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.

Please note that some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

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Report to the FOMC on Economic Conditions and Monetary Policy

Book B

Monetary Policy: Strategies and Alternatives

January 20, 2011

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

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Monetary Policy Strategies

The exhibit "Equilibrium Real Federal Funds Rate" displays estimates of short-run *r**, defined as the real federal funds rate that, if maintained, would return output to its potential in twelve quarters. Measures of short-run *r** for the first quarter of 2011 have generally moved up relative to their counterparts in the December Tealbook. The increases range from 60 basis points for the *r** estimated from the small structural model to little change for the *r** estimated from the EDO model using its own projections. The short-run *r** measures rose in large part because incoming data have led the staff to modestly revise up its estimate of the current level of real output, resulting in a somewhat narrower estimate of the output gap. Still, estimates of short-run *r** remain at very low levels and, with the exception of the estimate from the EDO model using its own projections, all are below the actual real federal funds rate.[1]

The exhibit "Constrained vs. Unconstrained Monetary Policy" displays the policy prescriptions produced by optimal control simulations of the FRB/US model based on the extended staff baseline projection.[2] In these simulations, policymakers are assumed to place equal weight on keeping core PCE inflation close to 2 percent, on keeping unemployment close to the effective NAIRU, and on minimizing changes in the federal funds rate. The simulations indicate that the optimal path of policy is affected significantly by the lower-bound constraint on the nominal funds rate. With this constraint imposed, the funds rate does not begin to rise appreciably until the second quarter of 2014, the unemployment rate remains above the staff estimate of the effective NAIRU until the second quarter of 2014, and inflation stays below its target rate until the second quarter of 2015 (black solid lines).[3] By contrast, if the nominal funds rate could fall below zero, optimal policy would call for the nominal funds rate to decline to around minus 2½ percent in the first quarter of 2012 before moving up to positive levels in the fourth quarter of 2013 (blue dashed line). Also, monetary policy would bring the

[1]The estimate of short-run *r** associated with the EDO model using its own forecast is higher than the other measures because the projected output gap in that model closes relatively quickly. Relative to the FRB/US model, the exogenous shock processes in the EDO model revert more quickly to their mean values, and there is faster endogenous adjustment of the capital stock through the model's investment dynamics.

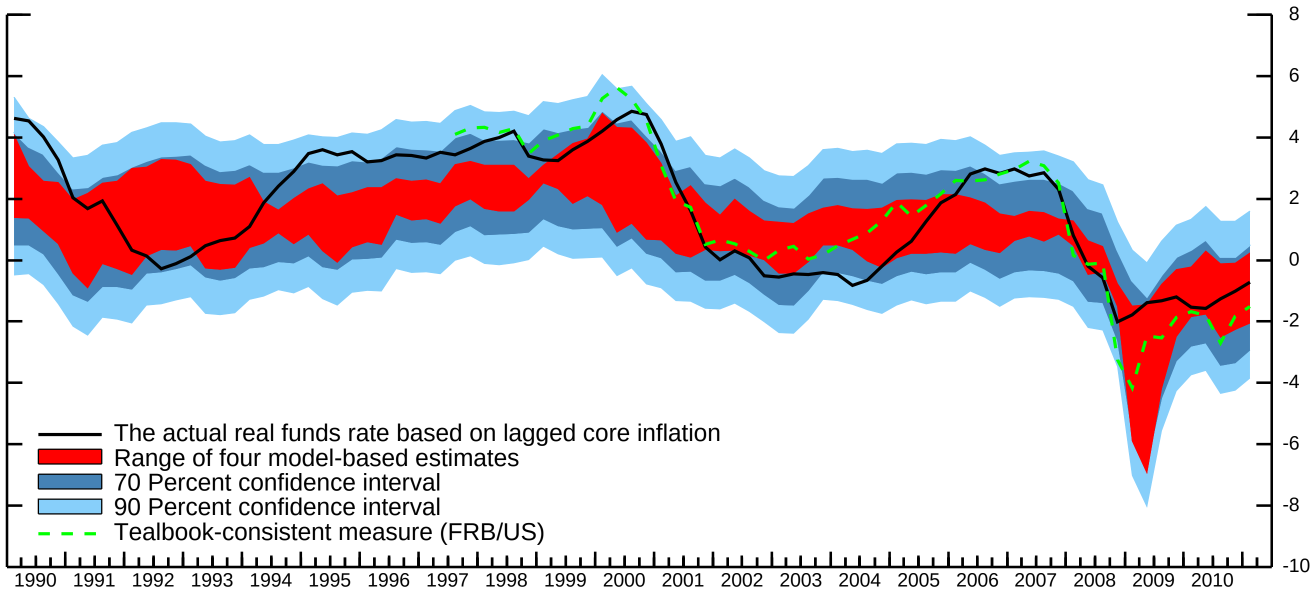
[2]The staff baseline forecast incorporates the effects of the Federal Reserve's large-scale asset purchases, and these effects are held at their baseline levels in the optimal policy simulations.

[3]The staff's estimate of the effective NAIRU falls from 6½ percent in the fourth quarter of 2010 to 6 percent by the fourth quarter of 2012, and then to 5¼ percent by the end of 2015, as the extended unemployment benefits expire and the labor market recovers.

Strategies

Equilibrium Real Federal Funds Rate

Short-Run Estimates with Confidence Intervals



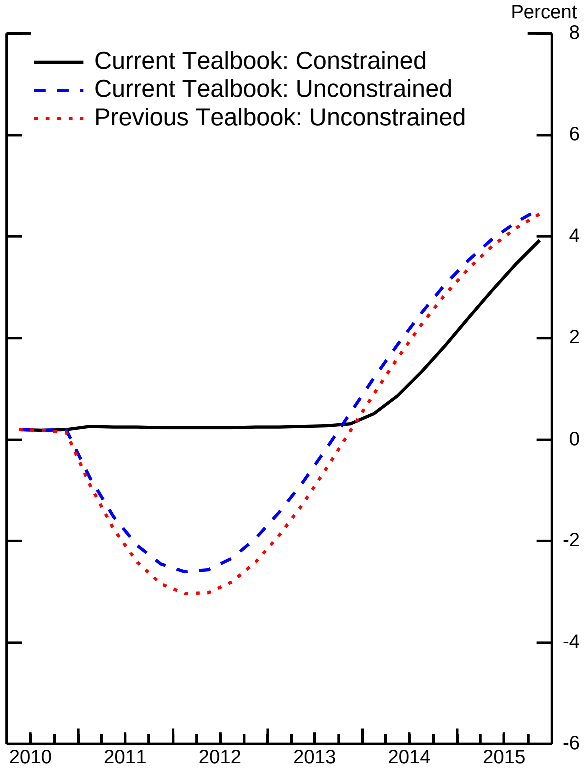
Short-Run and Medium-Run Measures (Percent)

	Current Tealbook	*Current Quarter Estimate as of Previous Tealbook*	*Previous Tealbook*
Short-Run Measures			
Single-equation model	-1.6	*-1.9*	*-2.0*
Small structural model	-1.5	*-2.1*	*-2.4*
EDO model	0.2	*0.2*	*-0.1*
FRB/US model	-2.1	*-2.4*	*-2.5*
Confidence intervals for four model-based estimates			
70 percent confidence interval	-2.9 to 0.5		
90 percent confidence interval	-3.9 to 1.6		
Tealbook-consistent measures			
EDO model	-1.4	*-1.9*	*-2.8*
FRB/US model	-1.5	*-1.6*	*-2.0*
Medium-Run Measures			
Single-equation model	1.1	*1.1*	*1.1*
Small structural model	1.4	*1.4*	*1.3*
Confidence intervals for two model-based estimates			
70 percent confidence interval	0.3 to 2.2		
90 percent confidence interval	-0.4 to 2.7		
TIPS-based factor model	2.0		*2.0*
Memo			
Actual real federal funds rate	-0.7		*-0.8*

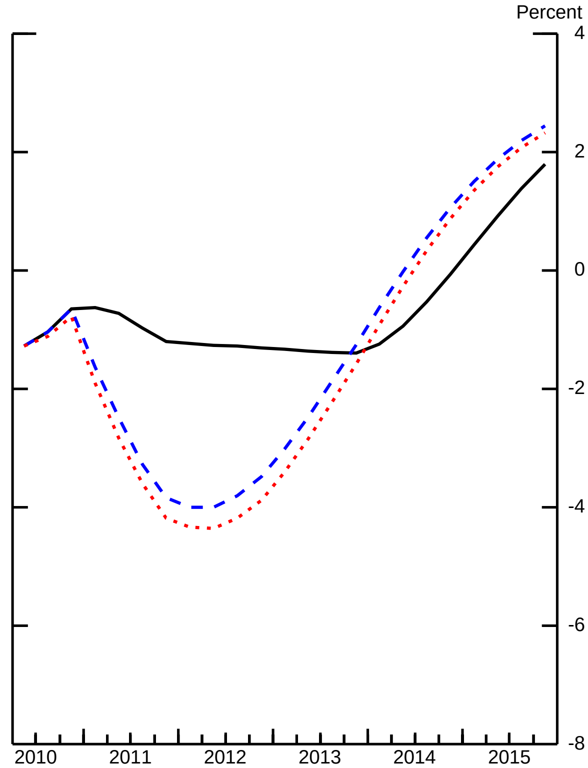
Note: Explanatory Note A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is based on lagged core inflation as a proxy for inflation expectations. For information regarding alternative measures, see Explanatory Note A. Estimates of r* may change at the beginning of a quarter even when there is no shift in the staff outlook because the twelve quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, this table includes a third column labeled "Current Quarter Estimate as of Previous Tealbook."

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

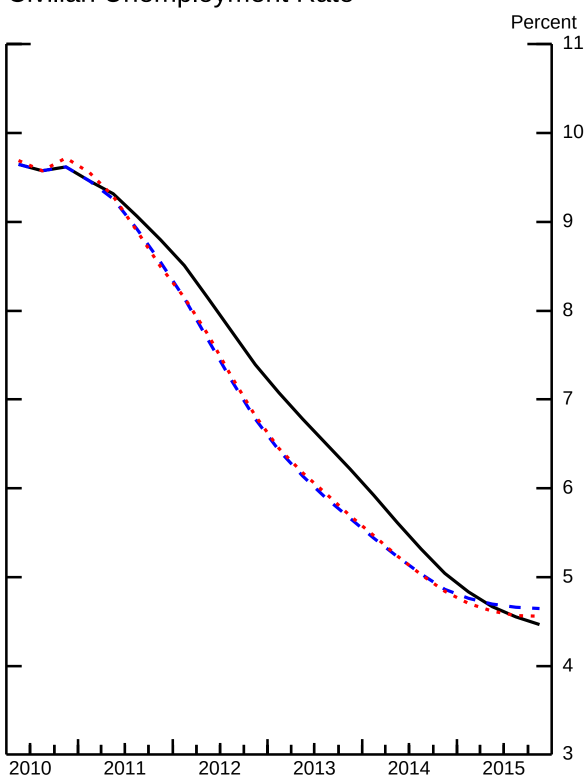
Nominal Federal Funds Rate



Real Federal Funds Rate

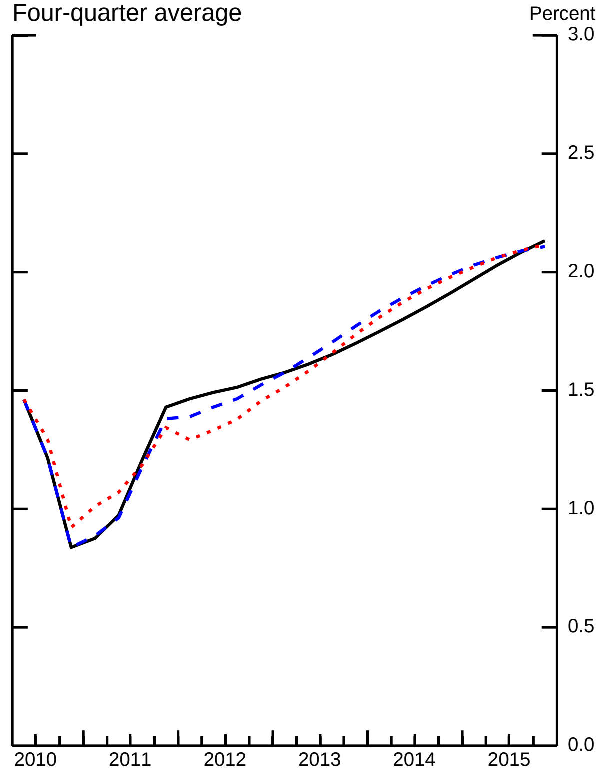


Civilian Unemployment Rate



Core PCE Inflation

Four-quarter average



Note: As discussed in the text note, the lines "Previous Tealbook" depict optimal control paths based on the previous Tealbook's staff outlook, but using the re-specified model under the new expectational assumptions.

unemployment rate down to the staff estimate of the effective NAIRU two quarters earlier than under the constrained policy, and inflation would reach 2 percent by the end of 2014. Changes in the staff forecast since December had little effect on the unconstrained optimal funds rate path; the slightly stronger outlook for aggregate demand imply only a small upward shift in the unconstrained policy rate. Likewise, the trajectory of the constrained path is little changed relative to December. In these simulations, it is assumed that monetary policymakers can accurately estimate the effective NAIRU. The box, "Possible Implications of Misestimating the NAIRU," considers an alternative possibility in which the NAIRU remains above the level that policymakers have projected in the baseline path and that policymakers only gradually learn about these less favorable conditions.

As shown in the exhibit "The Policy Outlook in an Uncertain Environment," the staff's estimated outcome-based policy rule prescribes keeping the federal funds rate in the current target range through the third quarter of 2012, a quarter earlier than in the December Tealbook. As shown to the right, information from financial markets suggests that the path for the expected federal funds rate through 2012 has changed little over the intermeeting period, as market participants expect the federal funds rate to rise above the current target range in the first quarter of 2012. Thereafter, the expected path for the federal funds rate rises gradually to about 2½ percent by the end of 2014, about 50 basis points higher than in December.

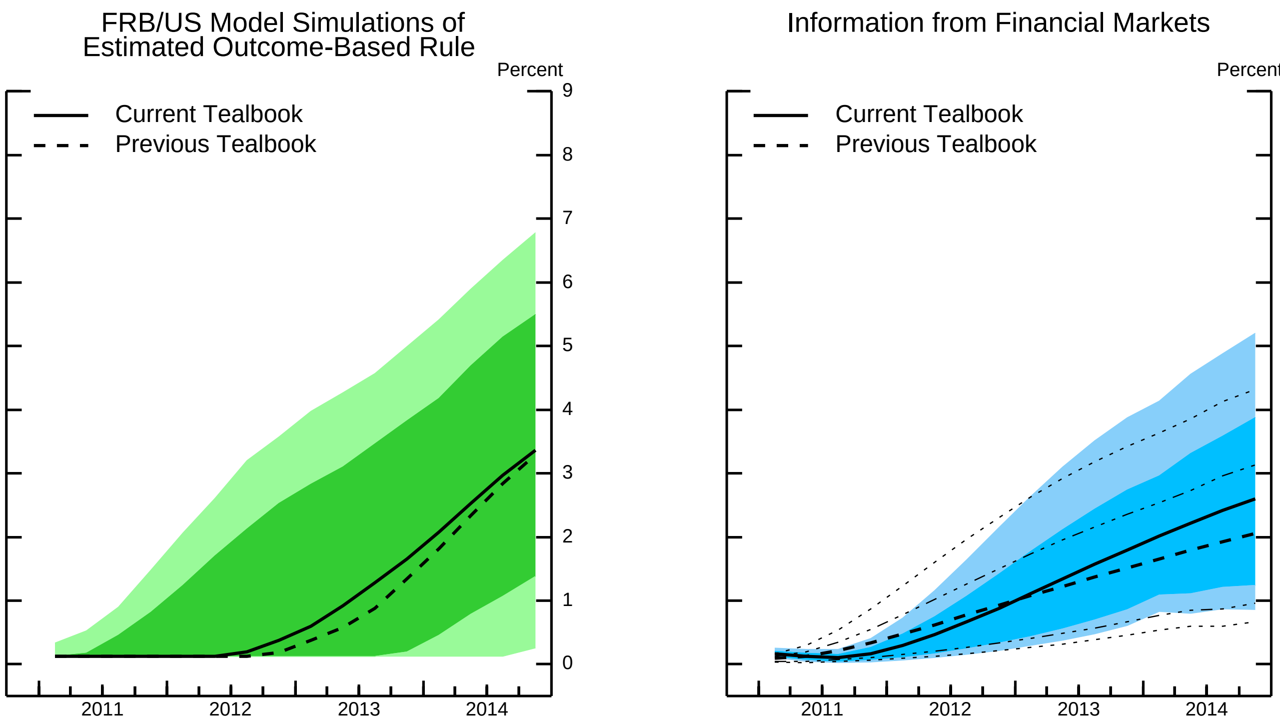
The lower panel of the exhibit provides near-term prescriptions from simple policy rules. As shown in the left-hand columns, prescriptions from all of the rules—except for the first-difference rule—remain at the effective lower bound.[4] The right-hand columns report the prescriptions that would be implied by these rules in the absence of the lower-bound constraint. Reflecting the staff's upward revision to real activity, all unconstrained rules except the Taylor (1993) rule imply higher values for the federal funds rate than the corresponding prescriptions in the December Tealbook.[5] Nonetheless, other than the first-difference rule, all unconstrained rule prescriptions continue to be negative, ranging from minus 0.3 to minus 3.9 percent.

[4] As in the previous Tealbook, the prescriptions from the first-difference rule are slightly above zero because the rule responds to the staff's assessment of near-term growth, which is above trend while the output gap is negative.

[5] The Taylor (1993) rule places relatively more weight on the trailing four-quarter average of core inflation than the other rules. Since readings of core inflation in the second half of 2010 have been revised down, the Taylor (1993) rule prescriptions for the funds rate in the first and second quarters of 2011 are little changed from the previous Tealbook.

Strategies

The Policy Outlook in an Uncertain Environment



Note: In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively. As in the December Tealbook, the staff baseline projection for the federal funds rate is based on the outcome-based policy rule. Accordingly, the top-left panel does not report a separate series for the staff's projected funds rate. Financial market quotes are as of January 19.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2011Q1	2011Q2	2011Q1	2011Q2
Taylor (1993) rule	**0.13**	**0.13**	**-0.91**	**-0.77**
Previous Tealbook	*0.13*	*0.13*	*-0.90*	*-0.81*
Taylor (1999) rule	**0.13**	**0.13**	**-3.93**	**-3.64**
Previous Tealbook	*0.13*	*0.13*	*-4.09*	*-3.89*
Estimated outcome-based rule	**0.13**	**0.13**	**-0.32**	**-0.88**
Previous Tealbook	*0.13*	*0.13*	*-0.42*	*-1.05*
Estimated forecast-based rule	**0.13**	**0.13**	**-0.26**	**-0.69**
Previous Tealbook	*0.13*	*0.13*	*-0.42*	*-0.98*
First-difference rule	**0.29**	**0.48**	**0.29**	**0.48**
Previous Tealbook	*0.16*	*0.26*	*0.16*	*0.26*

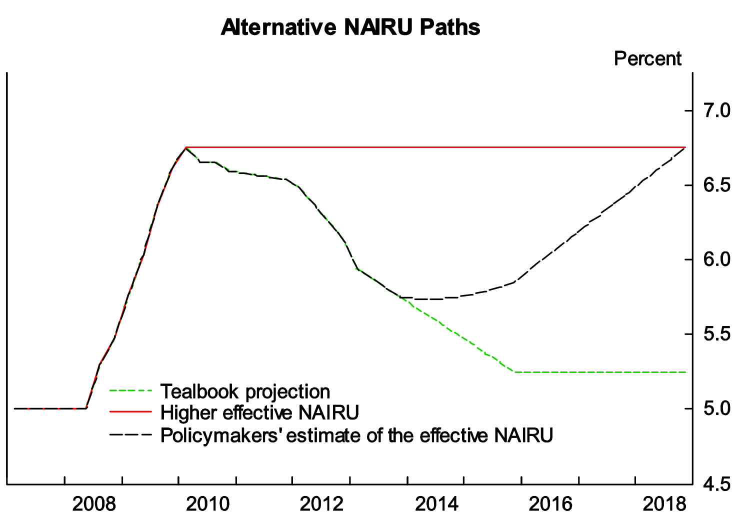
Memo	2011Q1	2011Q2
Staff assumption	0.13	0.13
Fed funds futures	0.15	0.12
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (January 1, 2011)	0.18	0.18

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

Possible Implications of Misestimating the NAIRU

In the staff's assessment, the effective NAIRU—which includes the effect of emergency and extended unemployment insurance (EEUI) on the unemployment rate—has risen since the onset of the financial crisis and reached a peak of 6¾ percent last year. But the staff expects much of the recent increase in the effective NAIRU to unwind over time, bringing the NAIRU down to 5¼ percent at the end of 2015 (the green line in the chart below). The steep drop in 2012 reflects the expiration of EEUI; the decline after 2012 reflects a gradual return of labor-market functioning to a state similar to that prevailing prior to the financial crisis. Of course, we could be overly optimistic about the improvement in supply-side conditions; in particular, we may be underestimating the persistence of the disruption to labor market functioning caused by the financial crisis and the deep recession. If so, a policymaker who accepted the staff estimates of the effective NAIRU would run the risk of making a persistent policy error.

To illustrate the consequences of this error, we consider a situation in which the effective NAIRU remains at 6¾ percent through the end of the decade, as indicated by the red line in the chart. We assume policymakers have an inflation target of 2 percent that the private sector takes as given. Private agents are assumed to recognize that the NAIRU will stay elevated for many years, but policymakers learn about the less favorable supply-side conditions only gradually. Specifically, policymakers' estimates of the effective NAIRU follow the path mapped out by the black dashed line. As a result of their real-time underestimation of the NAIRU and corresponding overestimation of economic slack, policymakers—following the prescriptions of the outcomes-based policy rule—keep the federal funds lower than they would if they immediately recognized that the NAIRU would remain higher for the rest of the decade. (Of course, the difference in policy stance only emerges during the period after the zero lower bound no longer constrains monetary policy.)



If policymakers are clear in their public statements about their assessments of supply-side conditions, private agents will recognize that monetary policy will be too accommodative for a time. As a result, private agents will revise up their expectations for inflation in the near and intermediate terms, thereby boosting actual inflation fairly quickly. Their recognition that the Federal Reserve is making a systematic policy error will also push down real long-term interest rates today, thereby stimulating real activity. Nevertheless, the macroeconomic consequences of policymakers' misperception of the NAIRU are likely to be moderate as long as the public knows that policymakers will infer the correct level of the NAIRU over time.

The policy mistake that results from the misperception of the NAIRU causes inflation to be higher than it would be if policymakers realized immediately that the effective NAIRU would remain flat at 6¾ percent; it also causes the unemployment rate to be lower and output to be higher than they otherwise would be. In particular, we estimate that inflation would be about ½ percentage point higher after a year as a result of the misperception of the NAIRU, and would remain elevated for several years thereafter. Meanwhile, the unemployment rate runs lower than it would if the Committee correctly perceived the level of the NAIRU—by an amount that averages about ½ percentage point around the middle of this decade. Eventually, however, higher inflation and the gradual recognition of the correct level of the NAIRU cause policymakers to tighten monetary policy sufficiently to bring inflation into line with its long-run objective and guide the actual unemployment rate toward its long-run sustainable level.

These simulation results suggest that the macroeconomic consequences of misestimating the degree of slack are moderate so long as the public maintains its confidence that the central bank will recognize the correct level of the NAIRU over time and will move to achieve its unchanged inflation objective. There is, however, an important caveat to this conclusion: The inflation consequences would be much larger and more persistent if the public were to misread higher-than-target inflation as a sign that the FOMC had raised its long-run inflation target.

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Monetary Policy Alternatives

This Tealbook presents four policy alternatives—labeled A, B, C, and D—for the Committee's consideration. Alternative B reaffirms the intended increase in securities holdings and the pace of purchases that the Committee first announced in November. Under Alternative A, the Committee would provide further monetary policy stimulus by increasing the overall size of the asset purchase program. Under Alternative C, the asset-purchase program would be scaled back by reducing the monthly pace of purchases, while under Alternative D, the program would be discontinued. All of the alternatives maintain the existing target for the federal funds rate. Alternative A provides more explicit forward guidance concerning the period over which the Committee expects the funds rate to remain at its effective lower bound. Alternatives B and C retain the familiar "extended period" language. Alternative C includes as an option new language stating that the Committee will use its tools to help ensure that inflation, over time, "is at levels of 2 percent or a bit less, which the Committee judges consistent with its mandate." Alternative D would signal that the period of exceptionally low funds rates is likely to come to an end in the near future and that the reinvestment of principal payments may be brought to a close before long.

The statement issued under Alternative B would again characterize the information received over the intermeeting period as confirming that the economic recovery "is continuing." It notes that growth in household spending "picked up late last year" and business spending on equipment and software is rising, but remarks that the housing and labor markets remain weak. Alternative B observes that although commodity prices have risen, measures of underlying inflation are "somewhat low" relative to levels the Committee judges consistent with its dual mandate and "have been trending downward." Moreover, it reiterates that progress toward the Committee's objectives "has been disappointingly slow." Under this alternative, the FOMC would reaffirm its intention to purchase an additional $600 billion of longer-term Treasury securities by the end of the second quarter of 2011 at a pace of about $75 billion per month.[1] The Committee would also maintain its existing policy of reinvesting the

[1] The Desk announced on January 12 that it expects to purchase $80 billion of Treasury securities over the coming month, an increase of $5 billion from the previous month. Purchases at roughly this monthly pace will be required through the end of the program in order to reach the announced $600 billion total by the end of June.

principal payments from agency debt and mortgage-backed securities (MBS) in longer-term Treasuries. Finally, the Committee would state that it “continued its practice of regularly reviewing” the pace of purchases and size of the program in light of incoming information, and that it “remains prepared” to adjust the program as needed.

The assessment of economic conditions and the outlook under Alternative A is similar to that under Alternative B. However, Alternative A retains the weaker characterization of household spending and business investment in equipment and software included in the December statement; it also describes measures of underlying inflation as “low” and unemployment as “elevated.” Alternative A not only states that progress toward the Committee’s objectives “remains disappointingly slow,” it adds that “there are still significant downside risks to the economic outlook.” Under this alternative, the Committee would announce that “in light of incoming information,” it was increasing the intended expansion of the Federal Reserve’s securities holdings to $800 billion by extending purchases to the end of the third quarter of 2011 while maintaining a pace of monthly purchases of about $75 billion. The Committee would also provide more explicit forward guidance about the federal funds rate by indicating its expectation that the target for the funds rate would stay at its current level “at least through mid-2012.” As in December, under Alternative A, the Committee would state that it will “regularly review” its asset-purchase program and “will employ its policy tools as necessary” to pursue its objectives.

Alternative C notes that the recovery “is continuing” and that there are “some indications” that it “is strengthening.” In particular, Alternative C describes household spending as having “picked up” and indicates that business investment (including investment in structures) is rising. In contrast to Alternatives A and B, Alternative C does not say that household spending remains constrained and that business investment in nonresidential structures is weak. Under Alternative C, the Committee would scale back the intended expansion of its securities holdings to $400 billion and reduce the pace of purchases from about $75 billion per month to around $50 billion per month through the end of the second quarter. The Committee would again state that it will maintain the current target for the funds rate for an extended period and continue its policy of reinvesting the proceeds of principal payments in Treasury securities. The Committee would repeat the portion of its December statement that indicated it will regularly review its purchase program and adjust the program as needed. The final paragraph of the draft statement in Alternative C offers a way the Committee could choose to communicate explicitly the level of inflation that it judges consistent, over time, with its dual mandate.

The statement issued under Alternative D states that the economic recovery "is continuing" but does not include the qualifier, found in the other alternatives, that the rate of growth has been insufficient to bring about a significant improvement in labor market conditions. It states that underlying measures of inflation have trended lower recently and that longer-term inflation expectations have remained stable, but notes that "commodity prices have risen noticeably." Under alternative D the Committee would maintain the target for the federal funds rate at its current level, but state that it anticipates that the rate will stay at "low levels" for "some time" rather than at "exceptionally low levels" for "an extended period" as in the previous statement. The Committee would also announce the immediate cessation of the asset-purchase program announced in November and would signal that other steps toward a less accommodative stance of policy are likely soon. In addition, the Committee would state that its policy of reinvesting the proceeds of principal repayments would be continued only for "the time being," suggesting that this policy was likely to end soon.

The next page tabulates key aspects of each alternative, and is followed by complete draft statements and the arguments for each alternative. As always, the Committee could mix components of the various alternatives to construct its desired statement.

Table 1: Overview of Alternatives for the January 26 FOMC Statement

Key Components	December Statement	January Alternatives A	B	C	D
Economic Activity					
Recent Developments	economic recovery is continuing, though insufficient to bring down unemployment	economic recovery is continuing, though insufficient to bring about significant improvement in labor market conditions			economic recovery is continuing
Household Spending	increasing at a moderate pace	increasing at a moderate pace but remains constrained by . . .	growth picked up late last year but remains constrained by , , ,	growth has picked up	
Labor Market	employers remain reluctant to add to payrolls; unemployment rate is elevated	employers remain reluctant to add to payrolls; unemployment rate is elevated			n.a.
Outlook	progress toward objectives has been disappointingly slow	progress toward objectives remains disappointingly slow and there are still significant downside risks	progress toward objectives has been disappointingly slow	progress toward objectives has been slow; but some indications that the economic recovery is strengthening	n.a.
Inflation					
Recent Developments	expectations have remained stable, but underlying inflation have continued to trend downward; measures are somewhat low	expectations have remained stable, but underlying inflation have been trending downward; measures are low	although commodity prices have risen, expectations have remained stable and underlying inflation has been trending downward; measures are somewhat low		underlying inflation has trended lower and expectations have remained stable, but commodity prices have risen noticeably
Outlook	*same as "Economic Activity" outlook above*				
Target Federal Funds Rate					
Intermeeting Period	0 to ¼ percent	0 to ¼ percent			
Forward Guidance	exceptionally low levels for an extended period	exceptionally low levels at least through mid-2012	exceptionally low levels for an extended period		low levels for some time

(Continued on next page)

Table 1: Overview of Alternatives for the January 26 FOMC Statement
(continued)

<table>
<tr><th rowspan="2">Key Components</th><th rowspan="2">December Statement</th><th colspan="4">January Alternatives</th></tr>
<tr><th>A</th><th>B</th><th>C</th><th>D</th></tr>
<tr><td colspan="6">SOMA Portfolio Policy</td></tr>
<tr><td rowspan="2">Approach</td><td>$600 billion of Treasuries by end of 2011:Q2, $75 billion per month</td><td>$800 billion of Treasuries ($200b more than Nov.), $75 billion per month, through 2011:Q3</td><td>$600 billion of Treasuries by end of 2011:Q2, $75 billion per month</td><td>$400 billion of Treasuries ($200b less than Nov.), $50 billion per month, through 2011:Q2</td><td>discontinue program announced in November</td></tr>
<tr><td>maintain reinvestment policy</td><td colspan="3">maintain reinvestment policy</td><td>maintain existing reinvestment policy for the time being</td></tr>
<tr><td colspan="6">Future Policy Action</td></tr>
<tr><td>Approach</td><td>will regularly review and will adjust program as needed; will employ policy tools as necessary to support the recovery and to help ensure that inflation, over time, is at levels consistent with its mandate</td><td>will regularly review and will adjust program as needed; will employ policy tools as necessary …</td><td>continued practice of reviewing and remains prepared to adjust program as needed; will employ policy tools as necessary…</td><td>will adjust program as needed; will employ policy tools as necessary to support the recovery and to help ensure that inflation, over time, is at levels [of 2 percent or a bit less, which it judges to be] consistent with its mandate</td><td>will employ policy tools as necessary to promote maximum employment and price stability</td></tr>
</table>

DECEMBER FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in November confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring down unemployment. Household spending is increasing at a moderate pace, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, while investment in nonresidential structures continues to be weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. Longer-term inflation expectations have remained stable, but measures of underlying inflation have continued to trend downward.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, progress toward its objectives has been disappointingly slow.
3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. The Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. In addition, the Committee intends to purchase $600 billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about $75 billion per month. The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability.
4. 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 for the federal funds rate for an extended period.
5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

JANUARY FOMC STATEMENT—ALTERNATIVE A

1. Information received since the Federal Open Market Committee met in ~~November~~ **December** confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring ~~down unemployment~~ **about a significant improvement in labor market conditions**. Household spending is increasing at a moderate pace, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than ~~earlier in the year~~ **in recent quarters**, while investment in nonresidential structures continues to be weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. Longer-term inflation expectations have remained stable, but measures of underlying inflation have ~~continued to~~ **been** trend**ing** downward.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are ~~somewhat~~ low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, progress toward its objectives ~~has been~~ **remains** disappointingly slow **and there are still significant downside risks to the economic outlook**.
3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities. ~~as announced in November.~~ **Moreover, in light of incoming information, the Committee now intends to increase its holdings of securities by a total of $800 billion—$200 billion more than announced in November—by purchasing longer-term Treasury securities at a pace of about $75 billion per month through the third quarter of 2011. In addition,** the Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. ~~In addition, the Committee intends to purchase $600 billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about $75 billion per month.~~ The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program ~~in light of incoming information~~ and will adjust the program as needed to best foster maximum employment and price stability.
4. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and ~~continues to~~ **currently** anticipates that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate ~~for an extended period~~ **at least through mid-2012**.
5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

Alternatives

JANUARY FOMC STATEMENT—ALTERNATIVE B

1. Information received since the Federal Open Market Committee met in ~~November~~ **December** confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring ~~down unemployment~~ **about a significant improvement in labor market conditions**. **Growth in** household spending ~~is increasing~~ ~~at a moderate pace~~ **picked up late last year**, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, ~~though less rapidly than earlier in the year,~~ while investment in nonresidential structures ~~continues to be~~ **is still** weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. **Although commodity prices have risen,** longer-term inflation expectations have remained stable~~, but~~ **and** measures of underlying inflation have been trending downward.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in the context of price stability, progress toward its objectives has been disappointingly slow.

3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. **In particular,** the Committee ~~will~~ **is** maintain**ing** its existing policy of reinvesting principal payments from its securities holdings~~. In addition, the Committee~~ **and** intends to purchase $600 billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about $75 billion per month. The Committee ~~will~~ **continued its practice of** regularly review**ing** the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information**,** and ~~will~~ **it remains prepared to** adjust the program as needed to best foster maximum employment and price stability.

4. 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 for the federal funds rate for an extended period.

5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

JANUARY FOMC STATEMENT—ALTERNATIVE C

1. Information received since the Federal Open Market Committee met in ~~November~~ **December** confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring ~~down unemployment~~ **about a significant improvement in labor market conditions**. **Growth in** household spending ~~is increasing~~ ~~at a moderate pace~~ **has picked up** ~~but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, while investment in nonresidential structures continues to be weak.~~ **and business investment is rising**. **However,** employers remain reluctant to add to payrolls **and** the housing sector continues to be depressed. **Although commodity prices have risen,** longer-term inflation expectations have remained stable~~, but~~ **and** measures of underlying inflation have been trending downward.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. ~~Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability,~~ Progress toward **the Committee's** objectives has been ~~disappointingly~~ slow, **but there are some indications that the economic recovery is strengthening**.

3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities. ~~as announced in November.~~ **However, in light of incoming information, the Committee now intends to increase its holdings of securities by a total of $400 billion—$200 billion less than announced in November—by purchasing longer-term Treasury securities at a pace of about $50 billion per month through the second quarter of 2011.** The Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. ~~In addition, the Committee intends to purchase $600 billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about $75 billion per month.~~ The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program ~~in light of incoming information~~ and will adjust the program as needed to best foster maximum employment and price stability.

4. 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 for the federal funds rate for an extended period.

5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels **[of 2 percent or a bit less, which the Committee judges to be]** consistent with its mandate.

Alternatives

JANUARY FOMC STATEMENT—ALTERNATIVE D

1. Information received since the Federal Open Market Committee met in ~~November~~ **December** confirms that the economic recovery is continuing. ~~though at a rate that has been insufficient to bring down unemployment.~~ **Growth in** household spending ~~is increasing at a moderate pace~~ **has picked up** ~~but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, while investment in nonresidential structures continues to be weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed.~~ **and business investment is rising**. **Measures of underlying inflation have trended lower in recent quarters and** longer-term inflation expectations have remained stable**,** but ~~measures of underlying inflation have continued to trend downward.~~ **commodity prices have risen noticeably**.

2. ~~Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, progress toward its objectives has been disappointingly slow.~~

2. To ~~promote a stronger pace of~~ **support the** economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, **the Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and anticipates that economic conditions are likely to warrant low levels for the federal funds rate for some time. However, the Committee judges that a further expansion of its securities holdings is not necessary to support a gradual return to higher levels of resource utilization in a context of price stability. Accordingly,** the Committee decided today to ~~continue expanding~~ **discontinue the asset purchase program it** ~~its holdings of securities as~~ announced in November. **For the time being,** the Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. ~~In addition, the Committee intends to purchase $600 billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about $75 billion per month. The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability.~~

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 for the federal funds rate for an extended period.~~

3. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to ~~support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate~~ **promote maximum employment and price stability**.

Alternatives

THE CASE FOR ALTERNATIVE B

If Committee members, like the staff, think that the economic outlook has changed little on balance since the December meeting, they may judge that the asset-purchase program first announced in November remains appropriate to promote progress toward the objectives of maximum employment and price stability, and thus choose to issue a statement along the lines of that provided in Alternative B.

A statement along the lines of Alternative B may be appealing to policymakers because it could reinforce investor confidence that the economic recovery is proceeding and that employment and inflation are evolving in a manner consistent with a gradual return to levels more consistent with the Committee's dual mandate. Policymakers may have a relatively high threshold for making adjustments to the purchase program because they see fine tuning as undesirable or because they want to minimize financial market volatility. Even if members are uncertain about the effectiveness of asset purchases, they may judge that the adverse consequences of unexpectedly discontinuing or reducing the current program would be unsettling to business and household confidence.

If members interpret the incoming data as providing greater confidence in the economic recovery, but not as indicating a significant change to the medium term outlook, they may be unwilling to cut back the intended total purchases at this meeting. In particular, the Committee may see recent data on household spending as encouraging, but view the pace of job gains as still insufficient to support a sustained pickup in consumption growth. Policymakers may see the recent decline in the unemployment rate as due, in large part, to a temporary drop in the labor force participation rate rather than an improvement in the willingness of employers to hire. Policymakers may also be concerned that the ongoing weakness in the housing market could depress aggregate demand for some time and worry that persistent tightness in consumer credit could limit gains in spending. Consequently, members may see significant benefits to waiting for additional information pertaining to the strength of the recovery and the likely trajectory of inflation before deciding to make an adjustment to the stance of monetary policy.

Conversely, the Committee may see little basis for increasing the intended total amount of asset purchases. The Committee may judge that the recent data indicate somewhat stronger production and spending as well as a leveling out in underlying inflation, and conclude that further monetary stimulus will not be needed to return employment and inflation, over time, to levels consistent with its dual mandate.

Moreover, some members may view the rise in five-year TIPS inflation compensation since the December meeting as suggesting that investors are anticipating higher rates of inflation in the not-too-distant future. Alternatively, some members may see the potential benefits of a further increase in asset purchases as quite small or view the risks to inflation and the balance sheet from such an action as outweighing the potential benefits. Policymakers may consequently choose to maintain the asset-purchase program on its previously announced course, at least for the time being.

Responses from the Desk's latest survey of primary dealers indicate that they expect the Committee's asset-purchase program to total $600 billion, as in Alternative B, and that they expect little change in the statement language other than an updating of the summary of economic conditions. Respondents held diverse views on the mostly likely timing of the next increase in the federal funds rate, but consistent with Alternative B's maintenance of the "extended period language," no respondent expected the first increase to occur before the fourth quarter of 2011 and most expected it in 2012. Thus the adoption of a statement along the lines of Alternative B would likely result in little change in bond yields, equity prices, or the foreign exchange value of the dollar.

THE CASE FOR ALTERNATIVE A

Policymakers may view developments in the economy and financial markets as indicating that the outlook for unemployment and inflation is still unacceptable and thus as justifying a modest further increase in the degree of policy accommodation. If so, the Committee may wish to expand its asset purchases beyond the amounts announced in November and, at the same time, provide more explicit forward guidance concerning the likely duration of the period of exceptionally low federal funds rates, as in Alternative A.

Members may be concerned that the real funds rate has drifted up in recent quarters as inflation has drifted down (as shown by actual real funds rate measure in the Equilibrium Funds Rate exhibit of the Monetary Strategies Section) and wish to offset this implicit tightening. In addition, members may view the improvement in the economic outlook since the announcement of the intended $600 billion asset-purchase program in November as not sufficiently encouraging and believe that further purchases are desirable to achieve greater progress toward the Committee's price and employment objectives. The staff's baseline forecast for the unemployment rate at the end of 2012 is close to 8 percent and its inflation forecast at this horizon remains below levels the

Committee sees as consistent with its objectives. Moreover, according to model simulations presented in the Monetary Policy Strategies Section of the Tealbook, which take into account the intended $600 billion of asset purchases, the unconstrained optimal funds rate is currently significantly below zero and inflation is likely to be only slightly above its current level at the end of five years. Members may view these results as suggesting that more stimulus would help foster higher levels of employment with little risk of unleashing inflation.

Even if policymakers believe that the economy is likely to return to higher levels of resource utilization at a reasonable pace without further monetary stimulus, some may be particularly concerned that the current low level of inflation leaves the economy unacceptably vulnerable to negative shocks. They may view the downside risks to the economy—including possible spillovers from developments in Europe, budget problems at state and local governments, and the possibility of an even weaker housing sector than currently anticipated – as calling for a monetary policy response. Consequently, members may see the announcement of an increase in the purchase program to $800 billion, as in Alternative A, as helping to ensure the transition to maximum employment and price stability will not be interrupted.

Committee members may judge that the risks associated with a modest further expansion of the balance sheet are low when compared with the anticipated benefits. Indeed, small-scale operations of two short-term reserve-draining tools, the Term Deposit Facility and reverse repurchase agreements with an expanded set of counterparties, have been conducted successfully. These operations may give policymakers confidence that even with a further expansion of the Federal Reserve's balance sheet and the associated increase in reserve balances, the Federal Reserve will be able to smoothly exit from its extraordinarily accommodative policy stance when appropriate.

The Committee may also wish to communicate more explicitly its expectation for the path of the federal funds rate by stating that it anticipates that the current level of the target rate will remain in place "at least through mid-2012." Members may feel that such an explicit indication would clarify the FOMC's intentions regarding future adjustments to the federal funds rate, helping to reduce investor uncertainty and term premiums—and thus intermediate to longer-dated Treasury yields, thereby acting as a stimulus to aggregate demand. Such guidance could also help guard against an unwarranted rise in interest rates if the economy strengthens in line with the Committee's outlook.

An announcement that the Committee had decided to expand the asset-purchase program to $800 billion would come as a significant surprise to market participants, especially given the more positive tone of the economic data since December. Longer-term yields would probably fall markedly, although this effect would be limited to some extent if the announcement led investors to mark up their inflation forecasts. The news would likely prompt a further rise in stock prices and a decline in the foreign exchange value of the dollar. These movements in asset prices could be significant if the announcement led investors to conclude that further expansion of the program was likely.

THE CASE FOR ALTERNATIVE C

Members may judge that the economic outlook has improved to a degree that justifies scaling back the additional policy accommodation announced by the Committee in November. Policymakers may conclude that, consistent with the Committee's statement that it would regularly review the purchase program in light of incoming information, the total volume of purchases should now be reduced. Members may consequently favor a statement that lowers the intended purchase total to $400 billion, as in Alternative C.

The Committee may judge that the likely trajectory for the economy is noticeably stronger than at the time of the December meeting. Incoming information over the intermeeting period indicates there was an acceleration in consumer spending. Members may view this pickup as reflecting an easing of the factors that have been restraining spending, and therefore as likely to continue over the forecast horizon. In addition, they may be convinced that last year's strong growth in business spending on equipment and software will continue to propel the recovery forward. Policymakers may also view the recent decline in the unemployment rate as evidence that the labor market is firming and expect that more significant advances in payrolls will be forthcoming. Consequently, the Committee may now expect a stronger recovery than it did in December, perhaps along the lines of the "Stronger Recovery" scenario in the Tealbook. At the same time, the Committee may see the somewhat smaller stimulus imparted by a $400 billion expansion of its portfolio as appropriate to promote satisfactory progress toward its objectives.

Some Committee members may see a risk that if the economic recovery were to suddenly accelerate in a context of substantial fiscal deficits and an extraordinarily large Federal Reserve balance sheet, inflation expectations could become unmoored, leading to a persistent and costly increase in actual inflation, along the lines of the "Stronger Recovery with Higher Inflation" scenario in the Tealbook. They may judge that scaling back the asset purchase program in response to the recent data will help keep inflation expectations well anchored. They may also think that making reference to an explicit numerical inflation objective, such as the one inserted at the end of paragraph 5 in Alternative C, could help keep expected inflation in check. However, the Committee may be concerned that an increased focus on its inflation objective in the statement could lead some to question its commitment to the "maximum employment" component of its dual mandate. As a result, members may see a need for additional preparatory work on communications prior to taking such a step.

As noted earlier, the Desk's survey of Primary Dealers suggested that market participants expect the Committee to reiterate its intention to expand its securities holdings by $600 billion. A statement along the lines of Alternative C would consequently surprise investors. As a result, longer-term interest rates would rise, although the increase would be limited to some extent if the Committee referenced an explicit inflation objective and that announcement reduced inflation risk premiums. Stock prices would likely fall, and the foreign exchange value of the dollar would increase. These effects would be reinforced to the extent that the adoption of Alternative C was seen as opening the door to further reductions in the size of the purchase program going forward and an earlier expected date for the first increase in the federal funds rate above its current range.

THE CASE FOR ALTERNATIVE D

Committee members may view the incoming data as confirming that a gradual recovery will continue and believe that further monetary stimulus will have little effect on the pace of the recovery. They may also believe that a potential link between sustained periods of accommodative policy and subsequent periods of financial instability requires a reevaluation of the costs and benefits of the asset-purchase program. In light of this reassessment, some Committee members may wish to immediately discontinue the $600 billion purchase program announced in November and indicate that other moves toward a less accommodative stance of policy are possible in the near future.

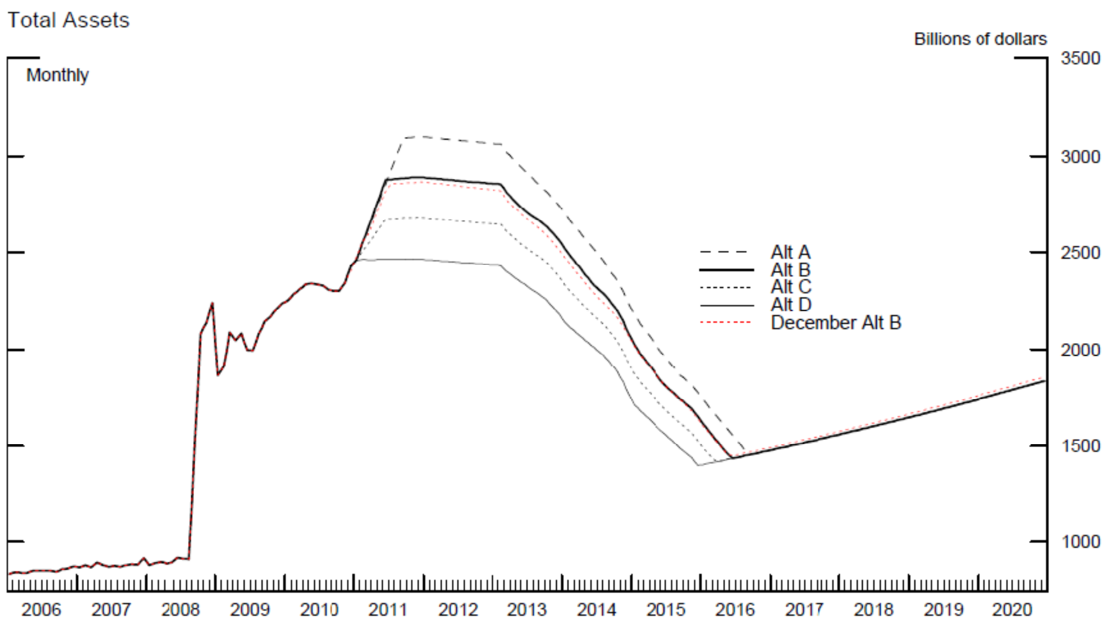
Even if policymakers are concerned about the elevated level of unemployment, they may judge that a good deal of current joblessness reflects the need for structural realignment in the economy that cannot be effectively addressed by monetary policy. Policymakers may also worry that, if the pace of economic growth picks up this year, the size of the Federal Reserve's balance sheet could limit their ability to tighten policy as quickly as may be needed to prevent an increase in inflation, especially if the size of the balance sheet itself directly affects inflation expectations. Members may judge that continued expansion of the balance sheet would only magnify these difficulties. Moreover, they may discount recent low inflation readings because they believe that the accommodative measures taken prior to November have not yet had their full impact on the macroeconomy and that the sharp rise in prices of energy and other commodities will have a greater effect on consumer price inflation than the staff assumes. Alternatively, some members may believe that the current statement language could lead to a buildup of macroeconomic or financial imbalances. For example, investors, responding to the statement language suggesting a long period of near-zero federal funds rates, may take on risks that they cannot manage appropriately, putting financial stability at risk as the economy recovers and interest rates rise.

For these reasons, Committee members may wish to position the Committee so that it can begin removing policy accommodation in the near term. Under Alternative D, the target for the federal funds rate would be maintained, but the forward guidance would indicate that economic conditions warrant "low levels" of the federal funds rate for "some time," instead of the "exceptionally low levels" for an "extended period" indicated in the December statement. The Committee would also state that its policy of reinvesting the proceeds from principal repayments on its current holdings of securities would be maintained only for "the time being," implying that the Committee might well discontinue this policy before long.

The announcement of Alternative D would completely surprise market participants. An indication that the Federal Reserve was discontinuing the asset-purchase program and that it may soon remove other aspects of policy accommodation would likely lead investors to completely re-examine their expectations both for the path of the funds rate and for the Federal Reserve's portfolio. The result would likely be a marked rise in interest rates at all horizons. The foreign exchange value of the dollar would likely increase, and equity markets would sell off sharply. The rise in longer-term rates could be dampened to the extent that the tighter financial conditions prompted a decline in inflation expectations.

LONG-RUN PROJECTIONS OF THE BALANCE SHEET AND MONETARY BASE

The staff has prepared four scenarios for the Federal Reserve's balance sheet that correspond to the policy alternatives A, B, C, and D. Projections under each scenario are based on assumptions about various components of the balance sheet. Details of these assumptions as well as projections for each major component of the balance sheet can be found in Explanatory Note C.



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

For the scenario that corresponds to Alternative B, we assume that the FOMC completes the intended expansion of its holdings of longer-term securities by $600 billion by the end of the second quarter of 2011 (an average pace of about $75 billion per month). The proceeds from principal repayments from Treasury securities and agency securities continue to be reinvested in Treasury securities. Under these assumptions, the size of the balance sheet peaks at about $2.9 trillion in mid-2011. During 2012 and the first quarter of 2013, the size of the balance sheet declines gradually as the credit extended through TALF and the Maiden Lanes is repaid. The target federal funds rate increases in the first quarter of 2013, and immediately thereafter all maturing securities and prepayments of securities are allowed to roll off the portfolio. Six months after the assumed rise in the target federal funds rate, the Committee begins to sell remaining holdings of agency MBS and agency debt securities at a pace that reduces the amount of

Alternatives

Alternatives

these securities in the portfolio to zero in five years, by the end of the third quarter of 2018.[2, 3]

After reserve balances reach the assumed $25 billion floor and the U.S. Treasury's Supplementary Financing Account (SFA) has been wound down, the balance sheet begins to expand, with increases in holdings of Treasury securities matching the growth of Federal Reserve capital and notes in circulation.[4] The balance sheet reaches a size of about $1.8 trillion by the end of 2020.[5]

The other alternatives have different assumptions about the size of longer-term securities holdings, and the contours of projected total assets reflect these assumptions.[6] Under Alternative A, the Federal Reserve purchases $200 billion more of longer-term Treasury securities than under Alternative B, with these purchases continuing through the third quarter of 2011. With these additional purchases, the size of the balance sheet peaks at $3.1 trillion. Under Alternative C, the purchases are reduced to $400 billion, ending in the second quarter of 2011, and the size of the balance sheet peaks at $2.7 trillion. Under Alternative D, asset purchases are discontinued this month and the size of the balance sheet peaks at $2.5 trillion; the reinvestment of principal repayments from Treasury securities and agency securities, however, continues.

Total assets in Alternative B are projected to be just a touch larger than shown in the December Tealbook, reflecting, in part, a small upward revision to projected MBS holdings that is only partly offset by a reduction in projected holdings of Treasury securities. On the liability side of the balance sheet, this implies a slightly higher path of reserve balances than in the previous set of projections. Under Alternative B, the U.S.

[2] Given the maturity schedule for agency debt securities, the volume of sales necessary to reduce holdings of these securities to zero over the five year period is minimal.

[3] Under all of the scenarios presented, the tools to drain reserve balances (reverse repurchase agreements and the Term Deposit Facility) are assumed to not be used. Use of these tools would result in a shift in the composition of Federal Reserve liabilities, but not an overall change in the size of the balance sheet.

[4] In the near term, the SFA is projected to be wound down to $5 billion as the level of public debt outstanding that is subject to the federal debt limit approaches the statutory ceiling. A special box on "Debt Subject to Limit" is found in Tealbook A. Later this year, under the assumption that Congress raises the debt ceiling, this balance is projected to return to $200 billion.

[5] The composition of Federal Reserve assets in these projections differs notably at times from historical patterns. Prior to August 2007, U.S. Treasury securities made up 100 percent of the domestic securities portfolio. By contrast, under Alternative B, Treasury securities are around 47 percent of the domestic securities portfolio at the end of 2010. By the end of 2020, Treasury securities account for 100 percent of the domestic securities portfolio under all scenarios.

[6] All scenarios assume the same path for the federal funds rate.

Treasury's Supplementary Financing Account is not run down to zero until August 2016. After expanding in 2011, the monetary base is projected to contract through 2015 reflecting the decline in Federal Reserve assets and the associated downward trend in reserve balances.

Growth Rates for the Monetary Base

Date	Alternative B	Alternative A	Alternative C	Alternative D	*Memo:* December Alternative B
			Percent, annual rate		
			Monthly		
Apr-10	-37.6	-37.6	-37.6	-37.6	-37.6
May-10	-2.0	-2.0	-2.0	-2.0	-2.0
Jun-10	-5.8	-5.8	-5.8	-5.8	-5.8
Jul-10	-2.2	-2.2	-2.2	-2.2	-2.2
Aug-10	-2.4	-2.4	-2.4	-2.4	-2.4
Sep-10	-10.1	-10.1	-10.1	-10.1	-10.1
Oct-10	-9.8	-9.8	-9.8	-9.8	-9.8
Nov-10	3.2	3.2	3.2	3.2	3.2
Dec-10	18.7	18.7	18.7	18.7	14.0
Jan-11	28.6	28.9	28.4	28.1	23.8
Feb-11	98.9	97.8	86.6	74.0	66.1
Mar-11	123.2	120.9	102.0	79.8	57.3
			Quarterly		
2010 Q2	-10.4	-10.4	-10.4	-10.4	-10.4
2010 Q3	-3.9	-3.9	-3.9	-3.9	-3.9
2010 Q4	-3.0	-3.0	-3.0	-3.0	-3.1
2011 Q1	52.2	51.8	46.5	40.7	33.5
2011 Q2	75.9	73.7	55.7	34.6	44.9
			Annual - Q4 to Q4		
2009	41.5	41.5	41.5	41.5	41.5
2010	-0.9	-0.9	-0.9	-0.9	-1.1
2011	33.6	44.2	22.9	12.1	30.3
2012	-0.9	-0.9	-1.0	-1.0	-1.2
2013	-10.0	-10.2	-9.9	-9.9	-10.9
2014	-19.3	-19.1	-19.6	-19.9	-19.4
2015	-25.4	-24.9	-25.6	-20.3	-25.4

Note: Not seasonally adjusted.

DEBT, BANK CREDIT, AND MONEY FORECASTS

Domestic nonfinancial debt is projected to expand at an annual rate of about 2¾ percent in the first quarter of this year, driven by a rapid expansion in federal government debt and a modest rise in private nonfinancial debt.[7] We expect domestic nonfinancial debt to rise somewhat faster, at an average annual rate of 5 percent, over the next two years as federal debt continues to expand rapidly and the rise in private nonfinancial debt picks up steadily to 3 percent by 2012. With housing activity projected to remain very weak over the forecast period, house prices anticipated to decline through mid-2012, and lending standards expected to ease only gradually, home mortgages are expected to continue to contract in 2011 and to be flat in 2012. Consumer credit is projected to rise modestly this quarter and to pick up further in coming quarters, driven by solid increases in spending on consumer durables and an increase in the availability of credit. Nonfinancial business debt is expected to accelerate over the forecast period, reflecting the ongoing recovery in capital spending.

Commercial bank credit is expected to contract at about a 1½ percent pace in the current quarter, reflecting a continued decline in loans and a slower expansion of security holdings relative to the previous quarter. Bank credit is projected to begin to rise in the second quarter and increase at an annual rate of about 1½ percent in 2011 and about 3½ percent in 2012 as loans begin to grow at a modest pace and securities expand at a moderate rate. The decline in commercial and industrial loans appeared to end late last quarter, and this loan category is projected to record gradually stronger increases over the forecast period as a result of continued gains in investment outlays and a further gradual easing of lending standards. With the commercial real estate sector expected to face persistently weak market fundamentals over the forecast period, the staff anticipates that commercial real estate loans will decrease over 2011 and 2012. For residential real estate loans, responses to the most recent Senior Loan Officer Opinion Survey (SLOOS) suggest that banks are increasingly willing to hold such loans on their books. Thus, despite weak housing activity and the projected decline in home mortgage debt, we anticipate that residential real estate loans on banks' books will continue to edge up over the forecast period. Consumer loans are expected to contract further in the first half of 2011and then to increase modestly during the rest of 2011 and in 2012, with the gains driven by solid increases in consumer spending on durables and declines in charge-offs.

[7] The rapid expansion of federal government debt is pushing Treasury towards the statutory debt ceiling. A special box on "Debt Subject to Limit" is found in Tealbook A.

With loan demand improving, banks' securities holdings are projected to expand more slowly than in 2010 over the forecast period.

M2 growth is projected to fall to about 1¾ percent in 2011 but then pickup somewhat in 2012. The contour of this forecast assumes that households will reallocate their portfolios away from safe and liquid M2 assets toward higher-yielding investments that are outside of M2 as the economic recovery gains strength over the coming year. Thereafter, M2 growth is projected to be more closely aligned with the expansion in nominal GDP. Growth in liquid deposits is expected to continue to decelerate from the robust rate posted in 2009, but remain at a solid pace over the forecast period. We expect small time deposits and retail money market mutual funds to continue to contract through the projection period though the rate of contraction diminishes over time. Currency is anticipated to expand moderately, reflecting a waning of demand from abroad.

Growth Rates of M2
(Percent, seasonally adjusted annual rate)

Monthly Growth Rates	Tealbook Forecast*
Jun-10	4.3
Jul-10	2.3
Aug-10	6.3
Sep-10	6.6
Oct-10	5.5
Nov-10	5.1
Dec-10	4.2
Jan-11	2.7
Feb-11	1.5
Mar-11	1.0
Apr-11	1.0
May-11	1.0
Jun-11	1.2
Quarterly Growth Rates	
2010 Q3	4.5
2010 Q4	5.6
2011 Q1	2.8
2011 Q2	1.1
Annual Growth Rates	
2009	5.0
2010	3.2
2011	1.8
2012	5.1

* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through December 2010; projections thereafter

Alternatives

DIRECTIVE

The December directive appears below. Drafts for a January directive that correspond to each of the four policy alternatives appear on subsequent pages. The directive for Alternative B would instruct the Desk to continue carrying out the increase in the SOMA's securities holdings of $600 billion by the end of June 2011 through purchases of longer-term Treasury securities while also continuing the current policy of reinvesting principal payments on SOMA securities. The directive for Alternative A would increase the SOMA's securities holdings by $800 billion by the end of September 2011 through the purchase of longer-term Treasury securities, while the corresponding increase under the Alternative C directive is a total of $400 billion by the end of June 2011. The directives for both Alternatives A and C continue the current portfolio policy of reinvesting principal payments. The directive for Alternative D would instruct the Desk to maintain the SOMA's total holdings of securities at approximately the current level by continuing to reinvest payments of principal from agency debt and MBS in longer-term Treasury securities.

December 2010 FOMC Directive

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 execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $2.6 trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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.

January 2011 FOMC Directive — 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 execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately ~~$2.6~~ **$2.8** trillion by the end of ~~June~~ **September** 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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.

January 2011 FOMC Directive — 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 execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $2.6 trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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.

January 2011 FOMC Directive — 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 execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately ~~$2.6~~ **$2.4** trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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.

January 2011 FOMC Directive — Alternative D

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 ~~execute purchases of longer-term Treasury securities in order to~~ ~~increase~~ **maintain** the total face value of domestic securities held in the System Open Market Account ~~to~~ **at** approximately ~~$2.6~~ $2.**2** trillion ~~by the end of June 2011. The Committee also directs the Desk to~~ **by** reinvest**ing** principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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.

Explanatory Notes

A. Measures of the Equilibrium Real Rate

The equilibrium real rate is the real federal funds rate that, if maintained, would return output to its potential level sometime in the future. 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 prevail 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.

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.
Tealbook-consistent	Two measures are presented based on the FRB/US and the EDO models. Both models are matched to the extended Tealbook forecast. Model simulations determine the value of the real federal funds rate that closes the output gap conditional on the extended baseline.

Measure	Description
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 Tealbook 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.

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 Tealbook publication date.

Estimates of the real federal funds rate depend on the proxies for expected inflation used. The table below shows estimates of the real federal funds rates using alternative proxies: lagged core PCE inflation, which is used to construct the actual real federal funds rate shown in the table that displays the r^* measures; lagged four-quarter headline PCE inflation; and projected four-quarter headline PCE inflation beginning with the next quarter. The table also displays the Tealbook-consistent FRB/US-based measure of the short-run equilibrium real rate and the average actual real federal funds rate over the next twelve quarters using each of the different proxies for expected inflation.

Proxy used for expected inflation	Actual real federal funds rate (current value)	Tealbook-consistent FRB/US-based measure of the equilibrium real funds rate (current value)	Average actual real funds rate (twelve-quarter average)
Lagged core inflation	-0.7	-1.5	-0.5
Lagged headline inflation	-1.0	-1.7	-0.7
Projected headline inflation	-0.9	-1.7	-0.7

Explanatory Notes

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 right-hand-side 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 Tealbook" is based on the current specification of the policy rule, applied to the previous Tealbook 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 Tealbook projections for inflation and the output gap. The first-difference rule, the estimated outcome-based rule, and the estimated forecast-based rule include the lagged policy rate as a right-hand-side variable. When the Tealbook is published early in the quarter, the lines denoted “Previous Tealbook” report rule prescriptions based on the previous Tealbook’s staff outlook, jumping off from the actual value of the lagged funds rate in the previous quarter. When the Tealbook is published late in the quarter, the lines denoted “Previous Tealbook Outlook” report rule prescriptions based on the previous Tealbook’s staff outlook, but jumping off from the average value for the policy rate thus far this quarter

REFERENCES

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

C. Long-run Projections of the Balance Sheet and Monetary Base

This explanatory note presents the assumptions underlying the projections provided in the section entitled "Long-Run Projections of the Balance Sheet and Monetary Base," as well as projections for each major component of the balance sheet.

GENERAL ASSUMPTIONS

The balance sheet projections are constructed on a monthly frequency from January 2011 to December 2020. The few balance sheet items that are not discussed below are assumed to be constant over the projection period at the level observed on December 31, 2010. The projections for all major asset and liability categories under each scenario are summarized in the tables that follow the bullet points.

The Tealbook projection assumes that the federal funds rate begins to increase in the first quarter of 2013. The balance sheet projections assume that no use of short-term draining tools is necessary to achieve the projected path for the federal funds rate.

ASSETS

Treasury Securities, Agency MBS, and Agency Debt Securities

- The assumptions under Alternative B are
    - Purchases of $600 billion of longer-term Treasury securities between November 2010 and June 2011, at an average pace of about $75 billion per month (about $80 billion per month from January to June of 2011).
    - Principal payments from Treasury securities continue to be reinvested until the target federal funds rate lifts off.
    - Principal payments from agency MBS and agency debt securities are reinvested in longer-term Treasury securities until the target federal funds rate increases.[1]
    - All purchases of Treasury securities are executed assuming a maturity distribution similar to that currently used by the Desk.[2]
    - Beginning immediately after the first increase in the target federal funds rate, all securities are allowed to roll off as they mature or prepay.

[1] Projected prepayments of agency MBS reflect interest rates as of January 18, 2011.

[2] Because current and expected near-term interest rates are below the average coupon rate on outstanding Treasury securities, the market value at which these securities are purchased will exceed their face value. Reserve balances will increase by the market value, whereas securities holdings as reported in the H.4.1 release will increase by the face value; the implied premiums are recorded as "other assets." As a percent of these assets, premiums decline gradually from 55 percent in 2012 to 13 percent in 2020.

- The Federal Reserve begins to sell agency MBS and agency debt securities six months after the assumed date of the first increase in the target federal funds rate. The holdings of agency securities are reduced over five years and reach zero by the end of the third quarter of 2018.
- For agency MBS, the rate of prepayment is based on estimates of housing market factors from one of the program's investment managers and interest rate projections from the Tealbook. The projected rate of prepayment is sensitive to these underlying assumptions.

- Under Alternative A, a total of $800 billion in longer-term Treasury securities are purchased by the end of the third quarter of 2011. All other assumptions are the same as for Alternative B.

- Under Alternative C, a total of $400 billion in longer-term Treasury securities are purchased by the end of the second quarter of 2011. All other assumptions are the same as for Alternative B.

- Under Alternative D, longer-term Treasury securities purchases are discontinued after the January 2011 FOMC meeting, although the proceeds from maturing Treasury securities and the principal payments of agency MBS and agency debt securities are reinvested in Treasury securities until the target federal funds rate lifts off. All other assumptions are the same as for Alternative B.

- In all four scenarios, a minimum level of $25 billion is set for reserve balances. To maintain reserve balances at this level, first the U.S. Treasury's Supplementary Financing Account (SFA) is reduced to zero. After the SFA is exhausted, Treasury bills are purchased. Purchases of bills continue until these securities comprise one-third of the Federal Reserve's total Treasury securities holdings–about the average level in the period prior to the crisis. Once this level is reached, the Federal Reserve buys notes and bonds in addition to bills to maintain an approximate composition of the portfolio of one-third bills and two-thirds coupon securities.

Liquidity Programs and Credit Facilities

- Loans through the Term Asset-Backed Securities Loan Facility (TALF) peaked at $48 billion in December 2009. Credit extended through this facility declines to zero by the end of 2014, reflecting loan maturities and prepayments.

- The assets held by TALF LLC increase to $1.0 billion by the end of 2011 and remain at this level through 2014 before declining to zero the following year. Assets held by TALF LLC consist of investments of commitment fees collected by the LLC and the U.S. Treasury's initial funding. In this projection, the LLC does not purchase any asset-backed securities received by the Federal Reserve Bank of New York in connection with a decision of a borrower to not repay a TALF loan.

- Credit extended 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 Holdings LLC, declined to zero in January 2011.
- The assets held by Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC are sold steadily, but gradually, over time.

LIABILITIES AND CAPITAL

- Federal Reserve notes in circulation grow in line with the staff forecast for money stock currency through the first quarter of 2014. Afterwards, Federal Reserve notes in circulation grow at the same rate as nominal GDP, as projected in the extended Tealbook forecast.
- The U.S. Treasury's general account (TGA) follows the staff forecast for end-of-month U.S. Treasury operating cash balances through June 2011.[3] At that point, the TGA slowly drops back to its historical target level of $5 billion by the end of 2011 as it is assumed that the Treasury will implement a new cash management system that allows it to 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 SFA balance reflect constraints that Treasury faces with the debt limit. We assume the SFA is reduced to $5 billion by the end of March 2011, as the debt ceiling approaches. Subsequently, under the assumption that Congress raises the debt ceiling, the SFA returns to $200 billion. Later in the projection, the SFA is reduced to ensure that the level of reserve balances does not fall below $25 billion.
- Federal Reserve capital grows 15 percent per year, in line with the average rate of the past ten years.
- In general, increases in the level of assets of the Federal Reserve generate higher levels of reserve balances. Increases in the levels of other liability items, such as Federal Reserve notes in circulation or the Treasury's general account, like increases in the level of Reserve Bank capital, drain reserve balances. When increases in these liability or capital items would otherwise cause reserve balances to fall below $25 billion, purchases of Treasury securities are assumed in order to maintain that level of reserve balances.

[3] The staff forecast for end-of-month U.S. Treasury 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 only $2 billion, for the time being, this forecast is a good proxy for the level of TGA balances.

Federal Reserve Balance Sheet
End-of-Year Projections -- Alternative B

	Dec 31, 2010	2012	2014	2016	2018	2020
		End-of-Year				
		$ Billions				
Total assets	2,428	2,858	2,079	1,430	1,592	1,779
Selected assets:						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending though other credit facilities	25	9	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	25	9	1	0	0	0
Support for specific institutions	113	47	35	23	10	7
Credit extended to AIG	46	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	66	47	35	23	10	7
Securities held outright	2,161	2,651	1,920	1,303	1,488	1,683
U.S. Treasury securities	1,021	1,830	1,358	1,043	1,488	1,683
Agency debt securities	147	77	39	16	0	0
Agency mortgage-backed securities	992	743	523	244	0	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	124	143	115	96	87	82
Total liabilities	2,375	2,788	1,986	1,307	1,430	1,565
Selected liabilities:						
Federal Reserve notes in circulation	942	993	1,080	1,200	1,323	1,457
Reverse repurchase agreements	63	59	59	59	59	59
Deposits with Federal Reserve Banks	1,323	1,720	831	33	33	33
Reserve balances held by depository institutions	977	1,512	623	25	25	25
U.S. Treasury, general account	141	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	0	0	0
Other balances	3	3	3	3	3	3
Total capital	53	70	93	123	162	215

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

Explanatory Notes

Federal Reserve Balance Sheet
End-of-Year Projections -- Alternative A

	Dec 31, 2010	End-of-Year 2012	2014	2016	2018	2020
		$ Billions				
Total assets	2,428	3,066	2,231	1,430	1,592	1,779
Selected assets:						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending though other credit facilities	25	9	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	25	9	1	0	0	0
Support for specific institutions	113	47	35	23	10	7
Credit extended to AIG	46	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	66	47	35	23	10	7
Securities held outright	2,161	2,851	2,068	1,302	1,487	1,683
U.S. Treasury securities	1,021	2,030	1,506	1,041	1,487	1,683
Agency debt securities	147	77	39	16	0	0
Agency mortgage-backed securities	992	743	523	244	0	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	124	152	120	98	88	82
Total liabilities	2,375	2,996	2,139	1,307	1,430	1,565
Selected liabilities:						
Federal Reserve notes in circulation	942	993	1,080	1,200	1,323	1,457
Reverse repurchase agreements	63	59	59	59	59	59
Deposits with Federal Reserve Banks	1,323	1,928	984	33	33	33
Reserve balances held by depository institutions	977	1,720	776	25	25	25
U.S. Treasury, general account	141	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	0	0	0
Other balances	3	3	3	3	3	3
Total capital	53	70	93	123	162	215

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

Explanatory Notes

Federal Reserve Balance Sheet
End-of-Year Projections -- Alternative C

	Dec 31, 2010	2012	2014	2016	2018	2020
		End-of-Year				
		$ Billions				
Total assets	2,428	2,649	1,922	1,430	1,592	1,779
Selected assets:						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending though other credit facilities	25	9	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	25	9	1	0	0	0
Support for specific institutions	113	47	35	23	10	7
Credit extended to AIG	46	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	66	47	35	23	10	7
Securities held outright	2,161	2,451	1,768	1,305	1,489	1,683
U.S. Treasury securities	1,021	1,630	1,206	1,045	1,489	1,683
Agency debt securities	147	77	39	16	0	0
Agency mortgage-backed securities	992	743	523	244	0	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	124	134	110	94	87	82
Total liabilities	2,375	2,578	1,829	1,307	1,430	1,565
Selected liabilities:						
Federal Reserve notes in circulation	942	993	1,080	1,200	1,323	1,457
Reverse repurchase agreements	63	59	59	59	59	59
Deposits with Federal Reserve Banks	1,323	1,511	674	33	33	33
Reserve balances held by depository institutions	977	1,302	466	25	25	25
U.S. Treasury, general account	141	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	0	0	0
Other balances	3	3	3	3	3	3
Total capital	53	70	93	123	162	215

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

Explanatory Notes

Federal Reserve Balance Sheet
End-of-Year Projections -- Alternative D

	Dec 31, 2010	2012	2014	2016	2018	2020
		End-of-Year				
		$ Billions				
Total assets	2,428	2,435	1,762	1,428	1,591	1,777
Selected assets:						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending though other credit facilities	25	9	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	25	9	1	0	0	0
Support for specific institutions	113	47	35	23	10	7
Credit extended to AIG	46	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III	66	47	35	23	10	7
Securities held outright	2,161	2,247	1,612	1,306	1,488	1,681
U.S. Treasury securities	1,021	1,426	1,051	1,045	1,488	1,681
Agency debt securities	147	77	39	16	0	0
Agency mortgage-backed securities	992	743	523	244	0	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	124	125	105	93	86	82
Total liabilities	2,375	2,365	1,669	1,306	1,428	1,563
Selected liabilities:						
Federal Reserve notes in circulation	942	995	1,079	1,198	1,321	1,456
Reverse repurchase agreements	63	59	59	59	59	59
Deposits with Federal Reserve Banks	1,323	1,295	516	33	33	33
Reserve balances held by depository institutions	977	1,087	307	25	25	25
U.S. Treasury, general account	141	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	0	0	0
Other balances	3	3	3	3	3	3
Total capital	53	70	93	123	162	215

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.