exhibits a faster recovery, while the trajectory for inflation is markedly closer to the assumed goal of 2 percent. The unconstrained policy path has shifted up significantly since October. This shift partly reflects the staff's assessment that the outlook for real activity has improved modestly in recent weeks —an improvement mirrored in the upward revision to the Greenbook-consistent estimates of *r**— as well as the earlier jumping-off point for adjusting the federal funds rate.[7]

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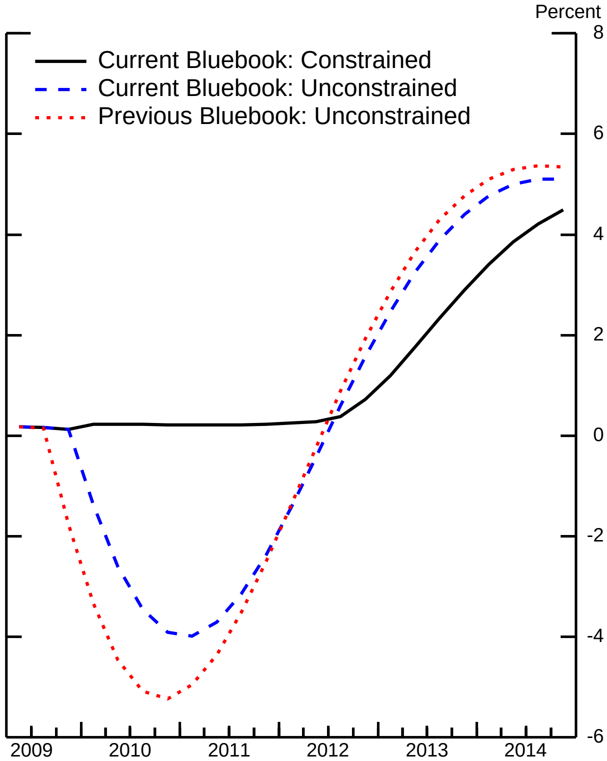
*r**. Relative to the estimates reported in the October Bluebook, this rolling forward would yield upward revisions to *r** of 0.2 to 0.4 percentage points.

[7] Even though the policy path is unconstrained in 2010Q1, it is conditioned on a federal funds rate in 2009Q4 that is at the effective lower bound rather than the lower value that was prescribed by the policy path in the October Bluebook. With the interest rate smoothing embedded in the objective function, this initial condition influences the unconstrained optimal policy path for a time, leading to a somewhat higher level of the optimal funds rate through the middle of 2011 relative to the October path.

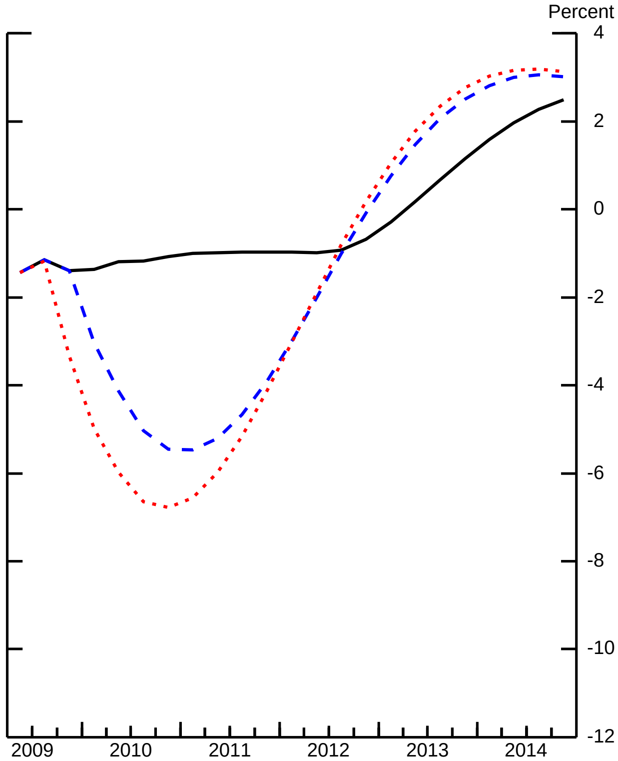
Chart 7

Constrained vs. Unconstrained Monetary Policy
(2 Percent Inflation Goal)

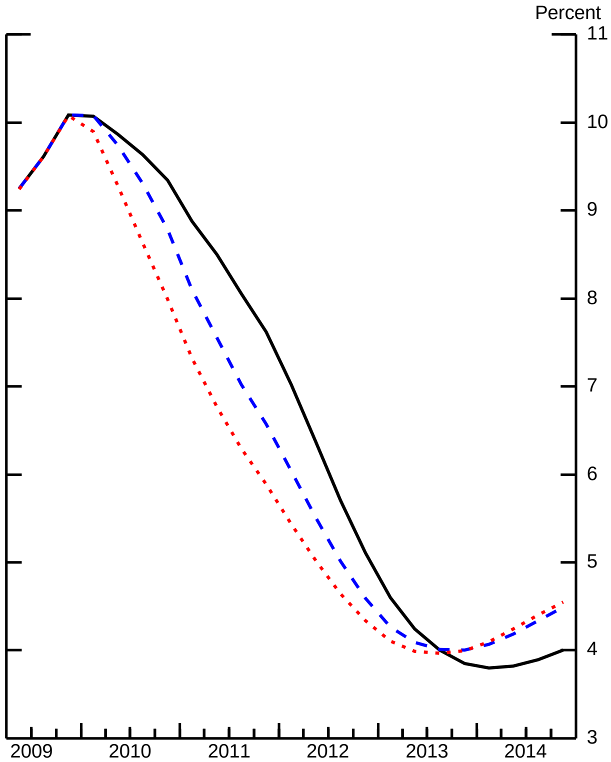
Nominal Federal Funds Rate



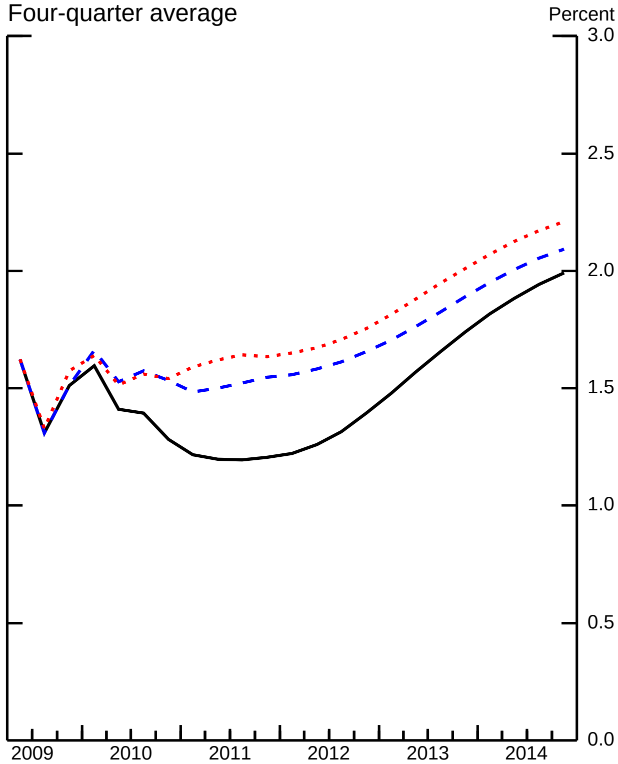
Real Federal Funds Rate



Civilian Unemployment Rate



Core PCE Inflation
Four-quarter average



As depicted in Chart 8, the outcome-based estimated policy rule prescribes a trajectory for the federal funds rate (upper-left panel) similar to the one in the previous Bluebook. The funds rate starts rising above the effective lower bound in 2011Q4, slightly earlier than in October. According to stochastic simulations of the FRB/US model, the 90 percent confidence band for the funds rate in 2011Q4 spans an interval from the effective lower bound to about 2½ percent.[8] Market participants' expectations regarding the path of the funds rate have shifted noticeably lower over the intermeeting period (upper-right panel). Staff models indicate, however, that term premiums may also have declined over the period, suggesting that the drop in the expected trajectory of the federal funds rate could be smaller than that shown here. Financial market quotes imply that the 90 percent confidence interval for the federal funds rate in 2011Q4 spans a range from about ½ percent to about 4½ percent; the width of this interval is slightly smaller than in the previous Bluebook.

The lower panel of Chart 8 provides near-term prescriptions from simple policy rules. The two variants of the Taylor rule, as well as the two estimated policy rules, leave the federal funds rate at its effective lower bound over the next two quarters. When this bound is not imposed, all rules prescribe funds rates that are higher (less negative) than in the previous Bluebook, reflecting the upward revision to the staff's projection of the output gap. The first-difference rule—because it responds to economic growth rather than to the estimated level of resource utilization—prescribes a slight upward trajectory for the policy rate, with the funds rate increasing to about 65 basis points in 2010Q2.

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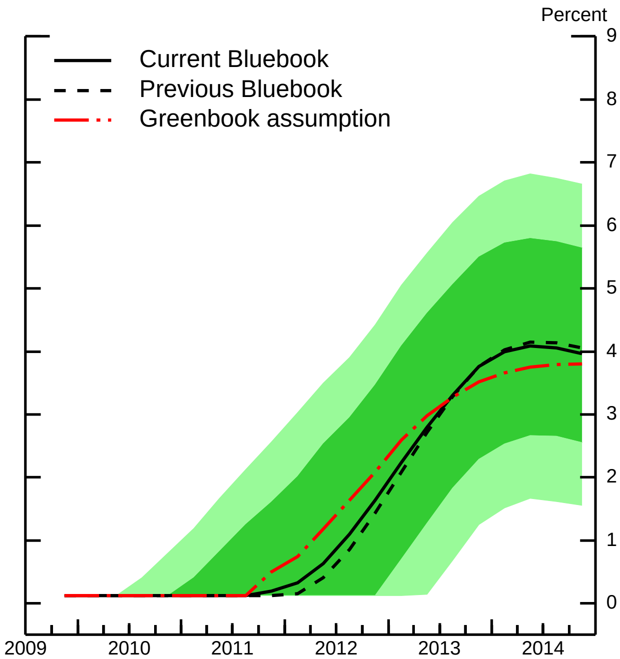
[8] While the staff projection roughly corresponds to the mode of the distribution, the financial-market forecast is probably closer to a mean. Stochastic simulations of the FRB/US model suggest that the mean of the distribution of the staff's federal funds rate projection first rises above ¼ percent in the second half of 2010, in contrast to late 2011 in the staff's modal baseline projection.

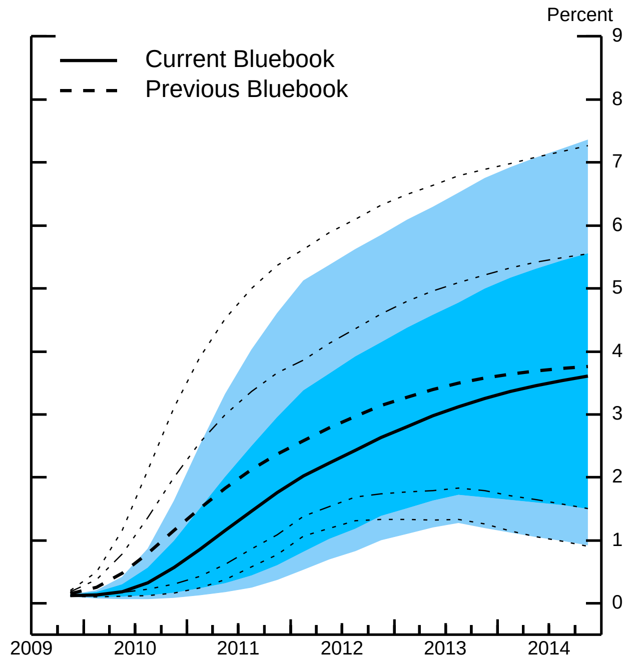
Chart 8

The Policy Outlook in an Uncertain Environment

FRB/US Model Simulations of Estimated Outcome-Based Rule



Information from Financial Markets



Note: In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2010Q1	2010Q2	2010Q1	2010Q2
Taylor (1993) rule	**0.13**	**0.13**	**-0.30**	**-0.46**
Previous Bluebook	*0.13*	*0.13*	*-0.56*	*-0.80*
Taylor (1999) rule	**0.13**	**0.13**	**-3.92**	**-3.92**
Previous Bluebook	*0.13*	*0.13*	*-4.23*	*-4.35*
Estimated outcome-based rule	**0.13**	**0.13**	**-0.38**	**-0.98**
Previous Bluebook	*0.13*	*0.13*	*-1.34*	*-1.97*
Estimated forecast-based rule	**0.13**	**0.13**	**-0.38**	**-0.93**
Previous Bluebook	*0.13*	*0.13*	*-1.34*	*-1.89*
First-difference rule	**0.39**	**0.67**	**0.39**	**0.67**
Previous Bluebook	*0.25*	*0.45*	*0.23*	*0.43*

Memo

	2010Q1	2010Q2
Greenbook assumption	0.13	0.13
Fed funds futures	0.14	0.19
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (December 1, 2009)	0.20	0.20

Note: In calculating the near-term prescriptions of these simple policy rules, policymakers' long-run inflation objective is assumed to be 2 percent. Appendix B provides further background information.

Policy Alternatives

This Bluebook presents three policy alternatives—labeled A, B, and C—for the Committee's consideration. Table 1 provides an overview of the key elements of these alternatives. Draft statements are provided in subsequent pages, followed by summaries of the cases for each alternative.

The characterization of the economic outlook differs somewhat across the three alternatives. Alternatives A and B note that economic activity has continued to pick up, while Alternative C states that a recovery is under way. All three acknowledge that the deterioration in labor markets is abating and that activity in the housing sector has increased. Alternatives A and B, however, note that household spending continues to be constrained by a variety of factors. Alternatives B and C point to financial market conditions that have become more supportive of economic growth. In contrast, Alternative A indicates that the recovery will be sluggish and slack in resource utilization will decline quite slowly absent further policy action. As in the November statement, Alternatives A and B note that the Committee expects that inflation will remain subdued for some time because resource slack is likely to dampen cost pressures and because longer-term inflation expectations remain stable. Alternative A mentions that inflation has fallen considerably over the past year. Alternative C indicates that the Committee expects inflation to remain stable, but in response to appropriate monetary policy adjustments rather than because of resource slack.

Each of the three alternatives maintains the target range for the federal funds rate at 0 to ¼ percent, but the alternatives differ in the specification of the size and completion dates of the Federal Reserve's purchase programs for agency MBS and agency debt, and also in their forward guidance regarding the path of the target federal funds rate. Under Alternative A, the Committee would increase its purchases of agency MBS to a total of $1.5 trillion (from the currently planned amount of $1.25 trillion) and extend the timeframe for these purchases to the end of the second quarter of 2010. The Committee also would complete its purchases of about $175 billion of agency debt by the end of the first quarter of 2010. The increase in purchases of MBS would provide additional macroeconomic stimulus, while the extension would permit the pace of transactions to be tapered to promote a smooth transition in markets as the purchases come to an end. Under Alternative B, the statement would be very similar to that for the November meeting. The Committee would reiterate its intention to purchase $1.25 trillion of agency MBS and about $175 billion of agency debt and the plan to complete these purchases by the end of the first quarter of 2010. Alternatives A and B maintain the forward guidance from November that the Committee anticipates maintaining exceptionally low levels of the federal funds rate for an extended period, with this expectation explicitly conditioned on low rates of resource utilization, subdued inflation trends, and stable inflation expectations. Alternative A specifies that the exceptionally low level of the federal funds rate anticipated is the current 0 to ¼ percent target range.

Under Alternative C, the amount of agency MBS purchases would be reduced to $1.1 trillion while agency debt purchases would be reduced to $160 billion. The statement would also indicate that the Committee anticipates that these purchases would be completed by the end of January 2010. Alternative C changes the forward guidance by indicating that the Committee anticipates "low" levels of the federal funds rate "for some time."

The alternatives also differ in their treatment of the discussion of policy tools. Alternative A indicates that the Committee will continue to employ a wide range of policy tools to promote economic recovery and price stability. Alternatives B and C remove the reference to the use of a wide range of policy tools and note that the Committee and the Board of Governors anticipate that a number of liquidity programs will expire on February 1 and that amounts auctioned through the Term Auction Facility will be scaled back further over the first quarter of 2010.

Table 1: Overview of Alternative Language for the December 15-16, 2009 FOMC Announcement

		December Alternatives		
	November FOMC	**A**	**B**	**C**
Forward Guidance on Funds Rate Path				
	"exceptionally low levels of the federal funds rate for an extended period"	"this exceptionally low range for the federal funds rate for an extended period"	"exceptionally low levels of the federal funds rate for an extended period"	"low levels of the federal funds rate for some time"
Agency MBS Purchases				
Total Amount	"a total of" $1.25 trillion	"a total of" $1.5 trillion	$1.25 trillion	"cap" at $1.1 trillion
Pace	pace will "gradually slow"		"is gradually slowing"	
Completion	by the end of the first quarter of 2010	through the second quarter of 2010	by the end of the first quarter of 2010	by the end of January 2010
Agency Debt Purchases				
Total Amount	"about" $175 billion	$175 billion	"about" $175 billion	"cap" at $160 billion
Pace	pace will "gradually slow"		"is gradually slowing"	
Completion	by the end of the first quarter of 2010	by the first quarter of 2010	by the end of the first quarter of 2010	by the end of January 2010
Evaluation of LSAP Timing and Overall Amounts				
	timing and amounts of all LSAPs will continue to be evaluated	timing and amounts of all LSAPs will continue to be evaluated		
Liquidity Facilities				
	adjustments as warranted	adjustments as warranted	expire on February 1	

November FOMC Statement

Information received since the Federal Open Market Committee met in September suggests that economic activity has continued to pick up. Conditions in financial markets were roughly unchanged, on balance, over the intermeeting period. Activity in the housing sector has increased over recent months. Household spending appears to be expanding but remains constrained by ongoing job losses, sluggish income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment and staffing, though at a slower pace; they continue to make progress in bringing inventory stocks into better alignment with sales. Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will support a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.

With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.

In these circumstances, the Federal Reserve will continue to employ a wide range of tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of $1.25 trillion of agency mortgage-backed securities and about $175 billion of agency debt. The amount of agency debt purchases, while somewhat less than the previously announced maximum of $200 billion, is consistent with the recent path of purchases and reflects the limited availability of agency debt. In order to promote a smooth transition in markets, the Committee will gradually slow the pace of its purchases of both agency debt and agency mortgage-backed securities and anticipates that these transactions will be executed by the end of the first quarter of 2010. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted.

December FOMC Statement—Alternative A

1. Information received since the Federal Open Market Committee met in **November** suggests that economic activity has continued to pick up **and that the deterioration in the labor market is abating**. The housing sector has **shown some signs of improvement** over recent months**, boosted in part by government incentives for first-time homebuyers**. Household spending appears to be expanding but remains constrained by **the weak labor market, modest** income growth, lower housing wealth, and tight credit. **Business spending is being dampened by firms' efforts to reduce inventories to bring them** into better alignment with sales **and by cutbacks in fixed investment**. **Partly reflecting these factors, the Committee anticipates that the economic recovery will be sluggish and that slack in resource utilization will diminish quite slowly absent further policy action.**
2. **Inflation has fallen considerably over the past year.** With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.
3. **To promote a stronger economic recovery and higher resource utilization, the Committee will provide additional monetary stimulus by increasing its purchases of agency mortgage-backed securities to a total of $1.5 trillion, up from the previously announced amount of $1.25 trillion; the Committee anticipates that these purchases will be executed by the end of the second quarter of 2010. The Committee is also in the process of purchasing** $175 billion of agency debt**; it** anticipates that these purchases will be **completed** by the end of the first quarter of 2010. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that low rates of resource utilization, subdued inflation trends, and stable inflation expectations are likely to warrant **this** exceptionally low **range for** the federal funds rate for an extended period. The Federal Reserve will continue to employ a wide range of tools to promote economic recovery and to preserve price stability. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted.

December FOMC Statement—Alternative B

1. Information received since the Federal Open Market Committee met in **November** suggests that economic activity has continued to pick up **and that the deterioration in the labor market is abating**. The housing sector has **shown some signs of improvement** over recent months. Household spending appears to be expanding **at a moderate rate, though it** remains constrained by **a weak labor market, modest** income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment, though at a slower pace; they continue to make progress in bringing inventory stocks into better alignment with sales. **Financial market conditions have become more supportive of economic growth.** Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will **contribute to** a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.
2. With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.
3. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve **is in the process of purchasing** $1.25 trillion of agency mortgage-backed securities and about $175 billion of agency debt. In order to promote a smooth transition in markets, the Committee **is** gradually **slowing** the pace of **these** purchases, and **it** anticipates that these transactions will be executed by the end of the first quarter of 2010. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.
4. **In light of ongoing improvements in the functioning of financial markets, the Committee and the Board of Governors anticipate that most of the Federal Reserve's special liquidity facilities will expire on February 1, 2010, consistent with the Federal Reserve's announcement of June 25, 2009. These facilities include the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Primary Dealer Credit Facility, and the Term Securities Lending Facility. The Federal Reserve will also be working with its central bank counterparties to close its temporary liquidity swap arrangements by February 1. The Federal Reserve expects that amounts provided under the Term Auction Facility will continue to be scaled back in early 2010. The anticipated expiration dates for the Term Asset-Backed Securities Loan Facility remain set at June 30, 2010, for loans backed by new-issue commercial mortgage-backed securities and March 31, 2010, for loans backed by all other types of collateral. The Federal Reserve is prepared to modify these plans if necessary to support financial stability and economic growth.**

December FOMC Statement—Alternative C

1. Information received since the Federal Open Market Committee met in **November indicates** that **a recovery in** economic activity **is under way**. The housing sector has **shown some signs of improvement** over recent months. **The deterioration in the labor market appears to be abating and** household spending **is** expanding. Businesses **have made additional** progress in bringing inventory stocks into better alignment with sales. **Financial market conditions have become more supportive of economic growth.** Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will **contribute to** a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.

2. Longer term inflation expectations **have been** stable**, and** the Committee expects that**, with appropriate monetary policy adjustments,** inflation will remain **at levels consistent with price stability**.

3. **At this meeting,** the Committee **maintained** the target range for the federal funds rate at **its** exceptionally low level of 0 to ¼ percent, and **it** anticipates that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant low levels of the federal funds rate for **some time**. **In view of continued improvements in financial market conditions and the economic outlook, the Committee decided to cap its purchases of agency mortgage-backed securities at $1.1 trillion and its purchases of agency debt at $160 billion, and it** anticipates that these transactions will be executed by the end of **January 2010**. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.

4. **In light of ongoing improvements in the functioning of financial markets, the Committee and the Board of Governors anticipate that most of the Federal Reserve's special liquidity facilities will expire on February 1, 2010, consistent with the Federal Reserve's announcement of June 25, 2009. These facilities include the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Primary Dealer Credit Facility, and the Term Securities Lending Facility. The Federal Reserve will also be working with its central bank counterparties to close its temporary liquidity swap arrangements by February 1. The Federal Reserve expects that amounts provided under the Term Auction Facility will continue to be scaled back in early 2010. The anticipated expiration dates for the Term Asset-Backed Securities Loan Facility remain set at June 30, 2010, for loans backed by new-issue commercial mortgage-backed securities and March 31, 2010, for loans backed by all other types of collateral. The Federal Reserve is prepared to modify these plans if necessary to support financial stability and economic growth.**

THE CASE FOR ALTERNATIVE B

If policymakers believe that completion of the Committee's large-scale asset purchase programs as previously announced as well as the maintenance of exceptionally low levels of the funds rate for an extended period is a reasonable course of action given current economic circumstances, the Committee might adopt the policy actions and language of Alternative B. Such a choice might be appealing if the Committee shares the staff's assessment that incoming economic data and recent financial market developments are consistent with sustained but moderate growth in output and subdued inflation over coming quarters. In the staff forecast, output expands at a pace above trend over the forecast period, and the unemployment rate gradually declines. Nevertheless, even by the end of 2011, the unemployment rate remains above 8 percent, significantly higher than the staff's estimate of the NAIRU, suggesting that a very accommodative stance of policy will remain appropriate for a considerable amount of time. While the Greenbook-consistent measures of short-run r^* have been revised up a bit since the November meeting, these measures are still negative and below the actual level of the real federal funds rate. Moreover, the funds rate path implied by the estimated outcome-based rule (Chart 8) seems consistent with the statement that economic conditions are likely to warrant exceptionally low levels of the funds rate for an extended period.

Even if participants believed that the economy might recover more quickly than in the staff forecast, they may nevertheless believe that they have considerable time before policy firming becomes appropriate. For example, in the "Stronger Recovery" scenario in the Greenbook, inflation still remains low over the forecast period even though policy firming does not commence until the end of 2010. Accordingly, policymakers may prefer to accumulate more conclusive evidence that the economic recovery is firmly established before tightening policy. This preference may be reinforced by a view that some of the observed pickup in aggregate spending may reflect government policy actions whose influence is expected to wane in 2011. More generally, participants may simply view the strength and sustainability of the recovery as still highly uncertain.

While policymakers may view the current and projected slack in resource utilization, particularly the persistently high unemployment rate, as unsatisfactory, an expansion of the LSAPs or other policy actions to provide more stimulus might be judged as likely to be relatively ineffective and as entailing significant potential costs. Additional actions to stimulate the economy could boost inflation expectations, which may call for a reversal in the stance of policy before the recovery is sufficiently well established. Moreover, a larger Federal Reserve balance sheet could also present challenges for the Committee's exit strategy, either because the greater size could result in larger unrealized mark-to-market losses on the portfolio in the event of an abrupt upward movement in interest rates or because of the potentially greater difficulty in controlling short-term interest rates that could result from even higher reserve balances.

The Federal Reserve announced in June that many of the liquidity facilities that have been supporting financial markets would be extended until February 1, 2010. Because that date is approaching and financial market functioning has improved to a great extent, policymakers may wish to confirm expectations that those liquidity facilities will in fact be wound down early next year and that the Federal Reserve is in the process of normalizing its support for markets. The proposed statement in Alternative B provides language to describe that development.

Market participants generally appear to expect a statement along the lines of Alternative B, so the announcement of this action would likely elicit only modest reaction in financial markets. To the extent that some market participants may place some odds on a further extension of liquidity programs, the confirmation that these programs will likely be discontinued early in the new year could result in some pressures in money markets. Moreover, the announcement could be seen as another milestone in the normalization of monetary policy implementation and—even with the language to the contrary in the statement—may be viewed as suggesting that the date at which policy firming would commence was drawing near. On the other hand, market participants might view the statement as reassuring because it would reiterate the Committee's and the Board's assessment that financial conditions have improved enough to allow the withdrawal of Federal Reserve support.

THE CASE FOR ALTERNATIVE C

If policymakers viewed the incoming data as indicating that the recovery is gaining strength and that inflation pressures could begin to mount before long, they might wish to trim the size of the LSAPs and suggest in the policy statement that the Committee may need to raise the federal funds rate target in the not-too-distant future, as in Alternative C. Under this alternative, the Committee would reduce its total purchases of agency MBS and agency debt compared with the previously announced amounts and bring the LSAPs to a more rapid close. The statement would also suggest a somewhat earlier start to policy firming by stating that the federal funds rate would remain at "low levels" for "some time" as opposed to the current characterization of "exceptionally low levels" for "an extended period." The statement for Alternative C would use the same language as proposed for Alternative B regarding the likely expiration of most of the liquidity facilities.

Participants might be particularly attracted to Alternative C if they saw greater upside risks to inflation and inflation expectations than does the staff. With a somewhat brighter labor market outlook, a falling foreign exchange value of the dollar, and readings on some measures of longer-term inflation expectations that are at the high end of their ranges over recent years, a significant further expansion of the Federal Reserve's balance sheet could be seen as risking a significant increase in inflation expectations that might prove costly to reverse later. The "Higher Inflation Expectations" scenario in the Greenbook presents such an outcome. A change in the stance of monetary policy at this point in time could be viewed as appropriate in order to keep inflation expectations stable.

Members' inflation concerns could be amplified if the recent spending, production, and labor market indicators were seen as suggesting that aggregate demand going forward could be stronger than had been expected and that the softness in labor costs that had prevailed might be coming to an end, along the lines of the "Stronger Recovery" scenario presented in the Greenbook. Although bank lending continues to contract, large firms have ready access to capital markets, and broader financial market conditions became more supportive of growth, on balance, over the intermeeting period, with a lower foreign exchange value of the dollar, lower interest rates, and rising equity prices. While business executives no doubt remain quite cautious, recent data on employment may indicate that firms will become willing to hire and expand production sooner than anecdotal information might suggest, pointing to a more rapid rise in employment and investment than in the staff forecast.

Members may also believe that measures of resource slack are subject to considerable error and, as a result, are not reliable guides for the conduct of monetary policy. Consequently, they may put less weight on the estimated level of output and unemployment gaps in forecasting inflation trends and more weight on inflation expectations and the change in output than does the staff. Misinterpreting the readings from the output gap could lead to undesirable outcomes for inflation. For this reason, participants may wish to signal that they are prepared to raise the federal funds rate sooner than had been anticipated, in addition to reducing the size of LSAPs.

Finally, the Committee may be concerned that even the present size of the Federal Reserve's balance sheet could pose challenges when it comes time to begin removing policy accommodation. Some participants may believe that the current extremely high level of reserves could give significant impetus to bank lending as banks become more confident about the outlook and their own capital positions. A very sharp pickup in lending could be unwelcome if it comes at a time when the Committee wishes to remove policy accommodation. The level of reserves might also be of concern if participants are not confident that the tools at the Committee's disposal will prove sufficient to allow it to raise short-term rates when doing so becomes appropriate. In either case, the Committee might choose to cap its purchases in order to limit the resulting risks. As in Alternative B, the Committee may also view it as appropriate to affirm that the various liquidity facilities will be winding down.

The adoption of Alternative C would greatly surprise market participants and lead them to reevaluate, perhaps significantly, their beliefs regarding the Committee's intentions. The expected near-term path of the federal funds rate could rise notably as investors inferred that a tightening in policy might be drawing near. Longer-term rates presumably would also rise as the path for policy was shifted up, and equity prices might fall. Importantly, MBS and primary mortgage rates could well move sharply higher; Federal Reserve MBS purchases currently exceed the pace of new issues significantly, and the adoption of Alternative C would imply a dramatic scaling back of those purchases. As a result, functioning in the MBS market might become impaired for a time. Forward measures of inflation compensation would probably decline if the Committee's decision led investors to mark down their longer-term inflation expectations, and the exchange value of the dollar would likely rise.

Given the strong reaction that curtailing the purchases of securities might provoke, the Committee might prefer to consider combining the forward guidance on the federal funds rate path in Alternative C with the LSAP purchases proposed in Alternative B. By indicating that the Committee anticipated low interest rates for some time (instead of an extended period), such a combination would be less likely to generate disruptions in the functioning of MBS and mortgage markets. Nevertheless, the change in the forward guidance about the path of the federal funds rate would still prompt a strong revision to investors' expectations, pushing up interest rates and likely causing equity prices to fall somewhat. Another possible combination is to reduce the LSAPs as in Alternative C and maintain the forward guidance language from Alternative B. Such a combination would have the possible advantage of exiting from unconventional policy earlier. However, this combination would also come as a considerable surprise to market participants and could well also disrupt MBS and mortgage markets to some degree and push up longer-term interest rates, although the rise in longer-term rates might be attenuated by the Committee's continued expectation that economic conditions would warrant maintaining an exceptionally low rate for the federal funds rate for an extended period.

THE CASE FOR ALTERNATIVE A

If the members' views of the economic outlook were similar to the staff forecast, with the unemployment rate remaining at very high levels for many quarters to come and inflation expected to fall further below a range consistent with price stability, then they might be inclined to put in place additional policy stimulus. To do so, the Committee could increase the quantity of agency MBS purchases and extend the timeframe for those purchases while continuing to signal that the federal funds rate will remain at the effective zero lower bound for an extended period, as in Alternative A. Even if they anticipate an outcome similar to the staff forecast as most likely, participants may see a significant risk that the economy could fall back into recession next year, perhaps after some of the support from government policies and liquidity facilities is removed. Also, even without a relapse in the real economy, additional policy accommodation may be seen as appropriate in view of the staff's projection that, for many years, unemployment will remain very high and inflation below the majority of Committee participants' long-run projections.

The Committee may view some of the recent stronger readings on economic activity as reflecting temporary forces, such as fiscal policy, that may be overstating the underlying momentum of the economy. Moreover, the staff may be underestimating the restraint that weakness in the balance sheets of households and some firms will put on the expansion. Indeed, the continued sharp contraction in bank credit and the sluggishness in M2 growth may point to slower economic expansion than is captured by the staff's forecast. The "Weaker Aggregate Demand" scenario provided in the Greenbook illustrates these downside risks to the economy.

The Committee's previous decisions to maintain the size of LSAPs, rather than increase them, may have been based partly on concerns about potential complications associated with the exit strategy. Staff work on the various tools to drain reserves may have provided greater confidence to policymakers that additional purchases of securities can be undertaken without significantly complicating the exit strategy. In order to promote a smooth transition in financial markets, given the greater quantity of purchases, the Committee may view it as desirable to extend the time period over which the purchases are to be completed to the end of the second quarter.

An announcement such as that in Alternative A would come as a surprise to market participants. Most likely, short-term interest rates would fall as investors priced in a later liftoff of the federal funds rate, and the resulting decline in mortgage and other longer-term rates would most likely be amplified by the increase in MBS purchases. Equity prices might rise, while the foreign exchange value of the dollar would likely decline. Inflation compensation could increase to some degree if investors revised up their inflation expectations based on a larger size of the Federal Reserve's balance sheet and greater policy accommodation. Alternative A does not explicitly mention the expiration of the various liquidity facilities as do the other alternatives. While this omission would in no way preclude policymakers from letting the facilities expire in February, participants may prefer to explicitly signal that the Federal Reserve's support for financial markets is winding down by including in Alternative A the paragraph proposed on the facilities' expiration proposed for Alternatives B and C.

LONG-RUN PROJECTIONS OF THE BALANCE SHEET AND MONETARY BASE

In this section, three scenarios for the balance sheet are presented that correspond to the different paths for large-scale asset purchases (LSAP) of agency debt securities and agency MBS proposed in the three policy alternatives discussed in the "Policy Alternatives" section of the Bluebook. The baseline scenario corresponds to Alternative B in which agency MBS purchases of $1.25 trillion and agency debt securities purchases of $175 billion are executed by the end of the first quarter of 2010. Under Alternative A, the agency MBS purchases are increased by $250 billion to a total $1.5 trillion and are completed by the end of the second quarter of 2010; purchases of agency debt securities under this alternative remain at $175 billion and are executed by the end of the first quarter of 2010. Under Alternative C, the quantities of agency MBS purchases and agency debt purchases are reduced to $1.1 trillion and $160 billion, respectively; all purchases under this alternative are completed by January 2010.

Projections for these scenarios are developed based on assumptions about each component of the balance sheet.[9] Details of these assumptions are contained in Appendix C. Substantive revisions to these assumptions, relative to the October Bluebook, are outlined below.

In all three scenarios, total assets are lower over the majority of the projection period than in the October Bluebook, largely due to a projected decrease in credit extended through the liquidity facilities that more than offsets an increase in the

[9] The Greenbook projection assumes that the federal funds rate begins to rise in the fourth quarter of 2011. The balance sheet projections assume that the interest rate paid on excess balances becomes an effective floor for the federal funds rate and that no draining of reserve balances is required to achieve the higher target federal funds rate.

forecasted level of agency MBS holdings. The projected levels of credit extended through the primary credit program, Term Auction Facility (TAF), and the Term Asset-Backed Securities Loan Facility (TALF) were revised down in response to lower use of these facilities over the intermeeting period. Projections of these and other Federal Reserve liquidity programs and credit facilities implicitly incorporate a judgment about the potential interactions between their level and the level of reserve balances. The upward revision to the level of agency MBS holdings reflects a lower assumed pace of prepayments.[10]

On the liability side of the balance sheet, the projected levels of reverse repurchase agreements with foreign official and international accounts and of deposits held at the Federal Reserve other than by depository institutions or the U.S. Treasury were revised down reflecting decreases over the intermeeting period.[11] On net, the revisions in the asset and liability components of the balance sheet imply an upward revision in the level of reserve balances over the projection period.

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[10] The change in the path for prepayments largely reflects the incorporation of a more up-to-date forecast from one of the MBS purchase program investment managers.

[11] The decrease in other deposits held at the Federal Reserve primarily reflects a decrease in deposits held at the Federal Reserve by Government Sponsored Enterprises (GSEs).

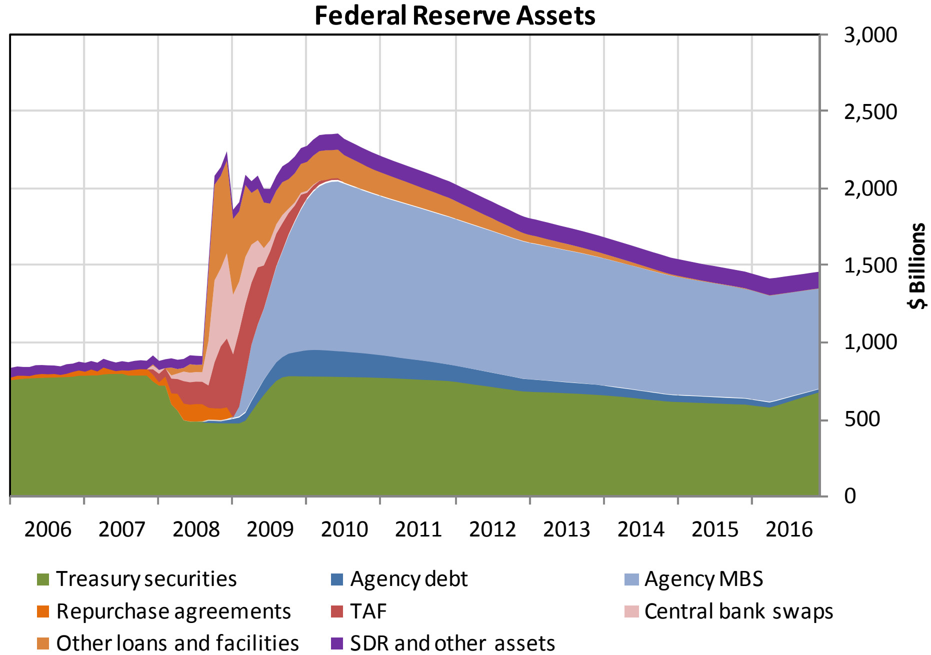
Balance Sheet Projections Summary			
	Alternative A	Alternative B	Alternative C
Agency Debt Securities			
Total Purchased	$175 billion	$175 billion	$160 billion
December 2016	$20 billion	$20 billion	$15 billion
Agency MBS			
Total Purchased	$1.5 trillion	$1.25 trillion	$1.1 trillion
December 2016	$0.8 trillion	$0.7 trillion	$0.6 trillion
Total Assets			
Peak month	September 2010	June 2010	December 2009
Peak amount	$2.5 trillion	$2.4 trillion	$2.2 trillion
December 2016	$1.5 trillion	$1.5 trillion	$1.5 trillion
Reserve Balances			
Peak month	September 2010	December 2009	December 2009
Peak amount	$1.3 trillion	$1.2 trillion	$1.1 trillion

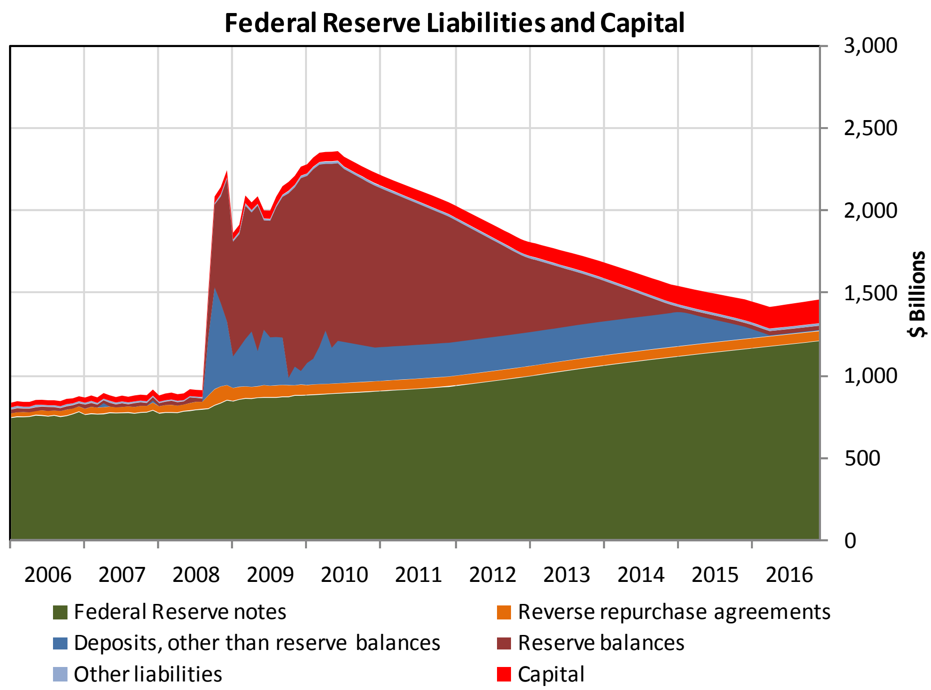
The size and timing of the peak level of the balance sheet varies in each scenario, primarily because of the different paths for the LSAPs. For the baseline and Alternative A scenarios, the balance sheet reaches a peak of $2.4 trillion and $2.5 trillion, respectively, with the peak occurring a quarter after the agency MBS LSAPs are assumed to be completed. In Alternative C, the size of the balance sheet peaks at $2.2 trillion in December 2009. By the end of 2016, the size of the balance sheet under each scenario declines to roughly $1.5 trillion.[12]

[12] The composition of Federal Reserve assets in all three of these projections differs notably from historical patterns. Prior to August 2007, U.S. Treasury securities were about 90 percent of assets and the Federal Reserve did not hold any agency mortgage-backed securities. By contrast, under the baseline scenario, Treasury securities are projected to account for only around 34 percent of total assets at the end of 2009 and rise to just 46 percent of total assets at the end of the projection period.

With respect to the level of reserve balances, the peak occurs at the end of 2009 under the baseline and Alternative C scenarios at $1.2 trillion and $1.1 trillion, respectively. Although LSAPs continue into 2010 in each of these scenarios, reserve balances begin to decline at the beginning of the year because of the decline in lending through liquidity and credit facilities and a return of the U.S. Treasury's supplementary financing account to $200 billion following an assumed increase in the debt ceiling. In contrast, under Alternative A, reserve balances do not peak until the third quarter of 2010 at $1.3 trillion, reflecting the extension of asset purchases through the middle of next year. Since the monetary base is derived from the balance sheet projections of Federal Reserve notes in circulation and reserve balances, the path of the monetary base in each scenario largely mirrors the path of reserve balances. Specifically, in each scenario, the monetary base peaks at essentially the same time as reserve balances, and as reserve balances decline, the monetary base contracts. Towards the end of the projection period, when reserve balances are assumed to stabilize at $25 billion, the growth rate of the monetary base roughly matches the growth rate of Federal Reserve notes in circulation.

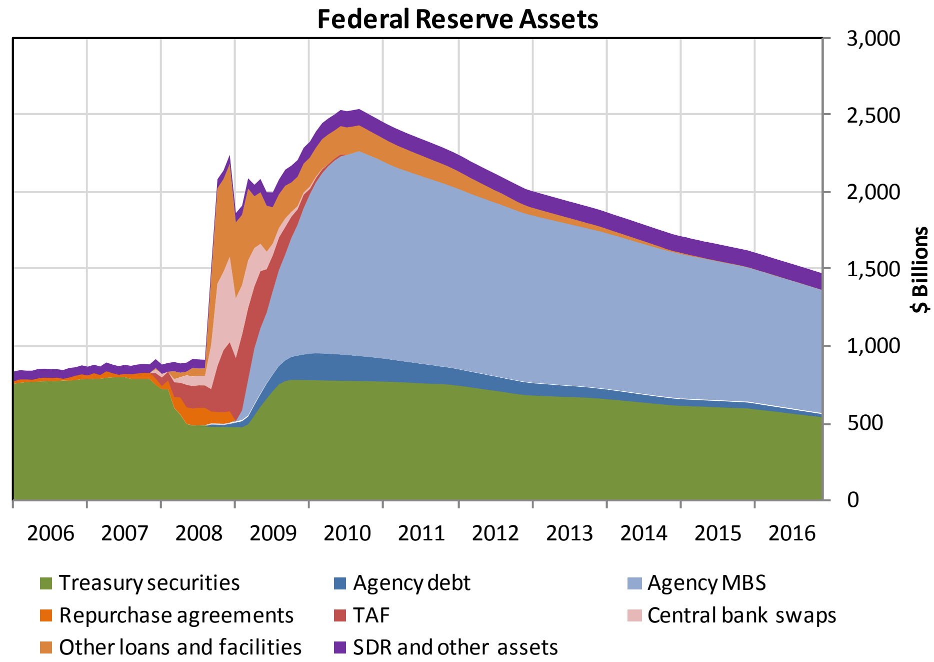
Baseline Scenario

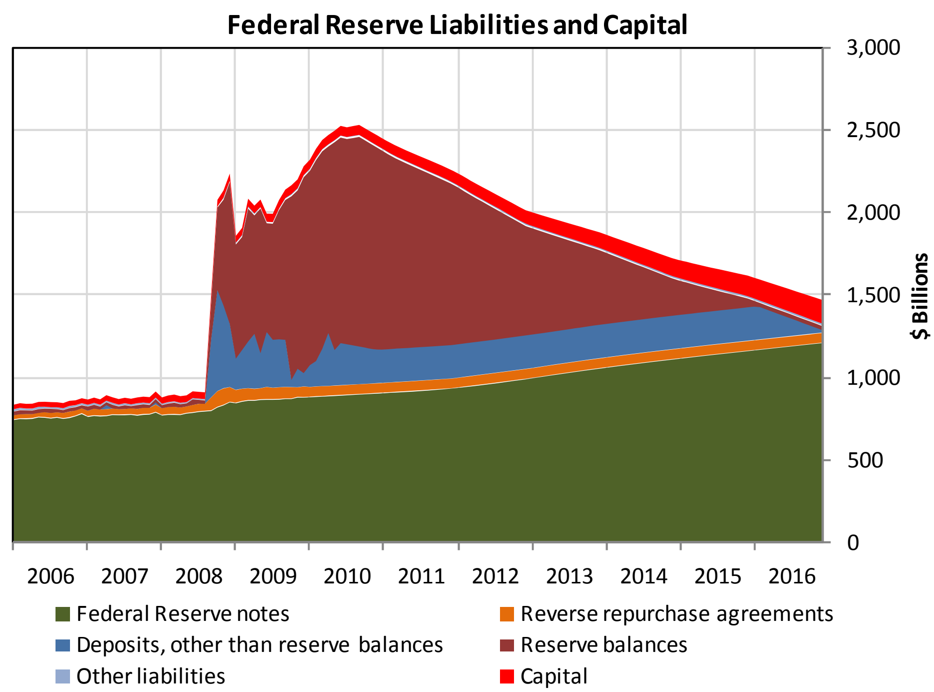




Source. Federal Reserve H.4.1 statistical release and staff calculations.

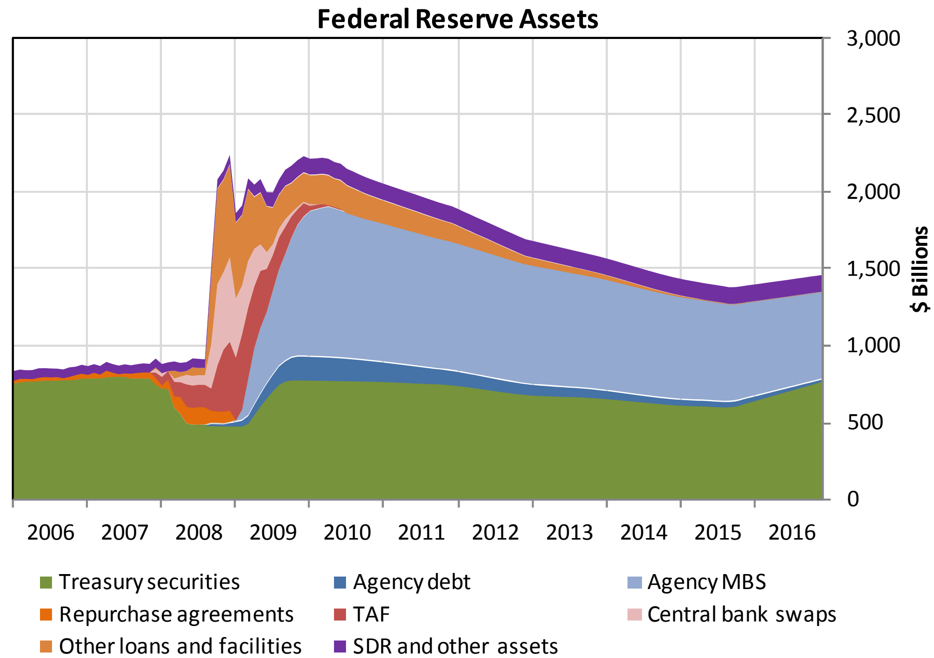
Alternative A

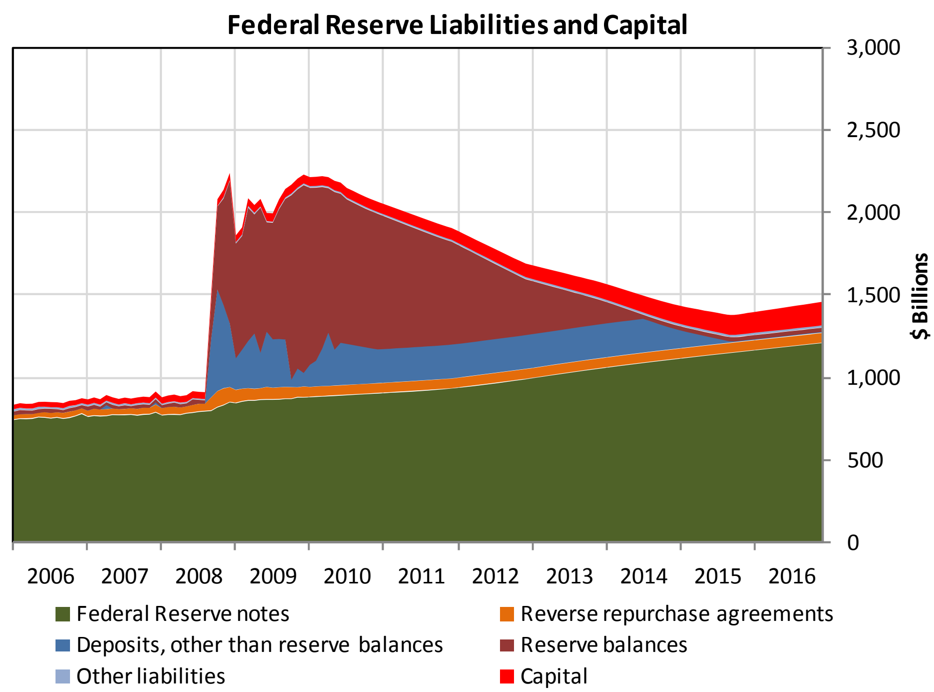




Source. Federal Reserve H.4.1 statistical release and staff calculations.

Alternative C





Source. Federal Reserve H.4.1 statistical release and staff calculations.

Growth Rates for the Monetary Base				
Date	Baseline	Alternative A	Alternative C	*Memo:* October Baseline
		Percent, annual rate		
		Monthly		
Sep-09	66.9	66.9	66.9	66.9
Oct-09	45.5	45.5	45.5	88.4
Nov-09	71.6	71.6	71.6	94.9
Dec-09	51.0	58.5	41.8	16.0
Jan-10	14.0	28.3	-3.5	-8.1
Feb-10	-4.5	9.8	-24.8	-10.3
Mar-10	-7.4	6.9	-27.0	-14.1
Apr-10	-38.6	-23.1	-52.0	-9.9
May-10	4.8	18.8	-5.9	10.4
Jun-10	20.6	33.3	10.1	8.9
		Quarterly		
Q3 2009	-2.6	-2.6	-2.6	-2.5
Q4 2009	56.8	57.7	55.6	73.7
Q1 2010	21.9	33.6	6.9	6.9
Q2 2010	-11.7	2.7	-26.0	-4.3
Q3 2010	-4.4	10.2	-9.7	-2.4
Q4 2010	-7.4	-0.1	-6.6	-10.1
		Annual - Q4 to Q4		
2009	39.7	40.0	39.4	45.0
2010	-0.6	11.9	-8.7	-2.5
2011	-9.2	-9.6	-9.0	-9.9
2012	-13.1	-12.6	-13.4	-13.1
2013	-9.4	-9.2	-9.6	-9.6
2014	-11.3	-10.8	-7.0	-10.8
2015	-0.1	-8.9	4.2	0.6
2016	3.9	-0.1	3.9	3.8

Note. Not seasonally adjusted. The calculated growth rates of the monetary base presented in the table are based on an approximation for month-average values.

Debt, Bank Credit, and Money Forecasts

The staff projects that domestic nonfinancial sector debt will expand at an annual rate of about 1¾ percent in the fourth quarter of 2009 and then at about a 5½ percent pace, on average, over 2010 and 2011. The forecast reflects rapid growth in federal government debt and a moderate increase in state and local government debt. By contrast, increases in household and nonfinancial business debt are projected to be sluggish. Staff anticipates that household debt will not begin to expand noticeably until the second half of next year, and the pace of borrowing is expected to be subdued through 2011 because of roughly flat home prices, a higher household saving rate, relatively tight lending standards, and loan charge-offs that remain elevated for some time. The growth of nonfinancial business debt is anticipated to be modest, as demand for external funds remains soft, banks' terms and standards for business loans ease only gradually, and the commercial real estate market remains very weak.

Commercial bank credit is expected to contract at an annual rate of 8½ percent in the fourth quarter, reflecting continued steep drops in loans—especially to businesses—and only a small increase in banks' holdings of securities. Bank credit is expected to increase about 1½ percent in 2010 as moderate growth in securities offsets a further decline in loans for much of the year. Loan growth resumes late in 2010 as the economic recovery gains steam and leads to a pickup in loan demand and a gradual easing of standards and terms, and in 2011 bank credit growth accelerates to about 5 percent. C&I loans are projected to continue to contract until late in 2010 and to expand only sluggishly in 2011. Weak fundamentals for commercial real estate and soft home prices hold down real estate loans through most of 2010, and that loan component is expected to expand only modestly in 2011. Consumer loans on banks' books are expected to be about flat in 2010 before rising at a moderate rate in 2011.

M2 is projected to expand at an annual rate of only 2½ percent in the fourth quarter, as a reallocation of household wealth toward higher-yielding assets continues to weigh on money demand to some degree. Over the next two years, outflows from money market mutual funds and small time deposits are expected to diminish, while growth in liquid deposits is expected to remain strong. As a result, the staff anticipates that M2 will accelerate gradually over 2010 and will expand at a pace closer to that of nominal GDP by 2011.

Bluebook Alternatives

Strictly Confidential Class II FOMC
10 Dec 2009 10:40 AM
FINAL

Growth Rates for M2
(percent, annual rate)

		Greenbook Forecast*
	Monthly Growth Rates	
	Apr-09	-7.7
	May-09	10.2
	Jun-09	4.6
	Jul-09	-2.5
	Aug-09	-7.4
	Sep-09	4.0
	Oct-09	3.9
	Nov-09	4.6
	Dec-09	2.1
	Jan-10	1.8
	Feb-10	1.9
	Mar-10	2.0
	Apr-10	2.2
	May-10	2.3
	Jun-10	2.5
	Jul-10	2.6
	Aug-10	2.9
	Sep-10	3.0
	Oct-10	3.2
	Nov-10	3.4
	Dec-10	3.7
	Quarterly Growth Rates	
	2009 Q2	2.7
	2009 Q3	0.1
	2009 Q4	2.6
	2010 Q1	2.2
	2010 Q2	2.2
	2010 Q3	2.7
	2010 Q4	3.2
	Annual Growth Rates	
	2008	8.3
	2009	4.5
	2010	2.6
	2011	4.6
Growth From	**To**	
Oct-09	Mar-10	2.5
2008 Q4	2009 Q4	4.5
2009 Q4	2010 Q4	2.6

*This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast.
Actual data through November 30, 2009; projections thereafter.

DIRECTIVE

The November directive and draft language for the December directive are provided below.

NOVEMBER FOMC MEETING

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about $175 billion in housing-related agency debt and about $1.25 trillion of agency MBS by the end of the first quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

DECEMBER FOMC MEETING — ALTERNATIVE A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about $175 billion in housing-related agency debt by the end of the first quarter of 2010 and about $1.5 trillion of agency MBS by the end of the second quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

DECEMBER FOMC MEETING — ALTERNATIVE B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about $175 billion in housing-related agency debt and about $1.25 trillion of agency MBS by the end of the first quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

DECEMBER FOMC MEETING — ALTERNATIVE C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about $160 billion in housing-related agency debt and about $1.1 trillion of agency MBS by the end of January 2010. The Desk is expected to slow the pace of these purchases as they near completion. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

APPENDIX A: MEASURES OF THE EQUILIBRIUM REAL RATE

The equilibrium real rate is the real federal funds rate that, if maintained, would be projected to return output to its potential level over time. The short-run equilibrium rate is defined as the rate that would close the output gap in twelve quarters given the corresponding model's projection of the economy. The medium-run concept is the value of the real federal funds rate projected to keep output at potential in seven years, under the assumption that monetary policy acts to bring actual and potential output into line in the short run and then keeps them equal thereafter. The TIPS-based factor model measure provides an estimate of market expectations for the real federal funds rate seven years ahead.

The actual real federal funds rate is constructed as the difference between the nominal rate and realized inflation, where the nominal rate is measured as the quarterly average of the observed federal funds rate, and realized inflation is given by the log difference between the core PCE price index and its lagged value four quarters earlier. If the upcoming FOMC meeting falls early in the quarter, the lagged inflation measure ends in the last quarter. For the current quarter, the nominal rate is specified as the target federal funds rate on the Bluebook publication date.

Measure	Description
Single-equation Model	The measure of the equilibrium real rate in the single-equation model is based on an estimated aggregate-demand relationship between the current value of the output gap and its lagged values as well as the lagged values of the real federal funds rate.
Small Structural Model	The small-scale model of the economy consists of equations for six variables: the output gap, the equity premium, the federal budget surplus, the trend growth rate of output, the real bond yield, and the real federal funds rate.
EDO Model	Estimates of the equilibrium real rate using EDO—an estimated dynamic-stochastic-general-equilibrium (DSGE) model of the U.S. economy—depend on data for major spending categories, price and wages, and the federal funds rate as well as the model's structure and estimate of the output gap.
FRB/US Model	Estimates of the equilibrium real rate using FRB/US—the staff's large-scale econometric model of the U.S. economy—depend on a very broad array of economic factors, some of which take the form of projected values of the model's exogenous variables.
Greenbook-consistent	Two measures are presented—based on the FRB/US and the EDO models. Both models are matched to the extended Greenbook forecast. Model simulations determine the value of the real federal funds rate that closes the output gap conditional on the extended baseline.
TIPS-based Factor Model	Yields on TIPS (Treasury Inflation-Protected Securities) reflect investors' expectations of the future path of real interest rates. The TIPS-based measure of the equilibrium real rate is constructed using the seven-year-ahead instantaneous real forward rate derived from TIPS yields as of the Bluebook publication date. This forward rate is adjusted to remove estimates of the term and liquidity premiums based on a three-factor arbitrage-free term-structure model applied to TIPS yields, nominal yields, and inflation.

Estimates of the real federal funds rate depend on the proxies for expected inflation used. The table below shows estimated real federal funds rates based on lagged core PCE inflation, the definition used in the Equilibrium Real Federal Funds Rate chart; lagged four-quarter headline PCE inflation; and projected four-quarter headline PCE inflation beginning with the next quarter. For each estimate of the real rate, the table also provides the Greenbook-consistent measure of the short-run equilibrium real rate and the average actual real federal funds rate over the next twelve quarters.

Proxy used for expected inflation	Actual real federal funds rate (current value)	Greenbook-consistent measure of the equilibrium real funds rate (current value)	Average actual real funds rate (twelve-quarter average)
Lagged core inflation	-1.4	-1.9	-0.6
Lagged headline inflation	-1.2	-2.1	-0.8
Projected headline inflation	-1.2	-2	-0.7

APPENDIX B: ANALYSIS OF POLICY PATHS AND CONFIDENCE INTERVALS

RULE SPECIFICATIONS

For the following rules, i_t denotes the federal funds rate for quarter t, while the explanatory variables include the staff's projection of trailing four-quarter core PCE inflation (π_t), inflation two and three quarters ahead ($\pi_{t+2|t}$ and $\pi_{t+3|t}$), the output gap in the current period and one quarter ahead ($y_t - y_t^*$ and $y_{t+1|t} - y_{t+1|t}^*$), and the three-quarter-ahead forecast of annual average GDP growth relative to potential ($\Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t}^*$), and π^* denotes an assumed value of policymakers' long-run inflation objective. The outcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen using the Bayesian information criterion. Each rule incorporates a 75 basis point shift in the intercept, specified as a sequence of 25 basis point increments during the first three quarters of 1998. The first two simple rules were proposed by Taylor (1993, 1999). The prescriptions of the first-difference rule do not depend on assumptions regarding r^* or the level of the output gap; see Orphanides (2003).

Outcome-based rule	$i_t = 1.20 i_{t-1} – 0.39 i_{t-2} + 0.19[1.17 + 1.73\pi_t + 3.66(y_t - y_t^*) - 2.72(y_{t-1} - y_{t-1}^*)]$
Forecast-based rule	$i_t = 1.18 i_{t-1} – 0.38 i_{t-2} + 0.20[0.98 + 1.72\pi_{t+2\|t} + 2.29(y_{t+1\|t} - y_{t+1\|t}^*) – 1.37(y_{t-1} - y_{t-1}^*)]$
Taylor (1993) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi^*) + 0.5(y_t - y_t^*)$
Taylor (1999) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi^*) + (y_t - y_t^*)$
First-difference rule	$i_t = i_{t-1} + 0.5(\pi_{t+3\|t} - \pi^*) + 0.5(\Delta^4 y_{t+3\|t} - \Delta^4 y_{t+3\|t}^*)$

FRB/US MODEL SIMULATIONS

Prescriptions from the two empirical rules are computed using dynamic simulations of the FRB/US model, implemented as though the rule were followed starting at this FOMC meeting. The dotted line labeled "Previous Bluebook" is based on the current specification of the policy rule, applied to the previous Greenbook projection. Confidence intervals are based on stochastic simulations of the FRB/US model with shocks drawn from the estimated residuals over 1969-2008.

INFORMATION FROM FINANCIAL MARKETS

The expected funds rate path is based on Eurodollar quotes and implied three-month forward rates from swaps, and the confidence intervals for this path are constructed using prices of interest rate caps.

NEAR-TERM PRESCRIPTIONS OF SIMPLE POLICY RULES

These prescriptions are calculated using Greenbook projections for inflation and the output gap. Because the first-difference rule involves the lagged funds rate, the value labeled "Previous Bluebook" for the current quarter is computed using the actual value of the lagged funds rate, and the one-quarter-ahead prescriptions are based on this rule's prescription for the current quarter.

References

Taylor, John B. (1993). "Discretion versus policy rules in practice," *Carnegie-Rochester Conference Series on Public Policy*, vol. 39 (December), pp. 195-214.

——————— (1999). "A Historical Analysis of Monetary Policy Rules," in John B. Taylor, ed., *Monetary Policy Rules*. The University of Chicago Press, pp. 319-341.

Orphanides, Athanasios (2003). "Historical Monetary Policy Analysis and the Taylor Rule," *Journal of Monetary Economics*, vol. 50 (July), pp. 983-1022.

APPENDIX C: LONG-RUN PROJECTIONS OF THE BALANCE SHEET AND MONETARY BASE

This appendix presents the assumptions underlying the projections provided in the section entitled "Long-Run Projections of the Balance Sheet and Monetary Base."

GENERAL ASSUMPTIONS

The balance sheet projections are constructed on a monthly frequency from December 2009 to December 2016. The few balance sheet items that are not discussed below are assumed to be constant over the projection period at the level observed on November 30, 2009. The projections for all major asset and liability categories are summarized in the charts and table that follow the bullet points.

The Greenbook projection assumes that the federal funds rate begins to rise in the fourth quarter of 2011. The balance sheet projections assume that the interest rate paid on excess balances becomes an effective floor for the federal funds rate and that no draining of reserve balances is required to achieve the higher target federal funds rate.

ASSETS

Asset Purchases

- The baseline scenario incorporates large-scale asset purchases (LSAP) roughly in line with those that have been announced.
    - The Committee purchases $175 billion in agency debt securities and $1.25 trillion in agency MBS; both types of purchases are to be executed by the end of the first quarter of 2010.
        - Agency debt securities and agency MBS are held to maturity and are not replaced. Prepayments of MBS are not reinvested.
        - Holdings of agency debt securities peak at $172 billion in March 2010, and decline slowly over the remainder of the forecast horizon as they mature. The peak is slightly below the announced purchase amount, reflecting the maturity of agency debt securities already in the SOMA portfolio.
        - Due to expected settlement lags and prepayments, agency MBS holdings peak at $1.1 trillion in June 2010, a somewhat lower level than the amount purchased.[13] For agency MBS, the rate of prepayment is based on estimates from one of the program's investment managers. The historically low coupon on these securities implies a relatively slow prepayment rate. As a result, at the end of 2016, $657 billion of the $1.25 trillion of MBS purchased remain on the balance sheet.

[13] Prepayments include regular payments of principal and repayments of mortgages.

- The Committee's purchases of $300 billion in U.S. Treasury securities related to the LSAP program were completed by the end of October 2009.
  - The maturity distribution of the Treasury securities purchased as a part of the LSAP program is based on data from the Federal Reserve Bank of New York's Markets Group. The maturities of most purchases are between two and ten years, with the weighted average maturity being a little over six years.
  - There are no sales of Treasury securities purchased as a part of the LSAP program, and maturing securities are not rolled over. As a result, total holdings of Treasury securities decline as issues mature. Treasury securities held in the SOMA portfolio prior to the initiation of the LSAP program are assumed to be reinvested as they mature.
- In the scenario corresponding to Alternative A, the Committee increases its purchases of agency MBS by $250 billion to a total of $1.5 trillion and extends the timeframe for these purchases to the end of the second quarter of 2010. The Committee completes its purchase of $175 billion in agency debt securities by the end of the first quarter of 2010.
- In the scenario corresponding to Alternative C, the Committee decreases its purchases of agency MBS by $150 billion to a total of $1.1 trillion and reduces its purchases of agency debt securities by $15 billion to a total of $160 billion. The Committee completes these purchases by the end of January 2010.
- A minimum level of $25 billion is set for reserve balances. By the end of the projection period in the baseline and Alternative C scenarios, the expansion of Federal Reserve notes in circulation and capital, combined with a runoff of assets, necessitates not only the reduction of the U.S. Treasury's supplementary financing account to zero, but also the resumption of Treasury securities purchases to maintain reserve balances at a level of $25 billion.

Liquidity Programs and Credit Facilities

- Projections of the liquidity programs and credit facilities implicitly incorporate a judgment about the potential interactions between their level and the level of reserve balances.
- Primary credit declines gradually from its current level to $1 billion by the end of 2011 and remains at that level thereafter. Secondary credit is assumed to be zero over the forecast period.
- The Term Auction Facility (TAF) falls to zero by July 2010 and remains at zero thereafter.
- The Term Asset-Backed Securities Loan Facility (TALF) peaks at $62 billion in March 2010. As these loans mature or are prepaid, credit extended through this facility reaches zero by the second quarter of 2015.
  - TALF loans are extended with either a three-year or a five-year term.
    - Until loans with a three-year term begin to mature in 2012, the decline in TALF is attributable to prepayments.
    - In 2012, TALF loans begin to decline more rapidly, reflecting the maturity of three-year loans.
    - After all three-year loans have matured in 2013, TALF declines at a less rapid pace as five-year loans mature, because the dollar amount of five-year loans is smaller than the dollar amount of three-year loans.

  - TALF loans backed by asset-backed securities other than newly issued commercial mortgage-backed securities (CMBS) reach $50 billion by March 2010. A portion of these loans are expected to prepay, and the quantity outstanding reaches zero by the end of the first quarter of 2015.
  - TALF loans backed by newly issued CMBS reach $12 billion by March 2010. These loans are assumed to be held to maturity, and the quantity outstanding reaches zero by the second quarter of 2015.
- The Commercial Paper Funding Facility (CPFF) and central bank liquidity swap lines are assumed to expire on February 1, 2010; funds extended through these facilities decline to zero in the second quarter of 2010 as their credit extensions mature.
- No credit is extended through either the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) or the Primary Dealer Credit Facility (PDCF) before the facilities expire February 1, 2010.
- Support to AIG, the sum of the Federal Reserve Bank of New York's extension of revolving credit and its preferred interests in AIA Aurora LLC and ALICO LLC, remains around $40 billion through midyear 2011 and then declines to zero by the end of 2013.[14]
- The assets held by Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC are sold over time and reach either zero or a nominal level by the end of 2016.
- The assets held by TALF LLC increase to $2 billion by June 2012 and remain at that level through 2014. Assets held by TALF LLC comprise investments purchased with commitment fees collected by the LLC and from the U.S. Treasury's initial funding. The LLC does not purchase any ABS received by the Federal Reserve Bank of New York in connection with a decision of a borrower not to repay a TALF loan.

Other Assets

- The Special Drawing Rights (SDR) certificate account increases by $2 billion, to $7 billion, by the third quarter of 2011, as a result of an assumed monetization of the recent allocation of SDRs.

LIABILITIES AND CAPITAL

- All liabilities and capital assumptions are the same across scenarios except where noted below.
- Federal Reserve notes in circulation grow in line with the staff forecast for money stock currency through the end of 2011. From 2011 to the end of the projection period, Federal Reserve notes in circulation grow at the same rate as nominal GDP, as projected in the extended Greenbook forecast.
- Reverse repurchase agreements remain roughly at the current level of reverse repurchase agreements with foreign official and international accounts. Some minor fluctuations in the

[14] On March 2, 2009, the Federal Reserve and Treasury jointly announced a restructuring of the government's assistance to AIG. As part of this restructuring, on December 1, 2009, the revolving credit facility was reduced in exchange for preferred interests in two special purpose vehicles created to hold common stock of two AIG subsidiaries. The total size of the assistance to AIG is not directly affected by this restructuring.

near-term level of reverse repurchase agreements reflect the tests by the Open Market Desk of triparty reverse repurchase agreements with primary dealers.

- The U.S. Treasury's general account (TGA) follows the staff forecast for end-of-month U.S. Treasury's operating cash balances through June 2010.[15] Thereafter, the TGA drops back to its historical target level of $5 billion by the end of next year as it is assumed that the Treasury will have implemented a new cash management system that allows it to easily invest funds in excess of $5 billion. The TGA remains constant at $5 billion over the remainder of the forecast period.
- In the near term, movements in the U.S. Treasury's supplementary financing account (SFA) reflect constraints the U.S. Treasury faces with regards to its debt limit. In line with the Treasury's announcement regarding the Supplementary Financing Program, the SFA has run down to $15 billion. Subsequently, under the assumption that the Congress raises the debt limit, the balances in the SFA gradually increase to $200 billion over the first quarter of 2010 and remain at this level in each of the scenarios until the SFA is reduced to ensure reserve balance levels do not fall below $25 billion. The timing of when the SFA is reduced to maintain reserve balance levels of $25 billion varies across the three scenarios.
- Federal Reserve capital grows 15 percent per year, in line with the average rate of the past ten years.
- In general, the level of assets of the Federal Reserve drives the level of reserve balances. Increases in the levels of other liability items, such as Federal Reserve notes in circulation and the TGA, along with increases in the level of Reserve Bank capital drain reserve balances. Reserve balances in the three scenarios peak at different levels and at different times. However, in all scenarios, reserve balances fall back to $25 billion by the end of the forecast horizon.

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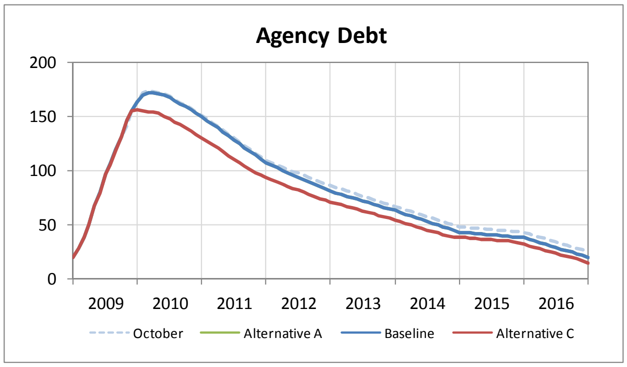
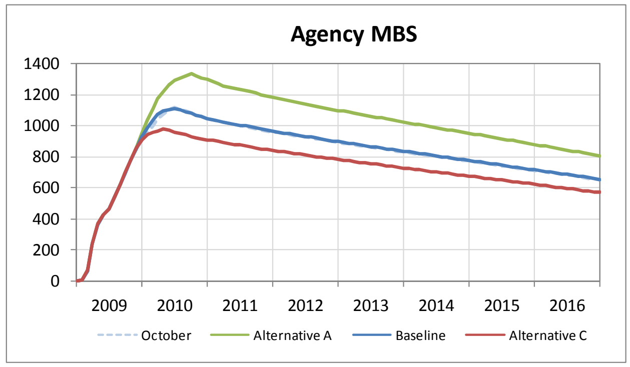
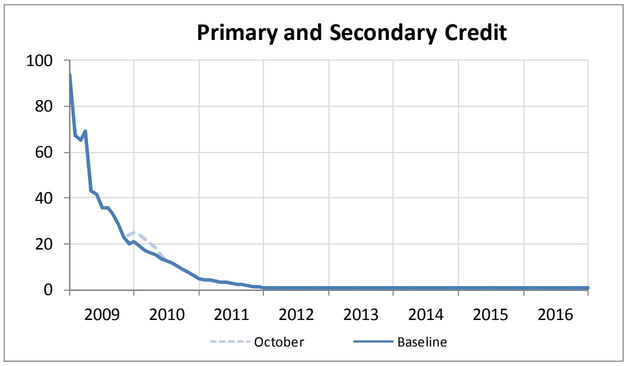
[15] The staff forecast for end-of-month U.S. Treasury's operating cash balances includes forecasts of both the TGA and balances associated with the U.S. Treasury's Tax and Loan program. Because balances associated with the Tax and Loan program are $2 billion, for the time being, this forecast is a good proxy for the level of TGA balances.

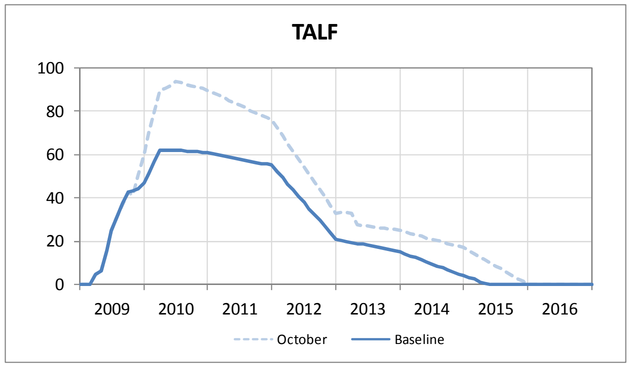
APPENDIX C: INDIVIDUAL BALANCE SHEET ITEM PROFILES

Asset purchases and Federal Reserve liquidity programs and credit facilities

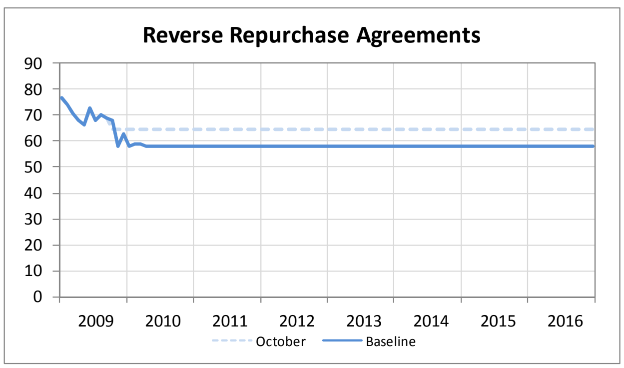


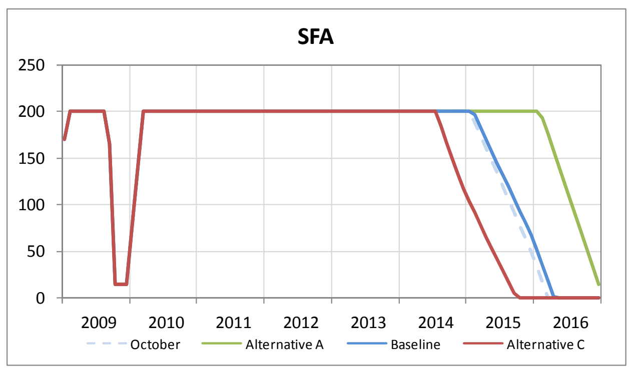


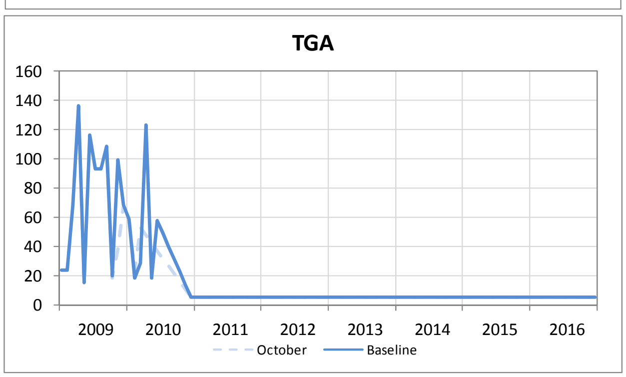


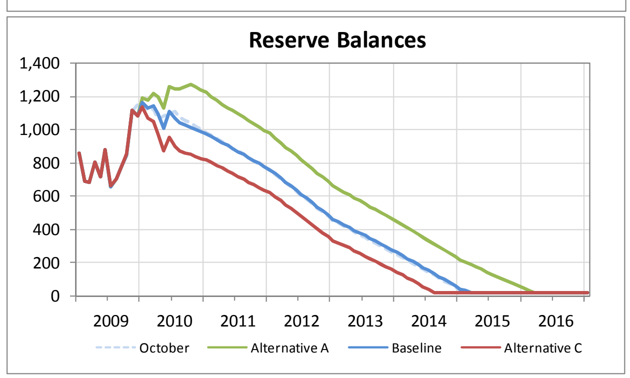


Federal Reserve liabilities and capital









Note. All values are in billions of dollars.

Appendix C: Table

Federal Reserve Balance Sheet: End-of-Year Projections -- Baseline Scenario

		End-of-Year							
	Nov 30, 2009	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
					$ Billions				
Total assets	2,207	2,262	2,224	2,047	1,819	1,699	1,551	1,461	1,460
Selected assets:									
Liquidity programs for financial firms	144	126	5	1	1	1	1	1	1
Primary, secondary, and seasonal credit	20	21	5	1	1	1	1	1	1
Term auction credit (TAF)	101	89	0	0	0	0	0	0	0
Central bank liquidity swaps	23	16	0	0	0	0	0	0	0
Primary Dealer Credit Facility (PDCF)	0	0	0	0	0	0	0	0	0
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	0	0	0	0	0	0	0
Lending though other credit facilities	59	62	61	55	21	15	4	0	0
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	15	15	0	0	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	44	47	61	55	21	15	4	0	0
Support for specific institutions	111	105	87	64	29	14	3	2	1
Credit extended to AIG	45	40	46	32	6	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	65	65	41	32	23	14	3	2	1
Securities held outright	1,784	1,866	1,964	1,818	1,658	1,559	1,433	1,350	1,350
U.S. Treasury securities	777	775	768	746	679	659	613	595	673
Agency debt securities	155	164	150	107	81	63	43	38	20
Agency mortgage-backed securities	852	927	1,046	965	898	837	777	717	657
Repurchase agreements	0	0	0	0	0	0	0	0	0
Total liabilities	2,153	2,208	2,162	1,976	1,737	1,605	1,443	1,337	1,318
Selected liabilities:									
Federal Reserve notes in circulation	883	882	907	936	994	1,060	1,115	1,164	1,213
Reverse repurchase agreements	58	63	58	58	58	58	58	58	58
Reserve balances of depository institutions	1,082	1,163	976	761	464	266	48	25	25
U.S. Treasury, general account	99	68	5	5	5	5	5	5	5
U.S. Treasury, supplementary financing account	15	15	200	200	200	200	200	68	0
Total capital	54	54	62	71	82	94	108	124	143

Source. Federal Reserve H.4.1 statistical release and staff calculations.