Part 1 April 22, 2009

# CURRENT ECONOMIC AND FINANCIAL CONDITIONS

# **Summary and Outlook**

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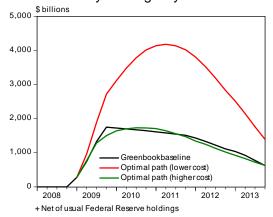
Prepared for the Federal Open Market Committee by the staff of the Board of Governors of the Federal Reserve System

#### **Large-Scale Asset Purchases and the Economic Outlook**

The Federal Reserve has announced plans to purchase \$1.75 trillion in long-term Treasury securities, agency debt, and agency MBS by the end of this year. As indicated by the black line in the chart at the bottom left, we have incorporated no additional purchases into the baseline outlook. In addition, we have assumed that the FOMC will let these assets run off gradually as the securities mature and as home mortgages in MBS pools are refinanced. Under this assumption, at the end of 2013 the Federal Reserve holds \$625 billion more in long-term assets than it otherwise would; the runoff is completed by 2015. As illustrated in the chart to the bottom right, we judge that these purchases will help to reduce unemployment modestly over the next several years.

As discussed in a recent memo to the FOMC, designing an "optimal" large-scale asset purchase (LSAP) program is complex, in part because of uncertainty about the costs

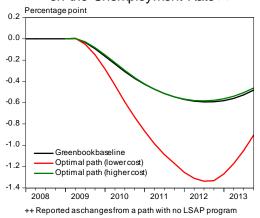
> Holdings of Long-Term Treasury and Agency Securities+



associated with buying and selling these assets.\* The costs may include such things as disruptions to market functioning, exposure of the Federal Reserve to large capital losses, and impaired management of our balance sheet. Designing an LSAP program is also complicated by uncertainty about its effects on interest rates, real activity, and inflation. As a consequence, we suggest that these simulations be taken with an even largerthan-usual grain of salt and with the reminder that the alternatives are "optimal" only within the very narrow terms of this exercise.

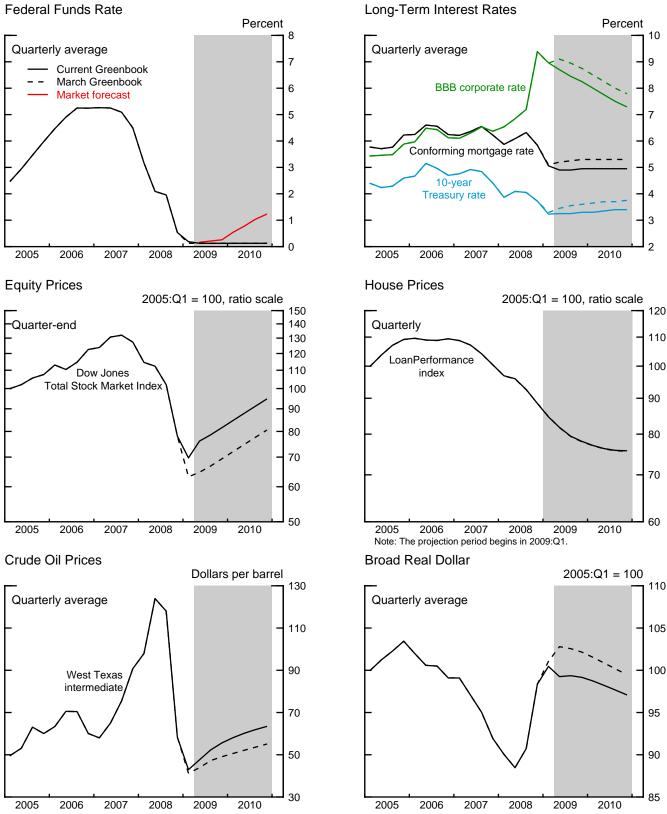
That said, the optimal-control exercises suggest that a path similar to the baseline assumption would be appropriate if policymakers judge the costs of buying and selling these assets as fairly high (the green lines). However, if policymakers judge the costs of an LSAP program as less substantial, then an expansion of the current program might be desirable (the red lines).

### Effect of LSAP Programs on the Unemployment Rate++



<sup>\*</sup>Eileen Mauskopf and Jae Sim, "Optimal Paths for Large-Scale Asset Purchases," FOMC memo (April 20, 2009).

# Key Background Factors Underlying the Baseline Staff Projection



Note: In each panel, shading represents the projection period, which begins in 2009:Q2, except where noted. In the upper-left panel that reports the federal funds rate, the dashed line is not apparent because the paths of the federal funds rate in the March and current Greenbooks are the same.

# Recent Developments and the Near-Term Outlook

We estimate that real GDP dropped at an annual rate of 6½ percent in the first quarter, as final sales fell steeply and the pace of inventory liquidation quickened. In the current quarter, with fiscal stimulus kicking in, defense spending rebounding, and motor vehicle production stepping up, we are projecting that real GDP will decline at a more moderate annual rate of 1½ percent.

The severe contraction in the labor market continued into March. Private nonfarm payrolls shrank another 660,000 last month, and the unemployment rate jumped to 8.5 percent. With initial claims for unemployment insurance remaining extremely elevated in April, we expect private employment to fall 600,000 further this month. Thereafter, we anticipate some moderation in the pace of job loss, with private payrolls dropping 400,000 in May and 300,000 in June. These job cuts are projected to push the unemployment rate up to 9.1 percent by June.

Industrial production has continued to fall sharply. Manufacturing production declined at an annual rate of 23 percent last quarter, and the factory utilization rate dropped to a new postwar low of 65.8 percent in March. As in the last Greenbook, we anticipate a slower pace of decline in the second quarter. After plummeting to a historically low level last

Summary of (Percent change a								
	200	9:Q1	2009	9:Q2				
Measure	March Greenbook	April Greenbook	March Greenbook	April Greenbook				
Real GDP	-6.5	-6.3	-2.0	-1.5				
Private domestic final purchases	-5.3	-5.0	-4.3	-4.0				
Personal consumption expenditures	ditures .4 1.1 .05							
Residential investment	-41.2 -38.2 -34.3 -27.4							
Business fixed investment								
Government outlays for consumption and investment	2	-5.3	5.5	6.7				
		Contributio (percentage	•					
Inventory investment	-2.2	-2.2	.5	1				
Net exports	.1	1.0	.0	.6				

**Projections of Real GDP** (Percent change at annual rate from end of preceding period except as noted)

Measure	20	009	2010
Measure	H1	H2	2010
Real GDP	-3.9	.8	2.6
Previous Greenbook	-4.2	3	1.5
Final sales	-2.8	6	2.4
Previous Greenbook	-3.4	-1.5	1.4
Personal consumption			
expenditures	.3	.8	2.7
Previous Greenbook	.2	.6	1.9
Residential investment	-33.0	9	11.0
Previous Greenbook	-37.9	-9.5	6.7
Business fixed investment	-25.6	-15.5	3.4
Previous Greenbook	-25.4	-19.7	9
Government purchases	.5	4.9	1.9
Previous Greenbook	2.6	4.3	1.8
Exports	-18.6	7	2.3
Previous Greenbook	-15.1	-2.3	1.0
Imports	-20.1	4.1	5.1
Previous Greenbook	-12.5	3.2	3.8
		bution to	
		owth	
	(percen	tage points	)
Inventory change	-1.1	1.4	.3
Previous Greenbook	8	1.2	.1
Net exports	.9	6	5
Previous Greenbook	.1	7	4

accumulation, and a gradual repair of financial markets. Relative to the last Greenbook, lower borrowing rates and higher equity prices boost our forecast through the usual channels. Moreover, given that measures of financial market stress appear to have eased somewhat more than we had assumed, we have also reduced our judgmental estimate of the restraint on spending from financial channels that are outside those that are routinely captured by our models. (See the box entitled "Judgmental Effects of Financial Market *Turmoil in the Staff Projection" for more details.)* 

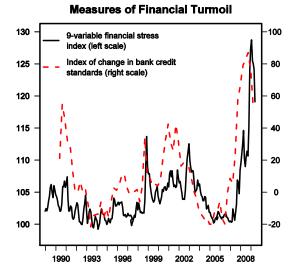
# Judgmental Effects of Financial Market Turmoil in the Staff Projection

As discussed last fall in the September and October Greenbooks, our standard models probably do not capture all the effects of financial turmoil on real activity, such as those associated with tighter lending standards and other factors that influence spending outside of conventional cost-of-capital and wealth channels. For this reason, we continue to use supplementary analyses to inform our judgmental estimates of these effects.

As before, we use two types of financial data to quantify the extent of financial turmoil: indicators of capital market stress derived from risk spreads and volatility measures, and indicators of bank lending conditions from the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS). We then gauge the implications of this stress for the economic outlook using two empirical methods: one that exploits the historical correlation between stress and errors in FRB/US spending equations to project the path of these errors forward, and another that incorporates indicators of stress within small-scale VAR models.

As shown in the chart and table below, measures of stress have improved somewhat since last fall, especially in recent weeks. Accordingly, our various econometric estimates of the fallout from financial turmoil—shown in the table on the facing page—are now smaller than they were in March. In particular, estimated effects on the level of real GDP have revised up ½ percent in 2009 and about ¾ percent in 2010, averaging across all the models.

In updating the staff projection in response to the recent easing in financial stress, we have had to wrestle with several issues. First, each estimate reported in the table has its own merits and drawbacks, and all are subject to considerable coefficient and model uncertainty. Second, each of the approaches poses significant identification challenges that have been exacerbated as the economy has experienced other contractionary shocks. Third, the estimates are sensitive to the projected speed at which financial stress fades away over time. Finally, the econometric



Recent Movements in Meas Financial Turmoil	ures of
SLOOS index	
October 2008 survey	87.0
January 2009 survey	76.0
April 2009 survey	51.9
Financial stress index	
October 2008 average	124.0
March 2009 average	124.2
Early April 2009 average	119.1

estimates do not fully account for the likely ameliorative effects of the various traditional and nontraditional policy actions taken in recent months by the Federal Reserve and the federal government to mitigate the effects of the current crisis.

After weighing these considerations, we have marked up the forecast from the last Greenbook to account for the diminished financial stress by an amount towards the low end of the range suggested by the model results.

As shown in the bottom portion of the table, our judgmental adjustments (which include the

effects of recession dynamics as well as financial turmoil) now cut about 5 percent off the level of real GDP by the end of this year and 3½ percent by the end of 2010, over and above the restraint imposed by traditional cost-of-capital and wealth effects. As can be seen, these effects are somewhat smaller than what we assumed in March. Beyond 2010, we expect the unusual restraint from financial turmoil and recession dynamics to continue to abate as financial institutions repair their balance sheets, credit availability improves further, and households and firms become more confident about the permanence of the economic recovery.

Selected Econometric Estin	nates of the Effects	of Financi	al Turmoil	on Real GD	P
Data of Estimate and Data Course	Mathadalaas	Percent	deviation fr	om Q4 basel	ine level
Date of Estimate and Data Source	Methodology	2007	2008	2009	2010
Senior Loan Officer Opinion Survey					
Index of survey responses	FRB/US <sup>1</sup>	4	-2.9	-1.8	-0.1
Commercial loan credit standards	$VAR^2$	1	-2.8	-4.4	-3.1
Change in bank credit standards <sup>3</sup>	$VAR^2$	1	-1.2	-2.3	-1.5
Capital markets data					
9-variable stress index	FRB/US <sup>2</sup>	1	-1.1	-2.0	-1.3
9-variable stress index	FRB/US <sup>1</sup>	4	-1.7	-4.6	-4.5
9-variable stress index	$VAR^2$	.0	1	-1.6	-2.6
Revision in estimates since March Gree	enbook				
Average				.5	.8
Range				(.1, .9)	(.1, 1.5)
Memo item: Staff judgmental					
projection adjustments <sup>4</sup>					
April Greenbook		3	-3.5	-5.2	-3.5
March Greenbook		3	-3.5	-5.4	-4.0
Revision		.0	.0	.2	.5

- 1. Stress treated as exogenous and phased out over four quarters.
- 2. Stress treated as endogenous and simulated as part of a system of equations.
- 3. Series shown as the dashed line in the chart; includes both business and consumer lending standards.
- 4. Includes the effects of financial stress and adjustments for recession dynamics.

# Decomposition of Structural Labor Productivity Nonfarm Business Sector

(Percent change, Q4 to Q4, except as noted)

Measure	1974- 95	1996- 2000	2001- 06	2007	2008	2009	2010
Structural labor productivity Previous Greenbook	<b>1.5</b> 1.5	<b>2.5</b> 2.5	<b>2.6</b> 2.6	<b>2.1</b> 2.1	<b>1.9</b> 1.9	<b>1.6</b> 1.6	<b>1.6</b> 1.5
Contributions <sup>1</sup> Capital deepening Previous Greenbook	.7	1.4 1.4	.7 .7	.6 .6	.4 .4	3 3	2 3
Multifactor productivity Previous Greenbook	.5 .5	.7 .7	1.6 1.6	1.2 1.2	1.3 1.3	1.6 1.7	1.6 1.7
Labor composition	.3	.3	.3	.2	.2	.2	.1
MEMO Potential GDP Previous Greenbook	3.0 3.0	3.4 3.4	2.6 2.6	2.5 2.5	2.5 2.5	2.0 2.0	2.0 2.0

Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points.

The Outlook for the Labor Market (Percent change, Q4 to Q4, except as noted)

Measure	2007	2008	2009	2010
Output per hour, nonfarm business	2.6	2.2	1.3	2.1
Previous Greenbook	2.6	2.1	.9	2.0
Nonfarm private payroll employment	.8	-2.1	-3.7	1.2
Previous Greenbook	.8	-2.1	-3.8	1
Household survey employment	.4	-1.5	-2.7	1.0
Previous Greenbook	.4	-1.5	-2.6	.4
Labor force participation rate <sup>1</sup> Previous Greenbook	66.0	65.9	65.3	65.1
	66.0	65.9	65.3	65.1
Civilian unemployment rate <sup>1</sup>	4.8	6.9	9.3	9.1
Previous Greenbook	4.8	6.9	9.2	9.5
MEMO GDP gap <sup>2</sup> Previous Greenbook	4 4	-3.6 -3.7	-7.0 -7.7	-6.4 -8.2

<sup>1.</sup> Percent, average for the fourth quarter.

<sup>2.</sup> Actual less potential GDP in the fourth quarter of the year indicated as a percent of potential GDP. A negative number thus indicates that the economy is operating below potential.

**Inflation Projections** (Percent change, Q4 to Q4, except as noted)

0 / 0		1		
Measure	2007	2008	2009	2010
PCE chain-weighted price index	3.5	1.9	.7	1.0
Previous Greenbook	3.5	1.9	.4	.8
Food and beverages Previous Greenbook	4.5	6.3	1.7	1.2
	4.5	6.3	1.9	1.2
Energy	19.1	-8.5	-8.9	6.1
Previous Greenbook	19.1	-8.6	-11.3	4.5
Excluding food and energy	2.2	1.9	1.2	.7
Previous Greenbook	2.2	1.9	1.0	.5
Consumer price index	4.0	1.5	.4	1.3
Previous Greenbook	4.0	1.5	.3	1.1
Excluding food and energy	2.3	2.0	1.3	.9
Previous Greenbook	2.3	2.0	1.3	.7
GDP chain-weighted price index	2.6	2.0	1.6	.9
Previous Greenbook	2.6	2.0	1.6	.8
ECI for compensation of private industry workers <sup>1</sup> Previous Greenbook	3.0	2.4	1.8	1.3
	3.0	2.4	1.8	1.1
Compensation per hour, nonfarm business sector Previous Greenbook	3.6 3.6	4.1 4.1	2.3 2.2	1.3 1.1
Prices of core goods imports <sup>2</sup> Previous Greenbook	3.4	3.5	-3.3	1.1
	3.4	3.6	-4.2	1.1

<sup>1.</sup> December to December.

# The Long-Term Outlook

We have extended the staff forecast to 2013 using the FRB/US model, which was adjusted to incorporate staff assessments of long-run potential output growth, fiscal policy, and foreign economic conditions. The contour of the long-run outlook depends on the following key assumptions:

• Monetary policy aims to stabilize PCE inflation at 2 percent in the long run, consistent with the longer-term inflation projections provided by FOMC participants in January. We have made no provision for further nontraditional policy actions in the construction of this extension beyond those that have already been announced.

<sup>2.</sup> Core goods imports exclude computers, semiconductors, oil, and natural gas.

# The Long-Term Outlook

(Percent change, Q4 to Q4, except as noted)

Measure	2008	2009	2010	2011	2012	2013
Real GDP	-0.8	-1.6	2.6	4.8	5.4	5.2
Civilian unemployment rate <sup>1</sup>	6.9	9.3	9.1	7.7	5.9	4.7
PCE prices, total	1.9	0.7	1.0	0.8	0.9	1.1
Core PCE prices	1.9	1.2	0.7	0.7	0.8	1.1
Federal funds rate <sup>1</sup>	0.5	0.1	0.1	0.1	0.1	2.0

- 1. Percent, average for the final quarter of the period.
- Federal Reserve holdings of long-term Treasury securities, agency debt, and agency MBS are allowed to run off gradually as the securities mature and mortgages in MBS pools are refinanced. This strategy causes term premiums on Treasury bonds to gradually move back up to their historical averages after 2010.
- Risk premiums on corporate bonds, mortgages, and corporate equity continue to fall back toward historically more normal levels beyond 2010.
- The fiscal stimulus package continues to boost government spending beyond 2010, reflecting the staff's assumptions about the rate at which state and local governments respond to increased grants. However, the level of government spending from this source gradually fades and is small by 2013.
- Government budget deficits narrow after 2010. This improvement mostly reflects the effects of the economic recovery on tax receipts and transfer payments.
- Beyond 2010, foreign real GDP expands 5 percent per year, on average, as the economic recovery picks up speed abroad. The dollar is assumed to depreciate about 2¾ percent per year in real terms. Nominal WTI crude oil prices rise gradually from recent levels to a bit more than \$70 per barrel by the end of 2013, consistent with futures prices. Under these assumptions, movements in prices of energy and imports have only minor implications for domestic inflation.
- The NAIRU remains flat at 4¾ percent, and potential GDP expands 2½ percent per year, on average, over the 2011-13 period.

The unemployment rate enters 2011 at a very high level, and inflation is well below the assumed long-run target. Under the assumptions used to construct the baseline extension, the federal funds rate remains at the effective lower bound through 2012. The lingering effects of financial upheaval continue to fade after 2010, and the recovery in residential construction gains momentum; coupled with stimulative monetary policy, these factors

Alternative Scenarios

(Percent change, annual rate, from end of preceding period except as noted)

Measure and scenario	20	009	2010	2011	2012-
wieasure and scenario	H1	H2	2010	2011	13
Real GDP					
Extended Greenbook baseline	-3.9	.8	2.6	4.8	5.3
False dawn	-5.8	-3.5	1.5	4.6	5.3
Typical recovery	-3.9	6.2	3.6	4.6	4.2
Labor market damage	-3.9	.1	2.2	4.8	5.0
Anchored inflation expectations	-3.9	.8	2.7	5.0	5.4
Deflation	-3.9	.8	2.5	4.6	4.9
Unemployment rate <sup>1</sup>					
Extended Greenbook baseline	9.0	9.3	9.1	7.7	4.7
False dawn	9.2	10.1	10.5	9.1	5.7
Typical recovery	9.0	8.7	7.9	6.6	4.5
Labor market damage	9.2	9.9	9.9	8.5	5.8
Anchored inflation expectations	9.0	9.3	9.1	7.6	4.5
Deflation	9.0	9.3	9.1	7.8	5.0
Core PCE inflation					
Extended Greenbook baseline	1.7	.8	.7	.7	.9
False dawn	1.7	.7	.4	.4	.5
Typical recovery	1.7	.8	.9	.9	1.1
Labor market damage	1.8	.8	.7	.8	1.0
Anchored inflation expectations	1.7	.9	.9	1.1	1.4
Deflation	1.1	4	4	6	3
Federal funds rate <sup>1</sup>					
Extended Greenbook baseline	.1	.1	.1	.1	2.0
False dawn	.1	.1	.1	.1	.1
Typical recovery	.1	.1	.1	.1	2.2
Labor market damage	.1	.1	.1	.1	2.0
Anchored inflation expectations	.1	.1	.1	.1	3.0
Deflation	.1	.1	.1	.1	.2

<sup>1.</sup> Percent, average for the final quarter of the period.

Economic activity abroad also falters, depressing demand for U.S. exports. Buffeted by these shocks, real GDP contracts at an annual rate of 5¾ percent in the first half of this year and 3½ percent in the second half. In 2010, the economic recovery begins, but at a pace noticeably below its potential. The unemployment rate peaks at 10½ percent next year, and core PCE inflation edges below ½ percent. Beyond 2010, the recovery

# Selected Greenbook Projections and 70 Percent Confidence Intervals Derived from Historical Greenbook Forecast Errors and FRB/US Simulations

Measure	2009	2010	2011	2012	2013
Real GDP					
(percent change, Q4 to Q4)					
Projection	-1.6	2.6	4.8	5.4	5.2
Confidence interval					
Greenbook forecast errors	-2.83	1.0-4.3			
FRB/US stochastic simulations	-2.65	1.3–4.2	3.3–6.5	3.7–7.2	3.0-6.8
Civilian unemployment rate					
(percent, Q4)					
Projection	9.3	9.1	7.7	5.9	4.7
Confidence interval					
Greenbook forecast errors	8.8–9.8	8.3-9.8			
FRB/US stochastic simulations	8.8–9.7	8.3–9.7	6.7–8.5	4.8–6.8	3.8–5.7
PCE prices, total					
(percent change, Q4 to Q4)					
Projection	0.7	1.0	0.8	0.9	1.1
Confidence interval					
Greenbook forecast errors	.0–1.4	2-2.2			
FRB/US stochastic simulations	.2–1.3	.2–1.9	1–1.8	.0–1.9	.2–2.0
PCE prices excluding					
food and energy					
(percent change, Q4 to Q4)					
Projection	1.2	0.7	0.7	0.8	1.1
Confidence interval					
Greenbook forecast errors	.8–1.7	1-1.4			
FRB/US stochastic simulations	.8–1.7	.0–1.4	1–1.5	.0–1.7	.2–1.8
Federal funds rate					
(percent, Q4)					
Projection	0.1	0.1	0.1	0.1	2.0
Confidence interval					
FRB/US stochastic simulations	.1–.1	.1–.1	.1–.1	.1–2.9	.1–5.2

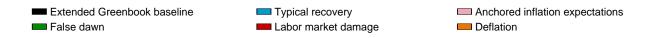
Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2008 set of model equation residuals.

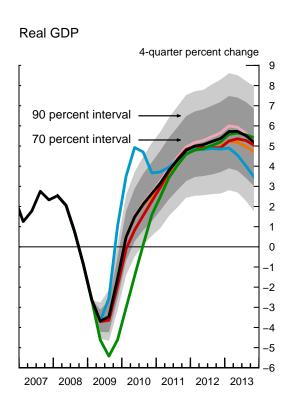
Intervals derived from Greenbook forecast errors are based on projections made from 1979-2008, except for PCE prices excluding food and energy, where the sample is 1981-2008.

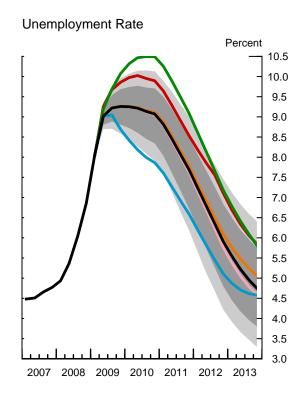
... Not applicable. The Greenbook forecast horizon has typically extended about two years.

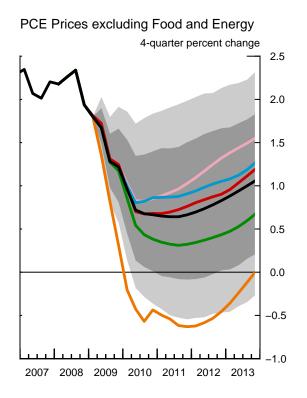
# **Forecast Confidence Intervals and Alternative Scenarios**

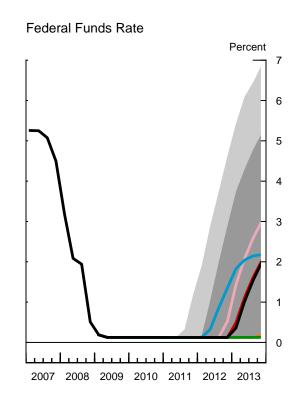
Confidence Intervals Based on FRB/US Stochastic Simulations



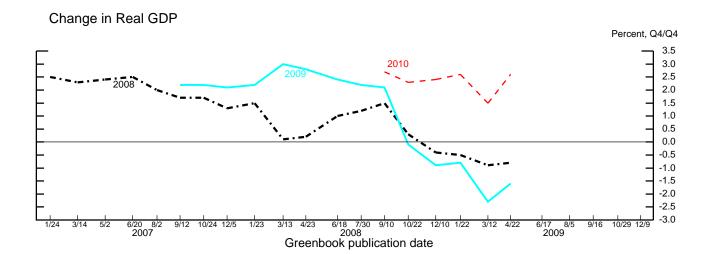


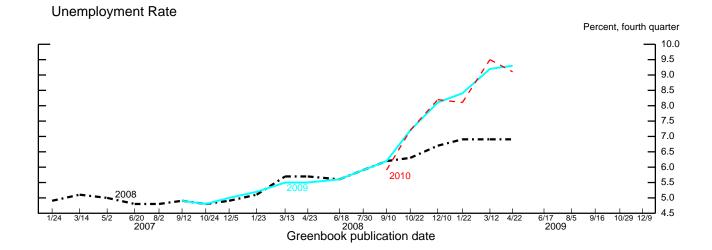


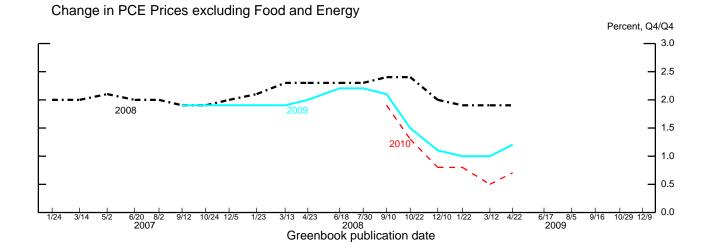




# **Evolution of the Staff Forecast**







Changes in GDP, Prices, and Unemployment (Percent, annual rate except as noted)

	Nominal GDP	al GDP	Real GDP	GDP	PCE pri	PCE price index	Core PCE	Core PCE price index	Unemployment rate <sup>1</sup>	nent rate <sup>1</sup>
Interval	3/12/09	4/22/09	3/12/09	4/22/09	3/12/09	4/22/09	3/12/09	4/22/09	3/12/09	4/22/09
Quarterly 2008:Q1 Q2 Q3 Q3	8.4.8.6- 6.4.8.6-	2. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4. 8. 4.	2.9 2.8 5.7.6-	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	8.4.3.6 6.0.6.0	8.4 9.6 6.0 4	22.00 2.00.42	22.2 2.4.2 2.0	4.3 6.0 6.0	4.8 6.0 6.0 6.0
2009:Q1 Q2 Q3 Q4	-3.3 -1.1 -6 .8	-3.1 -1.0 1.9 2.3	-6.5 -2.0 5 1	-6.3 -1.5 -1.5 -1.5	4.1- 1.0 1.1 1.0	6:- 8: 1 6: 4: 1	0. 4. 0. <i>C</i> .	7.1 7.1 9.	8.0 8.7 9.0 2.	8.1 9.0 9.2 9.3
2010:Q1 Q2 Q3 Q4	1.6 2.2 2.6 2.8 2.8	23 3.55 1.59	7. 1.9 1.9 2.1	1.9 2.5 3.0 3.3	0.8i L'. L'	1.1 1.0 8.	6 n n 4	<i>L. L. L.</i> 9:	9.6 4.6 5.6 5.0 5.0	9.3 9.2 9.1 9.1
Two-quarter <sup>2</sup> 2008:Q2 Q4 2009:Q2 Q4 2010:Q2 Q4	3.8 -1.6 -2.2 -7. -1.9	3.8 -1.3 -2.0 2.1 3.2 4.0	1.8 -3.6 -4.2 -3.3 -1.1 2.0	1.8 -3.5 -3.9 .8 3.2 3.1	3.9 -1.2 -2.1 -1.0 	3.9 0. 1.1 2.1 6.	22 26 27 27 27 27 27 27 27 27 27 27 27 27 27	2.2.2 1.7.1 7.8. F. 6.	6. 1. 8. 1. 8. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	6. 1.5 2.1 2.1 
Four-quarter <sup>3</sup> 2007:Q4 2008:Q4 2009:Q4 2010:Q4	4.9 1.1 2.3	4.9 0.0 3.6	2.3 9 -2.3 1.5	2.3 -1.6 2.6	£. 6. 1. 8.	3.5 1.9 7	2.2 1.9 1.0 3.5	2.2 1.9 1.2 7.7	4. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	4. C
Annual 2007 2008 2009 2010	8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4	4.8 3.3 -1.0	2.0 1.1 -3.2 .6	2.0 1.1 -2.8 1.7	2.6 3.3 .9	2.6 3.3 1.2	2.2 2.2 1.2 7.	2.2 2.2 1.5 .8	4.6.8.8.8.7.8.0.7.8.0.0.0.0.0.0.0.0.0.0.0.0	4.8 6.8 6.9 6.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7
-				]-						

<sup>1.</sup> Level, except for two-quarter and four-quarter intervals.
2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.
3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

Changes in Real Gross Domestic Product and Related Items (Percent, annual rate except as noted)

							,								
		20	2008			2(	5009			2010	10				
Item	Q1	Q2	<b>Q</b> 3	Q4	Q1	Q2	03	Q4	Q1	Q2	03	Q4	20081	20091	20101
Real GDP Previous Greenbook	<i>o</i> ; <i>o</i> ;	2.8	¿.	-6.3	-6.3	-1.5	4. <i>č</i> .	1.2	1.9	2.5	3.0	3.3	8	-1.6	2.6
Final sales Previous Greenbook Priv. dom. final purch. Previous Greenbook	यं यं यं यं	4.4 4.4 r. r.	-1.3 -4.1 -4.1	-6.2 -6.5 -7.5 -7.5	4.1 4.3 -5.0 -5.3	-1.4 -2.5 -4.0 -4.3	6 -1.9 -1.8 -3.0	-1.2 -1.2 -1.2	7. 5 1.3	3.0 1.9 2.8 1.7	3.0 2.1 3.6 2.4	2.9 9.1 9.2 9.3	77 -2.8 -2.8	-1.7 -2.5 -2.9 -3.5	2.4 1.4 3.0 1.8
Personal cons. expend.  Previous Greenbook  Durables  Nondurables  Services	e. e. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	1:2 1:2 3:9 3:9	-3.8 -3.8 -14.8 -7.1	-4.3 -22.1 -9.4 1.5	1.1 4. 6.0 1.1 4.	   	4 0 % w w	3.9 3.9 3.9 8.	1.9 1.3 6.9 1.8 1.2	2.5 1.8 7.6 2.2 1.8	3.0 2.1 6.5 2.7 2.6	3.3 2.4 6.1 3.0 3.0	-1.5 -1.5 -11.4 -3.4	6. 4. 1.1 6. 4.	2.7 1.9 6.8 6.8 2.2 2.2
Residential investment Previous Greenbook	-25.1	-13.3 -13.3	-16.0 -16.0	-22.8 -23.4	-38.2	-27.4 -34.3	-1.7	.0.	8.2	13.8	11.3	10.7	-19.4 -19.6	-18.5 -25.0	11.0
Business fixed invest.  Previous Greenbook  Equipment & software  Previous Greenbook  Nonres. structures  Previous Greenbook	4.4.6	2.5 2.5 -5.0 -5.0 18.5 18.5	-1.7 -1.5 -7.5 -7.5 9.7	-21.7 -21.6 -28.1 -28.1 -9.4	-30.1 -27.3 -32.4 -26.6 -26.4 -28.4	-20.8 -23.4 -13.6 -17.9 -31.6	-17.4 -21.7 -12.5 -17.4 -25.4 -28.8	-13.6 -17.8 -8.9 -13.6 -21.5	-5.3 -11.1 -1.1 -8.3 -13.0 -16.1	2.1 -1.6 9.2 5.2 -10.5 -13.4	6.8 3.2 14.8 11.1 -7.9	10.8 6.6 19.1 14.3 -5.4 -8.1	-5.2 -5.2 -11.0 -11.0 6.3	-20.7 -22.6 -17.4 -19.0 -26.3 -28.5	3.4 9 10.2 5.2 -9.2 -12.2
Net $\exp orts^2$ $Previous\ Greenbook^2$ Exports Imports	-462 -462 5.1 8	-381 -381 12.3 -7.3	-353 -353 3.0 -3.5	-364 -373 -23.6 -17.5	-333 -370 -31.4 -31.1	-314 -369 -3.4 -7.2	-325 -384 -1.5	-351 -411 .2 6.9	-383 -438 1.2 8.9	-378 -436 2.1 .3	-383 -442 2.7 3.3	-407 -464 3.2 8.2	-390 -392 -1.8 -7.5	-331 -383 -10.1 -8.8	-388 -445 -2.3 5.1
Gov't, cons. & invest.  Previous Greenbook Federal Defense Nondefense State & local	1.9 6.19 7.38 7.38 6.9 6.0 6.0 7.38	3.9 3.9 6.6 7.3 5.0 2.5	5.8 5.8 13.8 18.0 5.1	1.3 1.2 7.0 3.4 15.3 -2.0	-5.3 2 -9.4 -13.8 .7	6.7 5.5 14.8 19.8 4.9 2.0	6.1 5.5 12.5 15.5 6.5 2.2	3.7 5.7 5.9 9.6 2.4	3.1 2.6 5.3 1.9 12.9 1.7	2.2 3.2 1.8 6.0 2.0	1.3 1.5 1.5 2 -1.7 2.2	9. 1.2 4	8.8.2 2.8.8 6.9 6.9	7.28 7.48 7.53 7.00 1.0	1.9 1.8 2.0 1.1 3.7
Change in bus. inventories <sup>2</sup> Previous Greenbook <sup>2</sup> Nonfarm <sup>2</sup> Farm <sup>2</sup>	-10 -10 -18 6	-51 -52 -55	-30 -33 -33	-26 -31 -31 4	-93 -101 -96	-97 -87 -99	-66 -46 -70	-16 -16 -19	18 13 15	4 0 1 8	3-1-6	14 0 11 3	-29 -30 -34 4	-68 -62 -71	10 2 6 3
1. Change from fourth quarter of previous year to fourth quarter of year indicated	previous y	ear to fe	ourth que	urter of ye	ar indica	ted.									

Change from fourth quarter of previous year to fourth quarter of year indicated.
 Billions of chained (2000) dollars.

Changes in Real Gross Domestic Product and Related Items (Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
Real GDP Previous Greenbook	1.9	3.7	3.1	2.7	2.2 4.4	2.3	8	-1.6	2.6
Final sales  Previous Greenbook Priv. dom. final purch. Previous Greenbook	8. 8. 1.1.	3.7 7.8 1.4 1.1	2.2. 4.4. 8.8. E.E.	2.7 2.7 3.1 3.1	22.2.8 23.3.8 3.3.8	2.5 2.1 4.1 4.1	7 -2.8 -2.8	-1.7 -2.5 -2.9 -3.5	2.7 4.1.3.0 8.1.8
Personal cons. expend.  Previous Greenbook  Durables  Nondurables  Services	1.9 1.2 1.2 2.1 1.9	8.8.8.4.4.6.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	3.7 3.5 3.5 3.3	2.6 2.6 3.6 2.4 2.4	3.2 3.2 3.2 3.2 3.2 3.2 3.2	2.2 2.2 7.1 7.1 1.2	-1.5 -1.5 -11.4 -3.4	<i>c</i> . 4. 1. 1. 6. 4.	2.7 1.9 2.4 2.2
Residential investment Previous Greenbook	7.0	11.7	6.7	4.3 4.4	-15.5 -15.5	-19.0 -19.0	-19.4 -19.6	-18.5 -25.0	11.0
Business fixed invest.  Previous Greenbook  Equipment & software  Previous Greenbook  Nonres. structures  Previous Greenbook		6.4 6.6 6.6 6.5 6.5	2.7 4.9 9.4 2.3 2.3 3.3	6.4 4 9.0 7 7 9.0 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1	6.5 6.5 4.2 4.2 12.8 12.8	6.4 6.4 7.8 8.2 14.5 14.5	-5.2 -5.2 -11.0 -11.0 6.3 6.4	-20.7 -22.6 -17.4 -19.0 -26.3 -28.5	3.4 9 10.2 5.2 -9.2 -12.2
$egin{aligned} & \operatorname{Aports}^1 \\ & \operatorname{Previous} \operatorname{Greenbook}^1 \\ & \operatorname{Exports} \\ & \operatorname{Imports} \end{aligned}$	-471 -471 3.8 9.7	-519 -519 5.8 4.8	-594 -594 7.4 11.5	-617 -617 7.0 4.8	-616 -616 10.1 3.8	-547 -547 8.9 1.1	-390 -392 -1.8 -7.5	-331 -383 -10.1 -8.8	-388 -445 2.3 5.1
Gov't. cons. & invest.  Previous Greenbook Federal Defense Nondefense State & local	4.0 7.8 7.8 6.8 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3	1.7 7.1 5.5 7.1 9.1 9.1	r 4.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	6. 1.0 8. 1.4 5.	2.1 2.9 4.1 5.1 1.6	2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	£ £ 8 8 8 9	2.7 2.8 2.8 2.8 2.0 1.0	1.9 2.0 2.1 1.1 3.7
Change in bus. inventories <sup>1</sup> Previous Greenbook <sup>1</sup> Nonfarm <sup>1</sup> Farm <sup>1</sup>	12 12 15 -2	41 41 0	45 48 8	39 39 0	42 42 46 -3	5-5-4-1	-29 -30 -34 4	-68 -62 -71	10 2 3

1. Billions of chained (2000) dollars.

Contributions to Changes in Real Gross Domestic Product (Percentage points, annual rate except as noted)

		2008	80		ı	2009	60			20	2010				
Item	Q1	02	03	94	Q1	02	03	94	Q1	02	03	40	20081	20091	20101
Real GDP Previous Greenbook	6.6	2.8	<i>i. i.</i>	-6.3	-6.3	-1.5	4. v.	1.2	1.9 7.	2.5	3.0	3.3	8:-	-1.6	2.6
Final sales  Previous Greenbook Priv. dom. final purch. Previous Greenbook	ع ي ي يا يا	6. 4. 4. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	-1.4 -1.4 -3.5	-6.2 -6.6 -6.4 -6.4	4.0 4.1 4.1 4.1	-1.4 -2.5 -3.4 -3.6	6 -1.9 -1.5	5 -1.2 4	7. 3 1.1	2.9 2.2 1.4	3.0 2.1 2.9 2.0	2.9 1.9 3.5 2.4	7 4.2- 4.2-	-1.7 -2.5 -2.4 -2.9	21 21 4 4 4 4 4.
Personal cons. expend.  Previous Greenbook  Durables  Nondurables  Services	6. 6. 6. 1.0	<i>ο</i> ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	-2.8 -2.8 -1.2 -1.6	-3.0 -3.0 -1.7 -2.0	o' 4' 4' 4' 4'	6.0 6.0 6.0 7.0 1.0	.3 .0 .1 .1	∞ ∞ <i>w vi 4</i>	4.1 0.1 4. 4. 6.	7.1. 6. 4. 8.	2.1 4. 4. 1.1	2.3 1.7 4. 6.	1.1- 1.1- 9 7	4 6 5	1.9 4.1 4. 5. 0.1
Residential investment Previous Greenbook	1.1.	¿. ¿.	9	8 6	-1.5 -1.5	8	0.	.0.	<i>5</i> .1.	£ 5	£ 5	ω' <b>6</b> i	∞. ∞.	9. 8.	ω' <b>4</b>
Business fixed invest.  Previous Greenbook Equipment & software Previous Greenbook Nomes. structures Previous Greenbook	<i>ww</i> 00 <i>ww</i>	κι κι 4 4 . 6 . 6	5.5.6.44	2.2. 2.2. 2.2. 4	-3.6 -3.5 -2.4 -2.0 -1.2	-2.2 -2.6 9 -1.2 -1.3	-1.7 -2.2 8 -1.1 -1.0	2.1.2 5.1.2 5.1.2 6.1.3		4. di vi vi vi 4.	त्यं ८ छ छ तं तं तं	9. 5. 1.0 1.0	6. 6. 8. 8. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	-2.2 -2.4 -1.1 -1.2 -1.0 -1.0	ω'-i δ' ω' ω' 4'
Net exports Previous Greenbook Exports Imports	8.8.6.1.	2.9 2.9 1.5 1.4	1.1 4.	2 3.4 3.3	1.0 -4.4 5.3	6. 0. 1.0	4 4 5 5	e. e. e. e.	-1.1 9 .1.2	4040	4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	8  3	1.1 1.0 2 1.3	 5 1.2 1.3	~ 4 4 5 ° .
Gov't. cons. & invest.  Previous Greenbook Federal Defense Nondefense State & local	4 4 4 6 1 0	$\infty \propto \alpha \leftrightarrow 4 - \alpha$	1.1 0.0 2. 2. 2.	ಬರು ಸರಬರು	1.1- 0. 7 8 0. 0.	£.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	1.1 1.0 8.2 5.2 5.2	% <i>∟</i> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	r. 6 4 <u>-</u> 1 & 4	~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~	<i>ww</i> 000 w	ú	666460	<i>i i i i i i i i i i</i>	446114
Change in bus. inventories Previous Greenbook Nonfarm Farm	0.0.5.	5.1- 5.1- 4.1-	$\infty \propto \propto \sim \circ$		-2:2- -2:2- -2:2- .0	5. 0.	1.0 1.0 0.0	1.7	1.1 1.0 1.2 0.	¿. 4		4'4' 6'	2	1.2.1.0.	£ 1. £ 0.
						,									

1. Change from fourth quarter of previous year to fourth quarter of year indicated.

Changes in Prices and Costs (Percent, annual rate except as noted)

			•	, 20011, un		n idoovo	, moreon								
		2008	8(			2009	6			2010	0				
Item	Q1	Q2	<b>Q</b> 3	49	01	Q2	03	94	Q1	Q2	<b>Q</b> 3	Q4	20081	20091	20101
GDP chain-wt. price index Previous Greenbook	2.6	1.1	3.9	<i>κ</i> i ω	3.3	ئ <i>و</i> ز	1.5	1.1	1.0	1.0	6. 7.	∞. o.	2.0	1.6	0.∞
PCE chain-wt. price index  Previous Greenbook	3.6	4.4 £.3	5.0	-4.9	6 4.1-	8. 1.0	1.6	1.4	1.2	1.1	1.0	8. L	1.9	L. 4. 6	1.0
Energy Previous Greenbook	19.0 19.0	27.4 27.4	31.7	-65.0	-36.0 -36.0	-13.1 -7.8	12.2	10.5	8.4 2.4.	6.6 8.8	5.4 4.4	4.4 4.3	-8.5 -8.6	-8.9 -11.3	6.1
Food Previous Greenbook	4.9 6.4	6.4	8.5 8.5	5.6	e. 8.1	1.0	2.5	2.2	1.6	1.3	1.0	8. 1.1	6.3	1.7	1.2
Ex. food & energy Previous Greenbook	2.3	2.2	4.2 4.4	ಲ∶∞:	1.7	1.7	<i>e</i> : <i>e</i> :	r. r.	.7	L'	r: <i>r</i> :	<b>6</b> . 4.	1.9	1.2	r. n
CPI Previous Greenbook Ex. food & energy Previous Greenbook	44 22 88 88	4 4 4 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	8.8. 8.3. 6.0.	-2.4 -2.4 -2.1 -2.1	3. 9. 1.5 9. 1.6	2.1 1.2 1.2	1.8	1.6 1.2 9.8	4.1 1.1 6.	1.2 1.0 2.9	1.1 1.0 1.08	1.5 1.5 2.0 2.0	4. £. £. £. £.	1.3 1.1 9.
ECI, hourly compensation <sup>2</sup> $Previous\ Greenbook^2$	3.0	2.3	2.6	1.9	2.0	1.9	1.8	1.5	1.4	1.3	1.3	1.2	2, 2, 4, 4	1.8	1.3
Nonfarm business sector Output per hour Previous Greenbook Compensation per hour Previous Greenbook Unit labor costs Previous Greenbook	2.6 2.6 3.7 3.7 1.1	4.4. 1.1. 1.2. 2.2. 8.2. 2.3.	44 24 25 25 25 25 25 25 25 25 25 25 25 25 25	5.2 5.2 5.2 5.7 6.2	-1.0 -1.1 3.2 2.5 2.5 4.3	3.1 2.2 2.2 2 3.	1.6 1.3 1.9 2.1 3.3 8.	6.1. 6.1. 7. 4.1. 7. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	2.2.2 2.1.4.1.1.3 2.888	2.0 2.0 1.2 1.2 7  8	2.0 1.9 1.3 1.1 1.1	1.9 1.8 1.3 1.0	2.2 2.1 4.1 4.1 1.8 1.8	1.3 2.3 2.2 1.0 1.0	2.1 2.0 1.3 1.1 1.1 7
Core goods imports chain-wt price index <sup>3</sup> Previous Greenbook <sup>3</sup>	8.5	10.6	4.6 4.6	-8.5	-9.7 -10.0	-3.0	7	٠ċ 4 <sup>:</sup>	1.0	1.1	1.1	1.0	3.5	-3.3 -4.2	1.1

Change from fourth quarter of previous year to fourth quarter of year indicated.
 Private-industry workers.
 Core goods imports exclude computers, semiconductors, oil, and natural gas.

Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP chain-wt price index Previous Greenbook	1.7	2.2	3.2	3.5	2.8	2.6	2.0	1.6	6.8:
PCE chain-wt price index Previous Greenbook Energy Previous Greenbook Food Previous Greenbook Ex. food & energy Previous Greenbook	1.8 1.8 7.7 7.7 1.3 1.3	1.9 1.9 1.9 1.6 1.6 1.4 1.4	3.1 18.3 18.3 18.3 2.9 2.9 2.2 2.2	3.3 23.1 23.1 22.1 22.2 22.2 22.2	1.9 1.9 1.9 2.3 2.3 2.3 2.3 2.3	3.8 1.91 1.91 1.91 2.22 2.22 2.23	6.3 6.3 6.3 6.3 6.3 6.3	7. 4. 8-9. 11.3 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 8. 8. 8 6.1 2. 1 7. 7. 7. 8.
CPI Previous Greenbook Ex. food & energy Previous Greenbook	2.3 2.3 2.1	2.0 2.0 1.2 1.2	8 8 8 9 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3.8 3.8 2.1 2.1	1.9 1.9 2.7 2.7	4.0 4.0 2.3 2.3	1.5 1.5 2.0 2.0	4. E. 1.3 E.1.3	1.3 1.1 .9
ECI, hourly compensation <sup>1</sup> $Previous\ Greenbook^1$	3.1	4.0	3.8	2.9	3.2	3.0	2.2 4.4	1.8	1.3
Nonfarm business sector Output per hour Previous Greenbook Compensation per hour Previous Greenbook Unit labor costs Previous Greenbook	99 88 99 55 55	44 && 1.7. && vi vi	1.8 3.9 3.9 3.9 2.1 2.1	1.5 3.6 3.6 2.1 2.1	6. 44 2. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	22 8.8 6.6 6.6 6.9	2.2.2 1.4.4 1.1 1.8 1.9	1.3 .9 2.3 2.2 1.0	2.1 2.0 1.3 1.1 1.1 7
Core goods imports chain-wt. price index <sup>2</sup> Previous Greenbook <sup>2</sup>	-: -:	1.6	3.6	2.2	2.2 4.4	3.4	3.5	-3.3 -4.2	11.1

<sup>1.</sup> Private-industry workers.
2. Core goods imports exclude computers, semiconductors, oil and natural gas.

Other Macroeconomic Indicators

		2008	8(			2(	2009			2(	2010				
Item	01	02	03	9	01	02	03	Q4	Q1	<b>Q</b> 2	63	Q4	20081	20091	$2010^{1}$
Employment and production Nonfarm payroll employment <sup>2</sup> Unemployment rate <sup>3</sup> Previous Greenbook <sup>3</sup> GDP gap <sup>4</sup> Previous Greenbook <sup>4</sup>	1 6.4.9	4.2. 4.2. 7	6.0 6.0 6.0 -1.4 -1.4	-1.3 6.9 6.9 -3.6	-2.0 8.1 8.0 -5.6 -5.7	-1.6 9.0 8.7 -6.4	9.2 9.2 9.0 -6.8 -7.3	0. 9.3 9.2 -7.0	2.2 9.3 9.4 -7.0 -8.0	2. 9 9.5 6.9 6.9 5.2	.3 9.1 9.5 -6.7 -8.2	5. 9.1 9.5 -6.4 -8.2	-2.3 6.9 6.9 -3.6 -3.7	4.1 9.3 9.2 -7.0	1.5 9.1 9.5 -6.4 -8.2
Industrial production <sup>5</sup> **Previous Greenbook <sup>5</sup> Manufacturing industr. prod. <sup>5</sup> **Previous Greenbook <sup>5</sup> Capacity utilization rate - mfg. <sup>3</sup> **Previous Greenbook <sup>3</sup>	.2 -1.2 -1.0 78.1 78.7	-4.6 -3.4 -5.4 -4.1 76.7 7.57	-9.0 -8.9 -9.3 -8.7 77.5	-12.7 -12.1 -17.7 -17.4 71.0	-20.0 -18.3 -22.5 -21.7 66.7 67.4	-9.2 -9.3 -8.9 -9.9 65.3 65.8	5 -2.6 1.5 -2.0 65.8 65.6	2.0 2 2.5 .3 66.5 65.8	3.9 2.7 3.9 2.5 67.5 66.6	3.5 3.0 3.4 2.9 68.5 67.5	4.7 3.1 4.4 2.9 69.7 68.3	4.4 3.5 4.2 3.1 70.8 69.2	-6.7 -6.1 -8.6 -8.0 71.0	-7.1 -7.9 -7.4 -8.7 66.5 65.8	4.1 3.1 4.0 2.9 70.8 69.2
Housing starts <sup>6</sup> Light motor vehicle sales <sup>6</sup>	1.1	$\frac{1.0}{14.1}$	.9 12.9	.7	5.9	5.	.6 10.1	.6	7.11.2	.7 12.0	.8 12.5	.9 13.0	.9 13.1	.5 10.0	.8
Income and saving Nominal GDP <sup>5</sup> Real disposable pers. income <sup>5</sup> Previous Greenbook <sup>5</sup> Personal saving rate <sup>3</sup> Previous Greenbook <sup>3</sup>	3.5 7	4.1 10.7 10.7 2.5 2.5	3.4 -8.5 -8.5 1.3	.5.8 3.3 3.2 3.2	-3.1 3.9 6.4 3.9 4.6	-1.0 6.6 4.3 5.6 5.6	1.9 -1.5 -1.6 5.1 5.3	2.3 1.6 1.5 5.3 5.4	2.9 9 1.7 5.1 5.5	3.5 2.1 4.9 4.0	3.9 2.1 4.7 5.2	4.1 2.2 1.3 4.5 5.0	1.2 .8 1.0 3.2 3.2	0.72.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	3.6 1.7 1.4 4.5 5.0
Corporate profits <sup>7</sup> Profit share of GNP <sup>3</sup>	-4.3 11.2	-14.3 10.6	-4.7 10.4	-51.5	-18.9 8.5	-6.5 8.4	.3.3 8.3	-5.0	24.5 8.5	6.7	8.6	8.3	-21.5 8.8	-8.7	11.3
Net federal saving <sup>8</sup> Net state & local saving <sup>8</sup>	-331	-650	-544 -104	-561	-803	-1,030	-1,097	-1,146	-1,138	-1,116	-1,157	-1,138	-521 -80	-1,019	-1,137
Gross national saving rate <sup>3</sup> Net national saving rate <sup>3</sup>	12.4	-1.3	-1.8	12.0	11.1	10.5 -3.3	9.9 -4.1	9.6 -4.5	9.5 -4.6	9.6 4.5	9.4 4.8	9.4 -4.7	12.0	9.6	9.4 7.4-

Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated.
 Change, millions.
 Percent, annual values are for the fourth quarter of the year indicated.
 Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Annual values are for the fourth quarter of the year indicated.

Percent change, annual rate.
 Level, millions, annual values are annual averages.
 Percent change, annual rate, with inventory valuation and capital consumption adjustments.
 Billions of dollars, annual values are annual averages.

April 22, 2009

Other Macroeconomic Indicators (Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
Employment and production Nonfarm payroll employment <sup>1</sup> Unemployment rate <sup>2</sup> Previous Greenbook <sup>2</sup> GDP gap <sup>3</sup> Previous Greenbook <sup>3</sup>	5.8 5.8 5.6 5.6	1. 8.8 8.1 8.1.	0.2 C 2.0 4.2 C 3.0 S 3.	2.4 4.9 4.9 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5	1.2 4.4.4 2 2	1 4 4 4	-2.3 6.9 6.9 -3.6 -3.7	9.3 9.2 9.7.0	9.1 9.5 9.5 -6.4 -8.2
Industrial production <sup>4</sup> **Previous Greenbook <sup>4</sup> **Manufacturing industr. prod. <sup>4</sup> **Previous Greenbook <sup>4</sup> Capacity utilization rate - mfg. <sup>2</sup> **Previous Greenbook <sup>2</sup>	2.5 2.6 2.5 73.0 73.2	1.6 1.5 1.7 7.4.6 7.4.8	3.0 3.1 3.6 3.7 77.3	2.6 3.8 3.7 79.2 79.2	1.8 1.7 1.2 1.1 79.0 79.0	1.8 2.1 1.9 2.3 78.7 79.3	-6.7 -6.1 -8.6 -8.0 71.0	-7.1 -7.9 -7.4 -8.7 66.5 65.8	4.1 3.1 4.0 70.8 69.2
Housing starts <sup>5</sup> Light motor vehicle sales <sup>5</sup>	1.7	1.8	2.0	2.1	1.8	1.4	.9 13.1	.5	.8
Income and saving Nominal GDP <sup>4</sup> Real disposable pers. income <sup>4</sup> Previous Greenbook <sup>4</sup> Personal saving rate <sup>2</sup> Previous Greenbook <sup>2</sup>	3.6 2.9 2.9 1.8 1.8	5.5 2.2 2.2 2.2 2.2	6.5 4.1 4.1 5.5 5.5 5.5	6. 6. 0. 0. 8. 8.	5.3 3.6 9.0 9.0	9. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	1.2 8 1.0 3.2 3.2	0. 2.6 2.6 5.3 5.3	3.6 1.7 1.4 4.5 5.0
Corporate profits <sup>6</sup> Profit share of GNP <sup>2</sup>	20.6	12.6	20.3	18.8	6.9	-2.0	-21.5	-8.7	11.3
Net federal saving <sup>7</sup> Net state & local saving <sup>7</sup>	-248 -34	-372 -20	-371	-292 29	-201 46	-229 10	-521 -80	-1019	-1137 -34
Gross national saving rate <sup>2</sup> Net national saving rate <sup>2</sup>	13.6	13.7	13.8	15.0	15.5 3.4	13.4	12.0	9.6 -4.5	9.4

Change, millions.
 Percent, values are for the fourth quarter of the year indicated.
 Percent, values are for the fourth quarter of the year indicated.
 Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.
 Values are for the fourth quarter of the year indicated.

Percent change.
 Level, millions, values are annual averages.
 Percent change, with inventory valuation and capital consumption adjustments.
 Billions of dollars, values are annual averages.

Staff Projections of Federal Sector Accounts and Related Items

April 22, 2009

(Billions of dollars except as noted)

Fiscal year 2007a 2008a 200	lal y		ear 2009	2010	Q1a	2008 Q2 <sup>a</sup>	8 Q3 <sup>a</sup>	Q4ª	01	2009	Q3	Q4	19	2010	0	1 <sub>2</sub>
	i c		-	•	5	000	G	í	Not .	se			Š		[	i
3832	3832		3766		240 746	761	290 759	547 1033	442 914	640 899	555 986	,	206 987	689 861	2 / 8 4 / 8	796
-455 -1647 -	-1647	•	-1473		-206	27	-169	-485	-472	-259	-431		-481	-172	-260	-338
-455 -1915 -	-1915	'	-1221		-206	27	691-	-485	-520	-464	-416		-346	-194	-273	-348
-343 -638 -1779 -1607 181 183 132 134	- 1779 -	'	-1607		-237	-64 19	-171	-538	-490 19	-325	-425 -6	-616 55	-486 5	-253 81	-252 -8	-392 55
	}				\$		ı	:	ì		,		,		)	3
768 1770 1	1770		1283		200	-48	526	561	465	263	481	340	471	197	275	328
-23 -296 111 210 -22 -17 -235 -20	111 -235		210 -20		111	-7 29	-318 -39	-81	98 -92	24 -27	-15 -35	225 -5	<del>2</del> .	-20 -5	-10 -5	15 -5
;	(		1			;	į	!	,	!		;			1	;
/5 3/2 260 50	260		20		46	53	3/2	36/	569	245	760	33	70	40	20	33
									Seasonal	easonally adjuste	ted annual ra	ates —				
2624 2607 2425 2469 2832 3047 3298 3609	2425 3298		2469		2673 3003	3128	2596 3140	2544 3106	3222	2370 3400	2366 3463	2389 3535	2470 3608	2505 362.1	2513 3670	2554 3692
910 975	975		1055		868	918	954	957	948	981	1013	1031	1053	1066	1069	1072
94 311	94 311		710 345		614 284	629 289	660 295	657 301	908 308	313	692 321	701 331	708 345	714 352	718 352	351
2136 2323	2323		2554		2105	2210	2186	2148	2273	2418	2450	2504	2555	2555	2601	2620
1	-873 - 149	1	-1139		-331 129	-650 138	-5-4 	-561 150	-803 141	-1030 149	-1097 156	-1146 158	-1138 159	-1116 160	-1157 161	-1138 161
- 458 -899	- 668-	'	-1169		-344	-671	-569	-590	-822	-1055	-1128	-1177	-1168	-1146	-1186	-1166
-222 -426 -654 -810	-654	·	-810		-322	-641	-502	-447	-599	-771	-799	-824	608-	-783	-826	-813
-0.3 1.3 1.4 0.9	1.4		6.0		9.0	2.2	-1.0	-0.4	1.0	1.1	0.1	0.1	-0.1	-0.2	0.2	-0.1
0.2 0.8 0.8 0.9 0.9 0.9 0.9	0.8		0.9		$\begin{array}{c} 0.1 \\ 0.1 \end{array}$	0.5	0.7	-0.3	-0.2 0.0	0.8	0.3	0.2	0.3	0.1	$0.1 \\ 0.1$	-0.0
				- 1												

<sup>1.</sup> Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.

2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.

3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.

4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate demand stimulus. a--Actual

Households   Home   Consumer   Households   Consumer   Consumer   Home   Consumer   Consumer   Business   State and I	Class II FOMC Restricted (FR)	MC FR)	Ch	Change in Debt of the Domestic Nonfinancial Sectors (Percent)	he Domestic Nor (Percent)	nfinancial Sect	ors	April	April 22, 2009
Home credit Business of Consumer and Potal mortgages credit Business of Consumer and Potal mortgages credit Business of Consumer and Co				Households					
8.1 11.6 14.2 5.2 2.5 8.9 11.1 13.3 4.3 8.7 8.9 11.1 13.3 4.3 8.7 8.0 6.6 6.6 5.5 13.1 5.844 1.8 4.8 4.833 3.9 5.8 8.12 2.2 2.7 2.0 2.2 4.2 -1.7 2.0 2.2 3.0 4.3 -1.6 1.9 6.09 -1.1 -1.6 1.9 6.1 -1.5 1.7 6.2 -2.7 2.0 2.2 6.1 -1.7 2.0 2.2 6.1 -1.7 2.0 2.2 6.1 -1.7 2.0 2.2 6.1 -1.7 2.0 2.2 6.1 -1.7 2.0 2.2 6.1 -1.1 1.1 1.1 6.2 2.2 2.2 6.1 1.1 2.1 6.2 2.2 2.2 6.1 1.1 2.2 6.2 2.2 6.3 3.4 2.0 6.4 4.5 1.1 3.3 6.5 2.0 6.7 3.4 2.0 6.8 3.4 2.0	Period <sup>1</sup>	Total	Total	Home	Consumer	Business	State and local governments	Federal	Memo: Nominal GDP
8.1 11.6 14.2 5.2 2.5 8.9 11.2 13.6 5.5 6.2 8.9 11.1 13.3 4.3 8.7 8.9 10.0 10.9 4.5 10.5 8.6 6.6 6.6 5.5 13.1 5.8 -4 -4 1.8 4.8 4.8 -1.3 -1.6 -1.5 1.5 5.0 1.4 .7 7.2 3.1 .33 3.9 5.8 8.1 .2 -2.3 1.4 4.1 6.3 -1.9 -1.5 -2.9 1.7 6.09 -1.1 -1.6 1.9 6.09 -1.1 -1.6 1.9 6.1 1.3 .4 .5 5.2 6.2 5.6 5.2 6.7 5.7 5.2 6.8 5.8 5.8 6.9 5.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9	Year					1			1
8.9 11.2 13.6 5.5 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.6 6.6	2003	8.1	11.6	14.2	5.2	2.5	8.3	10.9	5.9
9.5       11.1       13.3       4.3       8.7         8.9       10.0       10.9       4.5       10.5         8.6       6.6       6.6       5.5       13.1         5.8       .4       .4       1.8       4.8         4.8       -1.3       -1.6       -1.5       1.5         5.0       1.4       .7       2.8       2.1         5.0       1.4       .7       2.8       2.1         7       2.3       2.4       4.7       7.2         8.1       .2       -2.3       1.4       4.1         6.3       -1.9       -1.5       -2.9       1.7         4.5       -2.2       -2.7       -2.9       1.7         4.5       -2.2       -2.7       -2.0       2.2         4.5       -1.7       -2.0       -2.2       .3         4.5       -2.9       -1.1       -1.6       1.9         4.5       -2.2       -2.7       -2.0       2.2         4.5       -3       -4       -6       -5       1.7         5.3       -6       -9       -1.1       -1.6       -1.5         6.0       -9<	2004	8.9	11.2	13.6	5.5	6.2	7.4	9.0	6.5
8.9 10.0 10.9 4.5 10.5  8.6 6.6 6.6 5.5 13.1  5.844 1.8 4.8  4.81.365 1.5  5.0 1.47 2.8 2.1  3.12 2.2 2.3 1.4 4.1  6.31.95 2.0 2.2  4.21.7 -2.0 2.2  4.21.7 -2.0 2.2  6.091.1 1.6 1.9  4.34 1.66 1.9  4.4 1.69 3.4 2.0  5.0	2005	9.5	11.1	13.3	4.3	8.7	10.2	7.0	6.3
8.6 6.6 6.6 5.5 13.1 5.8 .4 .4 .4 1.8 4.8 4.8 .1.3 .1.6 .1.5 1.5 5.0 1.4 .7 2.8 2.1 5.2 3.0 2.4 4.7 7.2 3.1 .2 .2.3 1.4 4.1 6.3 .1.9 .1.5 .2.0 2.2 4.2 .1.7 .2.0 2.2 4.2 .1.7 .2.0 2.2 6.09 .1.1 .1.6 1.9 6.1 .4.3465 1.7 6.2 2.5 2.0 6.3465 1.7 6.465 1.7 6.5 2.0 6.7 1.7 1.6 6.8 1.1 1.6 6.9 1.1 1.6 6.0 1.1 1.2 1.9 6.1 1.1 1.2 6.2 0.3 3.4 2.0 6.3 3.4 2.0	2006	8.9	10.0	10.9	4.5	10.5	8.2	3.9	5.3
5.8 .44 1.8 4.8 4.8 -1.3 -1.6 -1.5 1.5 5.0 1.4 .7 2.8 2.1 5.2 3.0 2.4 4.7 7.2 3.1 .33 3.9 5.8 8.1 .2 -2.3 1.4 4.1 6.3 -1.9 -1.5 -2.9 1.7 4.5 -2.2 -2.7 -2.0 2.2 4.5 -2.2 -2.7 -2.0 2.2 6.09 -1.1 -1.6 1.9 4.3465 1.7 5.3 .6 .1 1.2 1.9	2007	8.6	9.9	9.9	5.5	13.1	9.3	4.9	4.9
4.8       -1.3       -1.6       -1.5       1.5         5.0       1.4       .7       2.8       2.1         5.0       1.4       4.7       7.2         3.1       .3      3       3.9       5.8         3.1       .3      3       3.9       5.8         8.1       .2      3       1.4       4.1         6.3       -1.9       -1.5       -2.9       1.7         4.5       -2.2       -2.7       -2.9       1.7         4.2       -1.7       -2.0       -2.2       2.2         4.2       -1.7       -2.0       -2.2       .3         6.0      9       -1.1       -1.6       1.9         4.3      4      6      5       1.7         5.3       .6       .1       1.2       1.9         4.4       1.6       .9       3.4       2.0         6.0      9      1       1.2       1.9         7.1      5      5       1.9         8.9      5       2.5       2.0         8.9      5       2.5       2.0         8.0      7	2008	5.8	4.	4	1.8	4.8	1.8	24.2	1.2
5.0 1.4 .7 2.8 2.1  5.2 3.0 2.4 4.7 7.2  3.1 .33 3.9 5.8  8.1 .2 -2.3 1.4 4.1  6.3 -1.9 -1.5 -2.9 1.7  4.5 -2.2 -2.7 -2.0 2.2  4.2 -1.7 -2.0 -2.2 .3  6.09 -1.1 -1.6 1.9  4.3465 1.7  5.3 .6 .1 1.2 1.9  4.4 1.6 .9 3.4 2.0	2009	4.8	-1.3	-1.6	-1.5	1.5	3.3	24.4	0:
5.2 3.0 2.4 4.7 7.2 3.8 3.9 5.8 3.1 3 3.9 5.8 5.8 3.1 3 3.9 5.8 5.8 4.1 2 2.2 3 1.4 4.1 4.1 4.2 -2.2 2.2 2.2 2.2 4.2 -2.7 2.0 2.2 2.2 4.3 4 6 5 1.7 2.0 4.9 1.1 5 2.0 4.4 1.6 1.9 3.4 2.0	2010	5.0	1.4	<i>L</i> .	2.8	2.1	2.7	16.1	3.6
5.2       3.0       2.4       4.7       7.2         3.1       .3      3       3.9       5.8         8.1       .2       -2.3       1.4       4.1         6.3       -1.9       -1.5       -2.9       1.7         4.5       -2.2       -2.7       -2.0       2.2         4.5       -1.7       -2.0       -2.2       .3         6.0      9       -1.1       -1.6       1.9         4.3      4      6      5       1.7         5.3       .6       .1       1.2       1.9         4.9       1.1       .5       2.5       2.0         6.4       1.6       .9       3.4       2.0	Quarter								
3.1       .3      3       3.9       5.8         8.1       .2       -2.3       1.4       4.1         6.3       -1.9       -1.5       -2.9       1.7         4.5       -2.2       -2.7       -2.9       1.7         4.2       -1.7       -2.0       -2.2       .3         6.0      9       -1.1       -1.6       1.9         4.3      4      6      5       1.7         5.3       .6       .1       1.2       1.9         4.9       1.1       .5       2.5       2.0         6.4       1.6       .9       3.4       2.0	2008:1	5.2	3.0	2.4	4.7	7.2	3.5	8.1	3.5
8.1 2 2.3 1.4 4.1 6.3 -1.9 -1.5 -2.9 1.7 4.5 -2.9 1.7 4.2 4.2 -1.7 -2.0 2.2 3.3 6.09 -1.1 1.2 1.9 4.9 1.1 5 2.5 2.0 4.4 1.6 9 3.4 2.0	2	3.1	£.	3	3.9	5.8	6.	5.9	4.1
6.3 -1.9 -1.5 -2.9 1.7 4.5 -2.2 -2.7 -2.0 2.2 4.2 -1.7 -2.0 -2.2 .3 6.09 -1.1 -1.6 1.9 4.3 -4 -6 -1.1 1.2 1.9 4.9 1.1 .5 2.0 2.0 4.4 1.6 .9 3.4 2.0	ю	8.1	5.	-2.3	1.4	4.1	3.2	39.2	3.4
4.5       -2.2       -2.7       -2.0       2.2         4.2       -1.7       -2.0       -2.2       .3         6.0      9       -1.1       -1.6       1.9         4.3      4      6      5       1.7         5.3       .6       .1       1.9         4.9       1.1       .5       2.5       2.0         4.4       1.6       .9       3.4       2.0	4	6.3	-1.9	-1.5	-2.9	1.7	4	37.0	-5.8
4.2       -1.7       -2.0       -2.2       .3         6.0      9       -1.1       -1.6       1.9         4.3      4      6      5       1.7         5.3       .6       .1       1.2       1.9         4.9       1.1       .5       2.5       2.0         5.1       1.6       .9       3.4       2.0	2009:1	4.5	-2.2	-2.7	-2.0	2.2	4.6	23.2	-3.1
6.09 -1.1 -1.6 1.9 4.3465 1.7 5.3 .6 .1 1.2 1.9 4.4 1.6 .9 3.4 2.0	2	4.2	-1.7	-2.0	-2.2	£.	2.4	23.1	-1.0
4.3      4      6      5       1.7         5.3       .6       .1       1.2       1.9         4.9       1.1       .5       2.5       2.0         4.4       1.6       .9       3.4       2.0	8	0.9	6:-	-1.1	-1.6	1.9	3.1	26.7	1.9
5.3 .6 .1 1.2 1.9 4.9 1.1 .5 2.5 2.0 4.4 1.6 .9 3.4 2.0	4	4.3	4	9:-	5	1.7	3.0	16.8	2.3
1.1 .5 2.5 2.0 1.6 .9 3.4 2.0	2010:1	5.3	9:	1.	1.2	1.9	2.9	18.9	2.9
1.6 .9 3.4 2.0	2	4.9	1.1	ર.	2.5	2.0	2.8	15.6	3.5
70	8	4.4	1.6	6.	3.4	2.0	2.5	12.4	3.9
2.1 1.4 4.2 2.4	4	5.1	2.1	1.4	4.2	2.4	2.5	13.8	4.1

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2008:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

2.6.3 FOF

Flow of Funds Projections: Highlights

April 22, 2009

(Billions of dollars at seasonally adjusted annual rates except as noted)

		1)	<b>5</b> 10 (morning)	30 30 30 30 30 30 30 30 30 30 30 30 30 3	and Camera and	il man possible		representation	(m)					
					2(	2008		20	2009			20	2010	
Category	2007	2008	2009	2010	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	04
Domestic nonfinancial sectors Net funds raised Total Net equity issuance Net debt issuance	1668.9 -831.2 2500.1	1444.9 -395.1 1840.0	1398.6 -214.3 1612.9	1595.2 -160.0 1755.2	2235.0 -393.2 2628.2	1600.8 -450.0 2050.9	1213.5 -297.0 1510.5	1206.5 -200.0 1406.5	1866.4 -180.0 2046.4	1308.2 -180.0 1488.2	1695.5 -160.0 1855.5	1576.1 -160.0 1736.1	1418.3 -160.0 1578.3	1691.1 -160.0 1851.1
Borrowing indicators Debt (percent of GDP) <sup>1</sup> Borrowing (percent of GDP)	220.3	228.5 12.9	243.1 11.4	248.3 12.1	226.7 18.2	234.2 14.4	239.2 10.7	242.4	244.3 14.5	246.0 10.5	247.2 13.0	248.2 12.0	248.7 10.8	249.1 12.6
Households  Net borrowing <sup>2</sup> Home mortgages  Consumer credit  Debt/DPI (percent) <sup>3</sup>	848.7 651.5 133.6 131.2	53.5 -43.7 45.0 129.6	-179.6 -168.9 -40.1 126.2	184.4 73.5 72.3 123.0	26.7 -238.1 35.4 129.8	-265.7 -155.9 -77.1 130.3	-308.6 -287.2 -51.1 128.6	-230.2 -203.8 -56.0 125.7	-129.7 -118.5 -40.5 125.3	-49.7 -66.3 -12.6	76.5 9.5 30.3 123.5	148.5 47.4 63.5 123.0	220.8 94.8 87.0 122.5	291.6 142.2 108.4 122.2
Business Financing gap <sup>4</sup> Net equity issuance Credit market borrowing	185.6 -831.2 1228.4	181.3 -395.1 507.1	-65.8 -214.3 168.6	-33.7 -160.0 238.7	127.9 -393.2 451.4	110.0 -450.0 169.3	-37.6 -297.0 242.6	-86.7 -200.0 28.2	-89.7 -180.0 208.4	-49.2 -180.0 195.3	-20.2 -160.0 217.2	-43.4 -160.0 229.2	-48.0 -160.0 228.7	-22.9 -160.0 279.9
State and local governments Net borrowing Current surplus <sup>5</sup>	185.9	40.1	74.1 174.9	61.7	71.6	-7.9 118.5	103.0 199.5	54.1 148.8	69.7 175.3	69.7 176.1	65.7 184.0	65.7 179.5	57.7 193.3	57.7 195.9
Federal government Net borrowing Net borrowing (n.s.a.) Unified deficit (n.s.a.)	237.1 237.1 187.9	1239.2 1239.2 833.2	1549.7 1549.7 1722.4	1270.4 1270.4 1250.4	2078.5 526.5 168.9	2155.2 560.9 485.2	1473.4 465.4 471.6	1554.4 262.6 259.3	1898.0 481.4 431.0	1272.8 340.3 560.6	1496.0 471.1 481.1	1292.6 197.1 172.1	1071.1 274.6 259.6	1221.9 327.6 337.6
Depository institutions Funds supplied	858.7	422.6	79.2	309.4	549.5	503.4	-498.1	-117.5	544.4	388.0	293.0	406.0	373.7	164.9
	  -   .													

2.6.4 FOF

Note. Data after 2008:O4 are staff projections.

1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.

2. Includes change in liabilities not shown in home mortgages and consumer credit.

3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.

4. For corporations, excess of capital expenditures over U.S. internal funds.

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.

n.s.a. Not seasonally adjusted.

# **International Developments**

Following the substantial macroeconomic and financial policy actions of the last several months, the decline in foreign economic activity appears to be moderating and investor sentiment and financial market functioning have improved somewhat. Industrial production has started to move up in some emerging market economies, such as China, Korea, and Brazil, but more widespread indications of stabilization abroad remain tenuous. After dropping sharply in the first quarter, foreign economic activity through the remainder of 2009 is projected to evolve at rates a bit above those in the March Greenbook, still contracting in the second quarter and becoming slightly positive in the latter half of the year. We see the risks to this projection as being a bit less skewed to the downside than in March, but the outlook remains very uncertain.

Summary of Staff Projections
(Percent change from end of previous period except as noted, annual rate)

` 0					,	′
	20	008		Proje	ection	
Indicator	H1	H2		2009		2010
	111	112	Q1	Q2	Н2	2010
Foreign output	1.7	-3.5	-7.2	-2.4	.8	2.8
Previous GB	1.7	-3.4	-6.7	-2.9	.3	2.3
Foreign CPI	5.0	1.8	8	1.5	1.6	1.6
Previous GB	5.0	1.7	-1.5	1.1	1.5	1.5
				on to grov		
U.S. net exports	1.8	.4	1.0	.6	6	5
Previous GB	1.8	.2	.1	.0	7	4

NOTE. Changes for years are measured as Q4/Q4; half-years are Q2/Q4 or Q4/Q2.

Commodity prices have started to turn up some, but with output below potential in most foreign economies, consumer price inflation abroad remains subdued. We estimate that foreign consumer prices dropped ¾ percent at an annual rate in the first quarter and project that prices will rise at roughly a 1½ percent pace over the remainder of 2009 and 2010, about the same as in the March Greenbook. Spot oil prices moved up about

**Staff Projections of Selected Trade Prices** 

(Percent change from end of previous period, annual rate, excepted as noted)

	20	800		Projec	ction	
Trade category	771	110		2009		2010
	H1	H2	Q1	Q2	H2	2010
Imports						
Core goods	9.5	-2.2	-9.7	-3.0	1	1.1
Previous GB	9.5	-2.0	-10.0	-4.7	8	1.1
Oil (dollars per barrel)	108.65	68.74	43.40	47.32	51.32	58.86
Previous GB	108.65	68.74	41.46	43.09	44.79	50.51
Exports						
Core goods	13.0	-12.0	-10.1	-2.3	.7	1.2
Previous GB	13.0	-10.9	-10.9	-5.2	3	1.2

Note: Prices for core exports exclude computers and semiconductors. Prices for core imports exclude computers, semiconductors, oil, and natural gas. Both prices are on a national income and product account chain-weighted basis.

The price of imported oil for multi-quarter periods is the price for the final quarter of the period. Imported oil includes both crude oil and refined products.

# **Staff Projections for Trade in Goods and Services**

(Percent change from end of previous period, annual rate)

	20	800		Proje	ection	
Measure	TT1	112		2009		2010
	H1	H2	Q1	Q2	H2	2010
Real imports Previous GB	-4.1 -4.1	-10.8 -10.0	-31.1 -19.7	-7.2 -4.7	4.1 3.2	5.1 3.8
Real exports Previous GB	8.6 8.6	-11.3 -11.3	-31.4 -23.6	-3.4 -5.6	7 -2.3	2.3 1.0

Note: Changes for years are measured as Q4/Q4; half-years are measured as Q2/Q4 or Q4/Q2.

**Alternative Simulation:** Weaker Foreign GDP and Stronger Dollar (Percent change from previous period, annual rate, except as noted)

2009 2010 2012-Indicator and simulation 2011 13 H1 H2 H1 H2 U.S. real GDP Baseline -3.9 .8 2.2 3.1 4.8 5.3 -4.2 Weaker foreign GDP and stronger dollar -.9 0. 1.9 4.5 5.6 U.S. PCE prices excluding food and energy Baseline 1.7 .8 .7 .6 .7 .9 Weaker foreign GDP and stronger dollar 0. .2 .5 .9 1.4 .1 *U.S federal funds rate* (percent) Baseline 2.0 .1 .1 .1 .1 .1 Weaker foreign GDP and stronger dollar .1 .1 .1 .1 .1 1.6 U.S. trade balance (percent share of GDP) Baseline -2.7 -2.9 -3.3 -3.4 -3.6 -3.9 -4.0 -4.8 -4.7 Weaker foreign GDP and stronger dollar -3.1 -4.8 -4.0

NOTE. H1 is Q2/Q4; H2 is Q4/Q2. U.S. real GDP and U.S. PCE prices are the average rates over the period. The federal funds rate and the trade balance are the values for the final quarter of the period.

#### The Role of the Zero Lower Bound in Amplifying Foreign Shocks

In this box, we show that external disturbances can pose a much greater risk to domestic economic activity when monetary policy is constrained by the zero lower bound than when policy is unconstrained.

The solid lines in Figure 1 reproduce the previously discussed alternative simulation, showing the effects of foreign demand and risk premium shocks on key U.S. variables. In this scenario, the federal funds rate responds according to a Taylor rule but is constrained by the zero lower bound over the period shown. All simulation results are reported as deviations from baseline.

The dashed lines show the response to the same shocks in a different scenario, in which the federal funds rate is unconstrained and allowed to fall below the zero lower bound. In this case, the shocks have a depressing effect on U.S. real net exports through both weaker foreign activity and an appreciation of the dollar. This fall in external demand causes the level of U.S. GDP to decline more than 1 percent below baseline in 2010, while core PCE price inflation declines 0.4 percentage point. However, the contractionary effects of the shock are alleviated by the impact of a decline

in the real interest rate on private absorption, reflecting an easing of monetary policy.

When policy is constrained by the zero bound, the shocks have nearly the same effect on U.S. net exports, but the decline in U.S. GDP is about three times larger. The zero bound constraint keeps nominal interest rates from declining in the face of lower expected inflation, inducing a pronounced rise in the real interest rate. As a result, U.S. domestic absorption falls sharply, reinforcing the deflationary effects of the shocks.

The constrained simulation assumes that U.S. monetary policymakers do not engage in unconventional forms of stimulus. Such policies would bring the effects of the shocks closer to those seen when the federal funds rate is unconstrained.

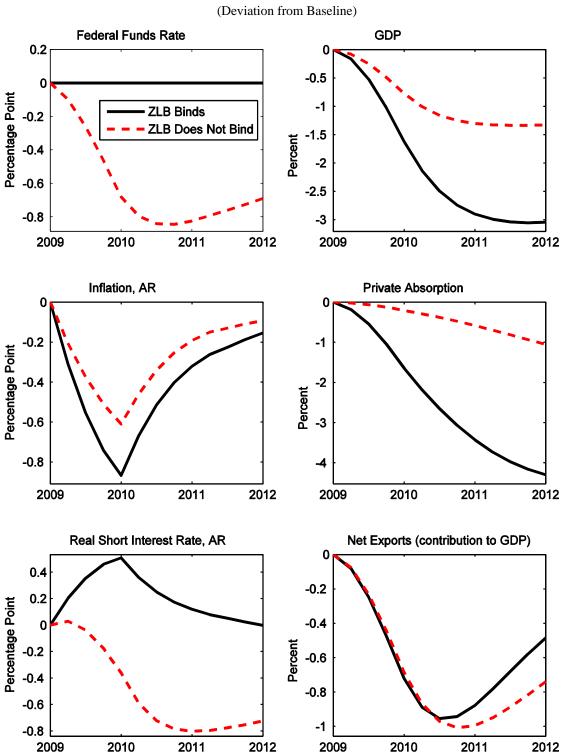
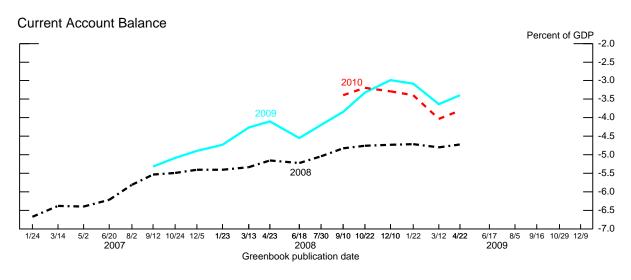
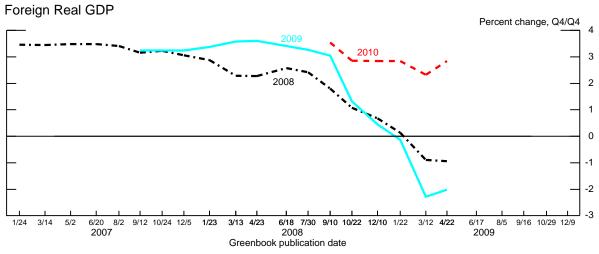
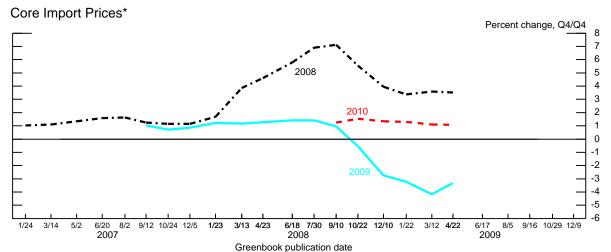


Figure 1

## **Evolution of the Staff Forecast**







<sup>\*</sup>Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.

OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES (Percent changes)

		Ν.	800		i			Proj	eq	1 2		 
Measure and country	21	1 1 1 1 1 1 1 1 1	i		21	1 1 1 1 1 1 1 1		. 40 			i	1 1 1 1
REAL GDP (1)			             	Qua	rterly	change	s at a:	n annual	rate .			
 Total Foreign	2.2	1.1	0.4	-7.3	-7.2	-2.4	0.4	1.3	2.1	2.8	3.2	3.3
Advanced Foreign Economies	0.7	-0.5	-0.3	-5.4	-7.8	-3.8	9.0-	0.5	1.0	1.7	2.0	2.1
or Wilch: 	•	0.	0,		91	٠ س ا	00	0	•	•	•	•
Japan United Kingdom		40	- 0				7 .					• •
Euro Area (2) Germany	2.7	-1.0	-1.0	-6.3	-6.5	9.0	-1.0	0.0	1.1	1.1 7.1	1.8	1.8
Emerging Market Economies	•	•	•	9.	9.	•	•	•	•	•	•	•
Asia	•	٠	•	0 a	4 u	o <		•	•	•	•	٠
China				 H	 o c	 t 9						
Latin America	H.	7	•	9.	φ,	i,	•	•	•	•	•	٠
Mexico Brazil	1.2	1.3	1.6 6.9	-10.3 -13.6	-10.0 -4.0	-2.0	0.6	7.0 7.0	0 M M	m m	3.0	8 2
CONSUMER PRICES (3)		 	 		Fou	r-quar	ter ch	anges	 			 
Total Foreign	4.1	4.7	4.8	3.3	1.9	1.0	0.4	6.0	1.6	1.6	1.6	1.6
Advanced Foreign Economies	2.3	2.7	3.4	2.0	1.0	0.5	-0.2	0.5	1.1	1.0	6.0	6.0
or wiicii: 	•	•	•	•	•	0	•	0	⊣.	•	⊣.	⊣.
Japan United Kingdom (4)							 0					
Euro Area (2) Germany	3.4 1.4	3.6	m m .7.	2.3	0.0	0.7	004.2	0.0	1.0	1.0	1.0	1.7
Emerging Market Economies Asia												
Korea China		•			•	2.						•
Latin America Mexico	14 W.	. С. 4.1 . С. 0.1	50.7	979	0 0 0 I	ι το το ι ι το 4 ι	144.		1 M M I	16.21	16.21	1001
Brazıl	•	•	•	•	•	•	•	•	•	•	•	•

<sup>1.</sup> Foreign GDP aggregates calculated using shares of U.S. exports.
2. Harmonized data for euro area from Eurostat.
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
4. CPI excluding mortgage interest payments, which is the targeted inflation rate.

٦

Class II FOMC Restricted (FR)						April	22, 2	600	
OUTLOOK FOR FOREIGN	REAL GDP (Per	AND	CONSUMER , Q4 to Q	PRICES:	SELECTED	ED COUNTRI	TRIES		
Measure and country	2002	2003	2004	2005	2006	2007	2008	Projec 2009	cted 2010
REAL GDP (1)  Total Foreign	3.0	2.	3.8	4.0	4.1	4.2	6.0	-2.0	2.8
Advanced Foreign Economies	2.5	1.8	2.6	2.7	2.7	2.6	-1.4	-3.0	1.7
Canada Canada Japan United Kingdom Euro Area (2) Germany	жиино г	НИЖНО  П4ИИИ	01213	WWWW	00 m m 4 00 u m 4 00 u 4 u	10320	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1 1 1 1 1 8 2 2 8 2 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	11111
Emerging Market Economies Asia Korea China Latin America Mexico Brazil	W 0 L 8 L 2 4 0 4 Z 0 0 0	4.00.00	0 0 0 0 0 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.7.01 0.7.01 0.7.04 0.8.04 0.8.04 0.8.04	0.740444 0.708	1,22,4 1,72,7 1,72,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,73,7 1,	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	0 - 0 - 7 - 2 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CONSUMER PRICES (3)Total Foreign	2.57	2.1	7.	2.	2.1	3.6	ю	6.0	1.6
Advanced Foreign Economies	2.1	1.3	1.8	1.6	1.4	2.2	2.0	0.5	6.0
Camada Japan United Kingdom (4) Euro Area (2) Germany	10H0H	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	00100  4	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100711 4 E C 8 E	3000 3000 3000 3000 3000	118311 12300 13300	00100.000.0000.000000000000000000000000	177.01
Emerging Market Economies Asia Korea China Latin America Mexico Brazil	100000000000000000000000000000000000000	1 134 12 13 13 13 13 13 13 13 13 13 13 13 13 13	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	W W W H W W W W W W W W W W W W W W W W	000044w 0411110	0000404 1447000	4 W 4 U 0 0 0 	1010 4.0.0.0.4 4.0.0.4.0	21111828 

Foreign GDP aggregates calculated using shares of U.S. exports. Harmonized data for euro area from Eurostat.
Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
CPI excluding mortgage interest payments, which is the targeted inflation rate. 40 % 4 ....

April 22, 2009 OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS Class II FOMC Restricted (FR)

	2002	2003	2004	2005	2006	2007	2008	Proj 2009	ected 2010
NIPA REAL EXPORTS and IMPORTS	Percenta	ge point	contributi	tion to GD	OP growth,	Q4/Q4			
Net Goods & Services Exports of G&S Imports of G&S	-0.9 4.0-1.3	-0.1 0.6 -0.7	-0.9 0.7 -1.7	-0.1 0.7 -0.8	0.4 1.1 9.0	0.0	10-1.1.32	-1.2 1.3	10.5
		Perc	centage cl	change, Q4,	/Q4				
Exports of G&S Services Computers Semiconductors Core Goods 1/	10.2 11.1 10.1 0.6	1 K H K 4 K 8 K 8 K 8 K 8 K 8 K 8 K 8 K 8 K 8	4.7 8.3 8.0 8.0 8.0	7	110.1 11.5 8.1.5 10.09	00000 00000	- 1.8 - 1.3 - 1.3 - 1.3 - 3.6 - 3.6 - 3.6 - 4.8	-10.1 -7.0 -13.2 -13.1	22.3 9.52 11.1
Imports of G&S Services Oil Natural Gas Computers Semiconductors Core Goods 2/	11111111111111111111111111111111111111	4211171 82222000000000000000000000000000000000	11 1 2 2 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2	4.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 - 1.0 -	112.6 112.6 113.8 103.8	11 0 1 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0		11111111111111111111111111111111111111	1 0 3 3 1 0 3 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		Billions	s of Chain	ned 2000 I	Dollars				
Net Goods & Services Exports of G&S Imports of G&S	-471.3 1013.3 1484.6	-518.9 1026.1 1545.0	-593.8 1126.1 1719.9	-616.6 1205.3 1821.9	-615.7 1314.8 1930.5	-546.5 1425.9 1972.4	-390.2 1514.1 1904.3	-330.8 1313.2 1644.0	-387.7 1324.2 1711.9
			Billions	of dollars	. Ω				
US CURRENT ACCOUNT BALANCE Current Acct as Percent of GDP	-461.3 -4.4	-523.4	-625.0 -5.3	-729.0	-788.1 -6.0	-731.2 -5.3	-673.3 -4.7	-478.9 -3.4	-552.3
Net Goods & Services (BOP)	-423.7	-496.9	-607.7	-711.6	-753.3	-700.3	-681.1	-393.8	-486.5
Investment Income, Net Direct, Net Portfolio, Net	33.0 102.4 -69.4	51.0 112.7 -61.7	73.4 150.9 -77.5	78.8 173.2 -94.4	63.8 184.1 -120.3	88.8 233.9 -145.1	134.8 267.9 -133.1	46.8 172.1 -125.2	64.2 197.0 -132.8
Other Income & Transfers,Net	-70.5	-77.5	9.06-	-96.2	-98.6	-119.7	-127.0	-132.0	-130.0

1. Merchandise exports excluding computers and semiconductors. 2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

April 22, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

			002				900				200	
	01	02		04 1	 01	02		04 1	01	02		
NIPA REAL EXPORTS and IMPORTS		Pe	Percentage	point c	contributi	ion to G	DP growt	, ,				
Net Goods & Services Exports of G&S Imports of G&S	000	00.0	100-	11.3	0.1	9.00	0 - 1 1 - 0 - 1 1 - 1 - 1	1.3	10.1	1.7	0.22	000
		Percenta	ge ch	ange from	m previou	us perio	d, s.a.a	ч.				
Exports of G&S Services Computers Semiconductors Core Goods 1/	10.2 16.2 15.3 7.3	2.2.8 2.7.2.8 1.1.7	0 K 8 C C C C C C C C C C C C C C C C C C	0.01 0.03 0.03 0.03 1.04	16.7 12.0 18.3 18.3	172.7 16.1 16.1	W W C U 4	15.6 28.6 12.7 -15.0	1.00 1.00 1.00 1.00 1.00	8.8.1 8.8.3 7.00 6.6	222 821 9.04 1.00 1.00 1.00	4.22-7.18
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$			NOUTUNOU	000070			7 8 0 H 4 D W			 n H O & w o w	
		Βi	0	aine	d 2000 Do	llars	s.a.a.r.					
Net Goods & Services Exports of G&S Imports of G&S	-623.7 1177.9 1801.7	-601.3 1203.1 1804.4	-603.6 1204.3 1807.9	-637.8 1235.7 1873.6	-636.0 1284.3 1920.2	-619.4 1301.4 1920.9	-623.0 1312.6 1935.7	-584.2 1361.1 1945.3	-618.6 1363.2 1981.8	-571.2 1392.2 1963.4	-511.8 1466.2 1978.0	-484.5 1482.1 1966.5
			Bil	lions of	dollars	, s.a.a.	Н					
US CURRENT ACCOUNT BALANCE Current Account as % of GDP	-696.2 -5.7	-711.3 -5.8	-675.6 -5.4	-832.9 -6.6	-783.8	-799.6 -6.1	-843.6 -6.4	-725.4 -5.4	-787.7 -5.8	-776.4 -5.7	-691.8 -5.0	-669.0 -4.8
Net Goods & Services (BOP)	-664.0	-682.9	-721.4	-778.0	-756.4	-767.4	-789.9	-699.5	-718.2	-715.3	-672.5	-695.1
Investment Income, Net Direct, Net Portfolio, Net	88.6 170.2 -81.6	77.8 168.5 -90.7	88.7 187.8 -99.0	59.9 166.3 -106.5	65.2 177.2 -112.0	70.7 189.2 -118.5	51.7 171.9 -120.3	67.7 198.2 -130.5	57.8 201.1 -143.2	45.8 196.2 -150.4	98.9 238.8 -139.9	152.6 299.3 -146.7
Other Inc. & Transfers, Net	:-120.9	-106.2	-42.9	-114.8	-92.6	-103.0	-105.4	-93.6	-127.4	-106.9	-118.3	-126.4

1. Merchandise exports excluding computers and semiconductors. 2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

-406.5 1338.1 1744.7

-382.9 1327.7 1710.6

0.0.

-377. 1318. 1696.

-383.3 1312.2 1695.5

-351.2 1308.4 1659.6

-324.7 1307.6 1632.3

-314.0 1312.7 1626.7

-333.4 1324.1 1657.5

r. υ. 4.

-364. 1454. 1819.

-353.0 1556.1 1909.1

381.3 544.7 926.0

0 9 9

-462.0 1500.6 1962.6

Goods & Services Exports of G&S Imports of G&S

Net

Exports Imports

Class II FOMC Restricted (FR)

TRANSACTIONS INTERNATIONAL Ø Þ FOR OUTLOOK

								-i				
			2008			. C		ว	ı	ı	2010	l .
	01	05 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I	0.40			. 8 . 0	04 1	0 1 1 1			
IIPA REAL EXPORTS and IMPORTS		Percen	tage	point cc	contribution	on to GDP	P growth					
Net Goods & Services Exports of G&S Imports of G&S	00.0	211 0 4.59	1.1	0 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	1.0	0.0 4.0.1	0 - 1 4 0 2	000	101	000	00.7	-0.3 -1.1
		Percentag	ம	change from	previous	s period,	g.a.a.	Н				
Exports of G&S Services	6.1	12.3		23. -1.	31.	7.						
Computers Semiconductors Core Goods 1/	4.6 4.6	57.4 -6.8 16.1	21.2 2.3 4.0	-45.2 -53.4 -30.4	- 18.5 - 64.8 - 38.1	15.8 31.2 -2.6	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11.0	110 110 110	11.1	11.0	11.1
Imports of G&S Services Oil Natural Gas Computers Semiconductors	- 140 - 170 - 100 - 100	- 3 8 8 . 0 . 3 . 3 . 4 . 4 . 4 . 4 . 4 . 4 . 4 . 4		117.5 - 127.2 - 137.9 - 137.9	-31.1 -15.7 -15.7 -26.4 -55.0		1 2 1 1 2 1 2 1 4 2 1 2 1 2 1 2 1 2 1 2	0.00 K L L L L L L L L L L L L L L L L L L	1155.00 1155.00 105.00	1288.15 11188.55	8. 8. 4. 1. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	8 4 8 8 2 2 8 4 8 4 5 4 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6
	)	•	• Ø	Cha	2000	H S		•	•	•	•	•

77.1 207.2 -130.2 -516.7  $\vec{\omega}$ ς. 571.9 -132 -544.6 -3.7 68.1 201.3 -133.2 4. -483. -129. 59.6 193.7 134.1 ⊣.∞. 4. ς. 542. -3. -472 52.1 185.7 133.6 -550.5 -473.3 -129. 46.0 178.4 132.4 508.2 -424.9  $\sim$ -129. -474.7 -3.4 41.0 171.7 -130.7 -386.4 ς. -129. ч. -462.7 -3.3 41.3 167.0 -125.7 m s.a.a -374.7 -129. dollars, 59.1 171.1 112.0 -470.2 -3.3 -389.2 -140. of -531.3 .5 7.75 ď 561. 153. 274. -120. -123 Billions 125.5 256.3 -130.8 -725.2 -5.0 -723.5 -127.2 -728.9 120.0 259.7 139.7 ۲. ς. -725. -123. 140.3 281.3 -141.1 -707.6 -713.8 Net-134.1 Services (BOP) US CURRENT ACCOUNT BALANCE Current Account as % of GDP Transfers, Investment Income, Direct, Net Portfolio, Net ଧ ଧ Inc. Goods Net

semiconductors and computers and semiconductors. oil, natural gas, computers, a excluding excluding exports imports Merchandise Merchandise

Part 2 April 22, 2009

# CURRENT ECONOMIC AND FINANCIAL CONDITIONS

# **Recent Developments**

April 22, 2009

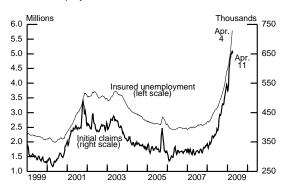
# **Recent Developments**

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

# Domestic Nonfinancial Developments

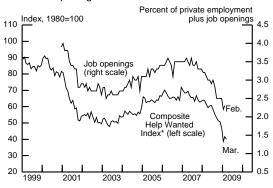
# **Labor Market Indicators**

# **Unemployment Insurance**



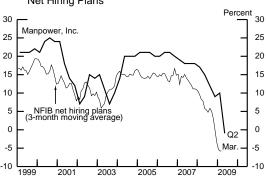
Note: 4-week moving averages. Source: U.S. Dept. of Labor, Employment and Training Administration.

# Job Openings



\*Index of staff composite help wanted advertising as a percent of private payroll employment. Source: For job openings, Job Openings and Labor Turnover Survey; for Help Wanted Index, Conference Board and staff calculations.

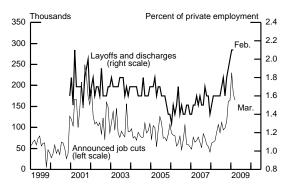
# Net Hiring Plans



Note: Percent planning an increase in employment minus the percent planning a reduction.

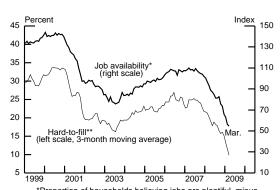
Source: National Federation of Independent Business (NFIB); Manpower, Inc.

# Layoffs and Job Cuts



Note: Job cuts seasonally adjusted by FRB staff. Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for job cuts, Challenger, Gray,

# Job Availability and Hard-to-Fill Positions



\*Proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100. \*\*Percent of small businesses surveyed with at least one "hard-to-fill" job opening. Seasonally adjusted by FRB staff. Source. For job availability, Conference Board; for hard-to-fill, National Federation of Independent Business.

# **Expected Labor Market Conditions**



Note: The proportion of households expecting labor market conditions to improve, minus the proportion expecting

conditions to worsen, plus 100.
p Preliminary.
Source: Conference Board; Reuters/University of Michigan Surveys of Consumers.

# **Production of Domestic Light Vehicles**

(Millions of units at an annual rate except as noted)

	200	08	20	09		20	09	
Item	Q3	Q4	Q1	Q2	Mar.	Apr.	May	June
U.S. production <sup>1</sup> Autos Light trucks	8.4	7.1	4.4	5.9	4.8	5.8	6.1	5.7
	4.1	3.3	1.6	2.6	1.9	2.5	2.7	2.5
	4.3	3.7	2.8	3.3	3.0	3.3	3.4	3.1
Days' supply <sup>2</sup> Autos Light trucks	76	98	93	n.a.	89	n.a.	n.a.	n.a.
	67	98	94	n.a.	86	n.a.	n.a.	n.a.
	84	99	92	n.a.	91	n.a.	n.a.	n.a.
Inventories <sup>3</sup> Autos Light trucks	2.41	2.47	2.04	n.a.	2.04	n.a.	n.a.	n.a.
	0.96	1.14	0.92	n.a.	0.92	n.a.	n.a.	n.a.
	1.44	1.33	1.11	n.a.	1.11	n.a.	n.a.	n.a.
Memo: U.S. production, total motor vehicles <sup>4</sup>	8.6	7.3	4.6	6.1	5.1	6.0	6.3	5.9

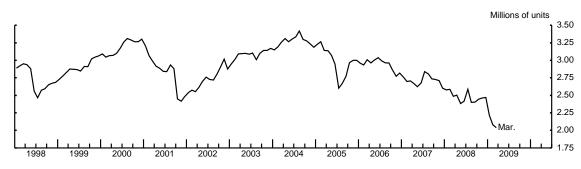
Note: FRB seasonals. Components may not sum to totals because of rounding.

- 1. Production rates for April, May, June, and the second quarter of 2009 reflect the latest industry schedules.
- 2. Quarterly values are calculated with end-of-period stocks and average reported sales.
- 3. End-of-period stocks.
- 4. Includes medium and heavy trucks.

n.a. Not available.

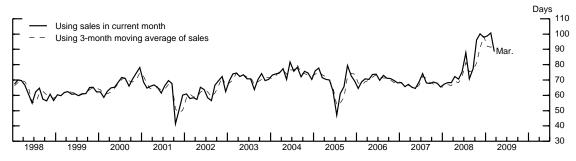
Source: Ward's Communications.

# **Inventories of Light Vehicles**



Source: Ward's Communications. Adjusted using FRB seasonals.

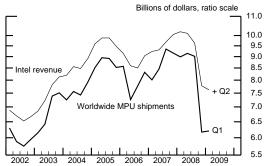
# Days' Supply of Light Vehicles



 $Source: Constructed \ from \ Ward's \ Communications \ data. \ Adjusted \ using \ FRB \ seasonals.$ 

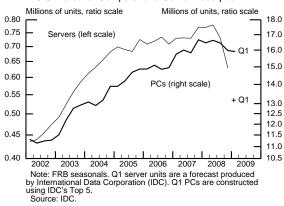
# **Indicators of High-Tech Manufacturing Activity**

# MPU Shipments and Intel Revenue

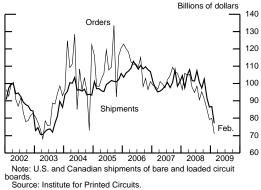


Note: FRB seasonals. MPU is a microprocessor unit. O2 Intel revenue is the company's internal forecast as of April 14, 2009. MPU shipments include Semiconductor Industry Association (SIA) data through February and a staff estimate for March. Source: Intel; SIA.

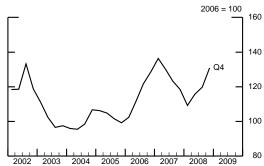
# U.S. Personal Computer and Server Absorption



### Circuit Board Orders and Shipments

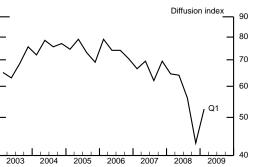


# FRB Chip Inventory Index



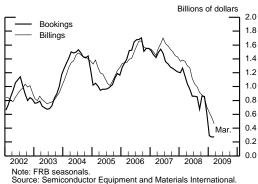
Note: The staff's chip inventory index is a sales-weighted chain-type index constructed from financial data for 10 major chip manufacturers. Source: Financial reports.

# High-Tech Spending Plans



Note: Based on survey question on firms' plans to increase or decrease their spending on high-tech equipment in the next 12 months. Source: NABE Industry Survey.

# Bookings and Billings for Semiconductor



# Sales of Light Vehicles

(Millions of units at an annual rate; FRB seasonals)

		200	08		20	09	
Category	2008	Q3	Q4	Q1	Jan.	Feb.	Mar.
Total	13.1	12.9	10.3	9.5	9.5	9.1	9.8
Autos Light trucks	6.7 6.4	6.6 6.3	5.2 5.1	4.8 4.7	4.6 5.0	4.6 4.5	5.1 4.7
North American <sup>1</sup> Autos Light trucks	9.8 4.5 5.3	9.7 4.4 5.3	7.7 3.6 4.1	6.8 3.0 3.7	6.9 2.9 4.0	6.3 2.9 3.5	7.1 3.3 3.8
Foreign-produced Autos Light trucks	3.3 2.2 1.1	3.2 2.2 1.0	2.6 1.7 .9	2.7 1.7 1.0	2.7 1.7 1.0	2.8 1.7 1.0	2.8 1.8 1.0
Memo: Detroit Three domestic market share (percent) <sup>2</sup>	47.6	46.7	47.5	43.2	43.1	43.4	44.5

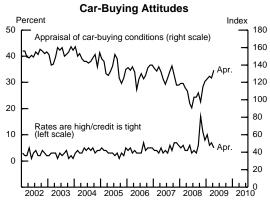
Note: Components may not sum to totals because of rounding.

1. Excludes some vehicles produced in Canada that are classified as imports by the industry.

2. Domestic market share excludes sales of foreign brands affiliated with the Detroit Three.

Source: Ward's Communications. Adjusted using FRB seasonals.







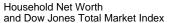


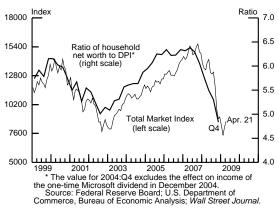
# Average Value of Incentives on Light Vehicles



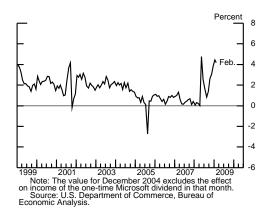
Note: Seasonally adjusted weighted average of customer cash rebate and the present value of interest rate reduction. April figure is based on data through April 12. Source: J.D. Power and Associates.

# **Fundamentals of Household Spending**

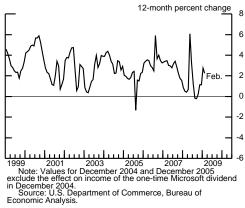




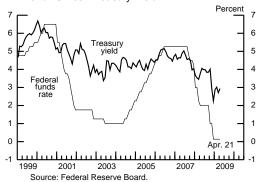
# Personal Saving Rate



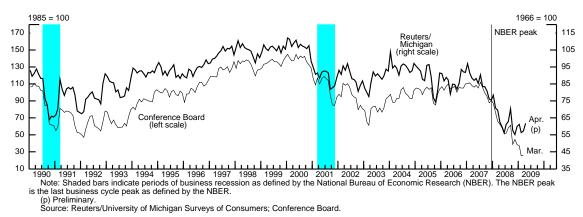
### Change in Real Disposable Personal Income



# Target Federal Funds Rate and 10-Year Treasury Yield



# Consumer Confidence



# **Indicators of Single-Family Housing**

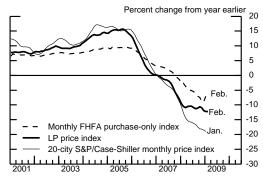
### New Single-Family Home Sales Millions of units (annual rate) Millions of units 1.6 Total (left scale) 1.4 0.5 1.2 0.4 1.0 0.3 0.8 0.2 0.6 0.1 0.4

# Source: For total, Census Bureau; for large homebuilders, National Association of Home Builders.

# **Existing Single-Family Home Sales**

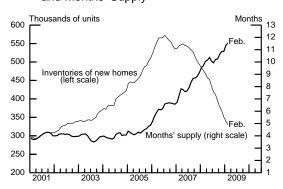


# Prices of Existing Homes



Source: For FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor's; for LP, LoanPerformance, a division of First American CoreLogic.

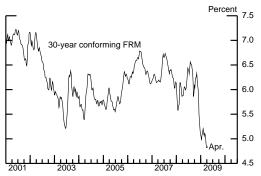
# Inventories of New Homes and Months' Supply



Note: Months' supply is calculated using the 3-month moving average of sales.

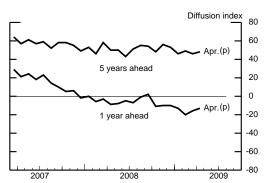
Source: Census Bureau.

# Mortgage Rates



Note: The April reading is a 2-week moving average of data available through Apr. 15, 2009. FRM is a fixed-rate mortgage. Source: Federal Home Loan Mortgage Corporation.

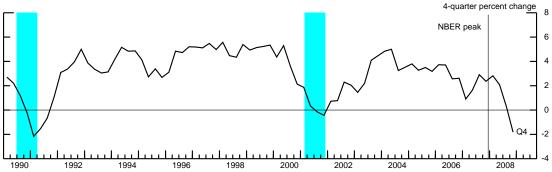
# House Price Expectations



Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase. p Preliminary. Source: Reuters/University of Michigan Surveys of Consumers.

# **Fundamentals of Equipment and Software Investment**

# Real Business Output

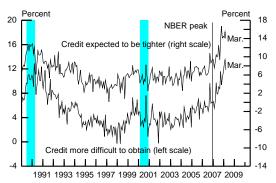


Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER. Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

# **User Cost of Capital**

# 

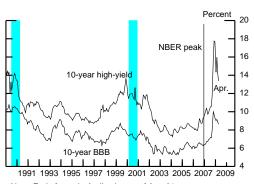
# NFIB: Survey on Loan Availability



Note: Of borrowers who sought credit in the past three months, the proportion that reported or expected more difficulty in obtaining credit less the proportion that reported or expected more ease in obtaining credit. Seasonally adjusted.

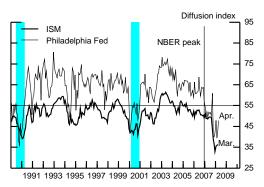
Source: National Federation of Independent Business (NFIB).

# Corporate Bond Yields



Note: End of month. April value as of Apr. 21. Source: Merrill Lynch.

# Surveys of Business Conditions

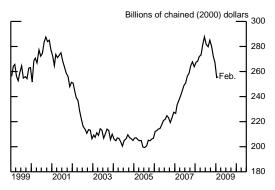


Source: Institute for Supply Management (ISM), Manufacturing ISM Report on Business; Philadelphia Fed Business Outlook Survey.

# **Nonresidential Construction and Indicators**

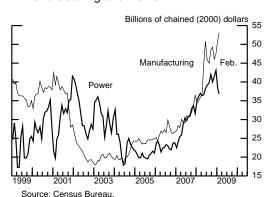
(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q4 and by staff projection thereafter)

# **Total Structures**

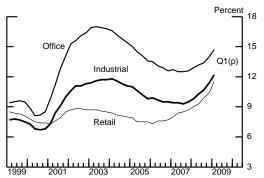


Source: Census Bureau.

# Manufacturing and Power

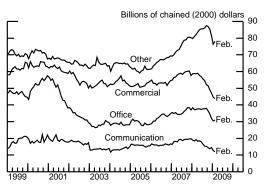


Vacancy Rates



Note: Industrial space includes both manufacturing structures and warehouses.
p Preliminary.
Source: Torfo Wheaton Research.

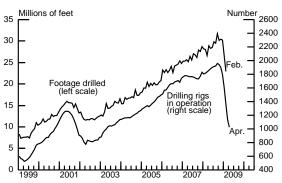
# Office, Commercial, Communication, and Other



Note: Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care.

Source: Census Bureau.

# **Drilling and Mining Indicators**



Note: The April readings for drilling rigs are based on data through April 17, 2009. Both series are seasonally adjusted by FRB staff.
Source: For footage drilled, U.S. Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

# Architectural Billings and Nonresidential Construction Employment



Note: Both series are 3-month moving averages. Employment consists of industrial, commercial, and specialty trade construction.
Source: For billings, American Institute of Architects; for employment, U.S. Department of Labor, Bureau of Labor Statistics.

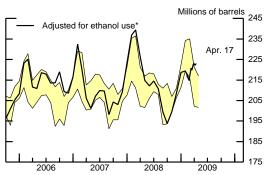
Energy and Food Price Indicators (Data from U.S. Department of Energy, Energy Information Administration, except as noted)

# **Total Gasoline Margin**

# Cents per gallon Retail price less average spot crude price\* 160 140 120 100 80 60

2005 2006 2007 2008 2009
\* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas intermediate, 40% Maya heavy crude. Includes gasoline taxes.

# **Gasoline Inventories**

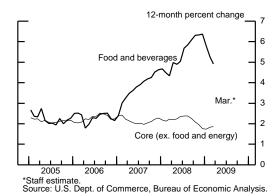


Note: Bounds are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. Monthly data through December 2008, wealth details the serfect.

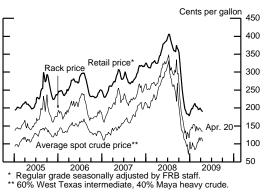
weekly data thereafter.

\* The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff.

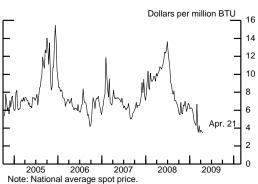
# PCE: Food and Core Prices



# Gasoline Price Decomposition

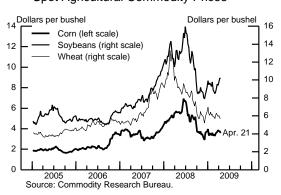


# **Natural Gas Prices**



Source: Bloomberg.

# Spot Agricultural Commodity Prices



# **Broad Measures of Inflation**

(Percent change, Q4 to Q4)

	, , ,			
Measure	2005	2006	2007	2008
Product prices GDP price index Less food and energy	3.5	2.8	2.6	2.0
	3.3	3.0	2.3	1.7
Nonfarm business chain price index	3.6	2.4	2.0	2.0
Expenditure prices Gross domestic purchases price index Less food and energy	4.0	2.5	3.3	2.0
	3.2	2.9	2.3	2.1
PCE price index	3.3	1.9	3.5	1.9
Less food and energy	2.2	2.3	2.2	1.9
PCE price index, market-based components	3.1	1.6	3.3	1.8
Less food and energy	1.7	2.0	1.8	1.8
CPI	3.8	1.9	4.0	1.5
Less food and energy	2.1	2.7	2.3	2.0
Chained CPI	3.2	1.7	3.6	1.1
Less food and energy	1.8	2.3	1.9	1.5
Median CPI	2.5	3.1	3.0	3.0
Trimmed mean CPI	2.6	2.6	2.8	2.9
Trimmed mean PCE	2.5	2.8	2.6	2.4

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

# **Surveys of Inflation Expectations**

(Percent)

			Reuters/Mic	higan Surve	y		essional
	Actual CPI	1 y	ear <sup>2</sup>	5 to 10	) years <sup>3</sup>		casters years) 4
Period	inflation <sup>1</sup>	Mean	Median	Mean	Median	CPI	PCE
2007:Q2 Q3 Q4	2.7 2.4 4.0	4.2 4.1 4.1	3.3 3.2 3.3	3.5 3.5 3.3	3.0 3.0 2.9	2.4 2.4 2.4	2.0 2.1 2.1
2008:Q1 Q2 Q3 Q4	4.1 4.4 5.3 1.6	4.2 6.4 5.4 3.0	3.8 5.0 4.7 2.8	3.3 3.8 3.6 2.9	3.0 3.3 3.1 2.8	2.5 2.5 2.5 2.5	2.2 2.2 2.2 2.2
2009:Q1	.0	2.4	2.0	3.3	2.9	2.4	2.2
2008:Dec. 2009:Jan. Feb. Mar.	.1 .0 .2 4	1.7 2.5 2.3 2.4	1.7 2.2 1.9 2.0	2.6 3.4 3.5 2.9	2.6 2.9 3.1 2.6	 2.4 	 2.2 
2009:Apr.(p)	n.a.	3.4	3.0	2.8	2.7		

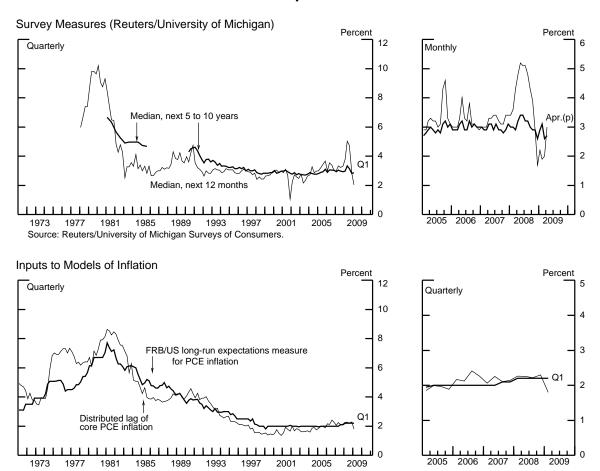
- 1. Percent change from the same period in the preceding year.
- 2. Responses to the question, By about what percent do you expect prices to go up, on average, during the next 12 months?

  3. Responses to the question, By about what percent per year do you expect prices to go up,
- on average, during the next 5 to 10 years?
  4. Median CPI and PCE price projections.

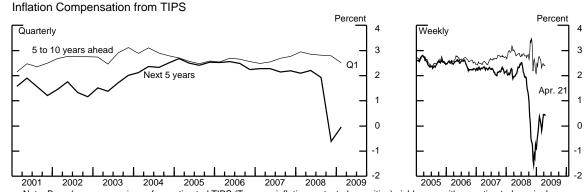
- ... Not applicable.

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for Reuters/Michigan Survey, Reuters/University of Michigan Surveys of Consumers; for professional forecasters, the Federal Reserve Bank of Philadelphia.

# **Measures of Expected Inflation**



Note: The distributed lag of core PCE inflation is derived from one of the reduced-form Phillips curves used by Board staff. Source: For the distributed lag of core PCE inflation, FRB staff calculations; for the FRB/US measure, for 2007 forward, the median projection for PCE inflation over the next 10 years from the Survey of Professional Forecasters (SPF); for 1990 to 2006, the equivalent SPF projection for the CPI; for 1981 to 1989, a related survey for the CPI conducted by Richard Hoey; and for the period preceding 1981, a model-based estimate constructed by Board staff. The survey data before 2007 are adjusted down 0.5 percentage point to put the CPI projections approximately on a PCE basis.

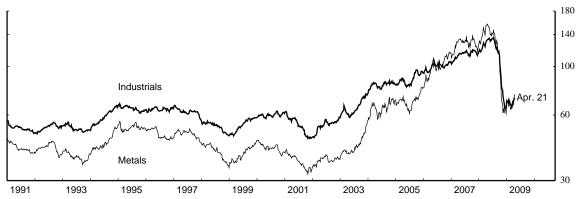


Note: Based on a comparison of an estimated TIPS (Treasury inflation-protected securities) yield curve with an estimated nominal off-the-run Treasury yield curve, with an adjustment for the indexation-lag effect. Source: FRB staff calculations.

# **Commodity Price Indexes**

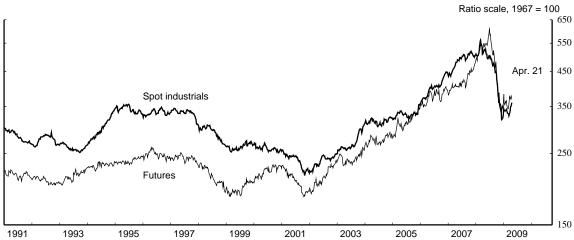
# Journal of Commerce

Ratio scale, 2006 = 100



Note: The *Journal of Commerce* (JOC) industrial price index is based almost entirely on industrial commodities, with a small weight given to energy commodities. Copyright for JOC data is held by CIBCR, 1994.

# Commodity Research Bureau



Note: The Commodity Research Bureau (CRB) spot industrials index consists entirely of industrial commodities, excluding energy. The CRB futures index gives about a 60 percent weight to food commodities and splits the remaining weight roughly equally among energy commodities, industrial commodities, and precious metals.

# **Selected Commodity Price Indexes**

(Percent change)

Index	2008 1	12/30/08 to 3/10/09 <sup>2</sup>	3/10/09 <sup>2</sup> to 4/21/09	52-week change to 4/21/09
JOC industrials JOC metals CRB spot industrials CRB spot foodstuffs CRB futures	-41.4	1.0	8.3	-45.5
	-48.2	8.2	13.3	-51.8
	-34.3	1.5	8.2	-31.3
	-14.1	-3.0	7.9	-23.4
	-24.7	-1.3	6.0	-33.0

- 1. From the last week of the preceding year to the last week of the year indicated.
- 2. March 10, 2009, is the Tuesday preceding publication of the March Greenbook.

(One-day quotes in percent except as noted)

		2007		2009			ge to Apr. 21 fi	
Instrument		Aug. 6	Jan. 27	Mar. 17	Apr. 21	2007 Aug. 6	2009 Jan. 27	2009 Mar. 17
Short-term FOMC intended federal funds ra	nte	5.25	.13	.13	.13	-5.12	.00	.00
Treasury bills <sup>1</sup> 3-month 6-month		4.74 4.72	.13 .32	.24 .44	.15 .34	-4.59 -4.38	.02 .02	09 10
Commercial paper (A1/P1 rates) 1-month 3-month	)2	5.26 5.29	.29 2.04	.44 .66	.29 .35	-4.97 -4.94	.00 -1.69	15 31
Large negotiable CDs <sup>1</sup> 3-month 6-month		5.34 5.27	1.08 1.57	1.08 1.83	.90 1.50	-4.44 -3.77	18 07	18 33
Eurodollar deposits <sup>3</sup> 1-month 3-month		5.33 5.35	.75 1.75	1.00 1.65	.90 1.50	-4.43 -3.85	.15 25	10 15
Bank prime rate		8.25	3.25	3.25	3.25	-5.00	.00	.00
Intermediate- and long-term U.S. Treasury <sup>4</sup> 2-year 5-year 10-year		4.49 4.52 4.82	.68 1.74 3.17	1.04 2.14 3.47	.90 1.96 3.27	-3.59 -2.56 -1.55	.22 .22 .10	14 18 20
U.S. Treasury indexed notes <sup>5</sup> 5-year 10-year		2.43 2.48	1.84 1.97	2.04 2.26	1.61 1.99	82 49	23 .02	43 27
Municipal general obligations (I	Bond Buyer) <sup>6</sup>	4.51	5.13	5.03	4.78	.27	35	25
Private instruments 10-year swap 10-year FNMA <sup>7</sup> 10-year AA <sup>8</sup> 10-year BBB <sup>8</sup> 10-year high yield <sup>8</sup>		5.44 5.34 6.12 6.57 9.21	2.84 3.65 6.03 8.94 14.68	3.14 4.04 6.99 9.25 16.41	2.99 3.88 6.29 8.63 13.37	-2.45 -1.46 .17 2.06 4.16	.15 .23 .26 31 -1.31	15 16 70 62 -3.04
Home mortgages (FHLMC surv 30-year fixed 1-year adjustable	ey rate)	6.59 5.65	5.10 4.90	4.98 4.91	4.82 4.91	-1.77 74	28 .01	16 .00
	Record	high		2009			inge to Apr. 21 ected dates (pe	
Stock exchange index	Level	Date	Jan. 27	Mar. 17	Apr. 21	Record high	2009 Jan. 27	2009 Mar. 17
Dow Jones Industrial S&P 500 Composite Nasdaq	14,165 1,565 5,049	10-9-07 10-9-07 3-10-00	8,175 846 1,505	7,396 778 1,462	7,970 850 1,644	-43.74 -45.69 -67.44	-2.51 .52 9.23	7.76 9.25 12.43
Russell 2000 D.J. Total Stock Index	856 15,807	7-13-07 10-9-07	456 8,524	404 7,878	470 8,695	-45.07 -44.99	3.18 2.00	16.47 10.37

- 1. Secondary market.
- 2. Financial commercial paper.
- 3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time.
- 4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities.
- 5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect.
- 6. Most recent Thursday quote.7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities.
- 8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data.

# NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.

January 27, 2009, is the day before the January 2009 FOMC monetary policy announcement.

March 17, 2009, is the day before the most recent FOMC monetary policy announcement.

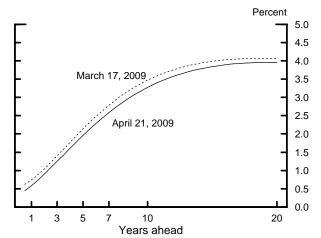
# **Policy Expectations and Treasury Yields**

### Interest Rates Percent Percent 2.4 3.4 **FOMC Employment** Retail sales report statement report 2.2 3.2 Public Private Investment 2.0 3.0 Program 10-year Treasury yield 1.8 announcement (left scale) 2.8 1.6 2.6 1.4 2.4 Mar. 2010 1.2 Eurodollar 2.2 1.0 (right scale) 2.0 8.0 Mar. 17 Mar. 20 Mar. 25 Mar. 30 Apr. 2 Apr. 7 Apr. 10 Apr. 15 Apr. 20

Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.

Source: Bloomberg.

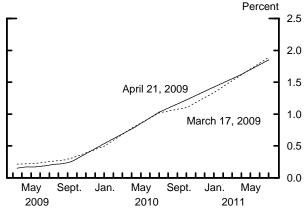
# Treasury Yield Curve



Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.

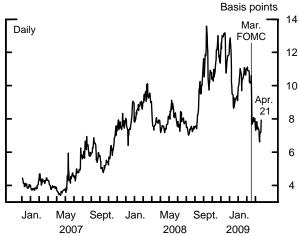
Source: Federal Reserve Bank of New York.

# Implied Federal Funds Rate



Note: Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments. Source: Chicago Mercantile Exchange; Chicago Board of Trade.

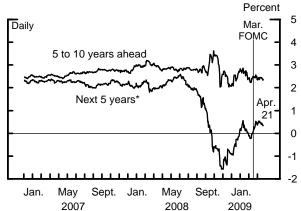
# 10-Year Treasury Implied Volatility



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

Source: Bloomberg.

# Inflation Compensation



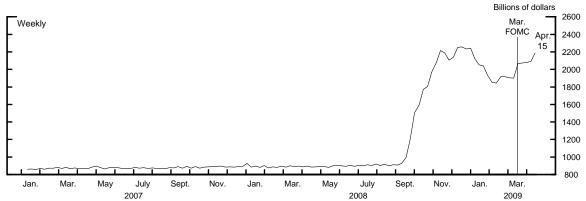
Note: Estimates based on smoothed nominal and inflation-indexed Treasury yields.

\*Adjusted for lagged indexation of Treasury inflation-protected

Source: Federal Reserve Bank of New York.

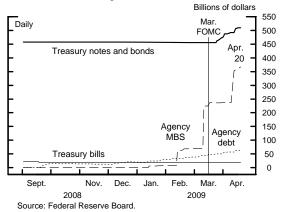
# **Federal Reserve Purchase Programs and Facilities**

# **Total Federal Reserve Assets**

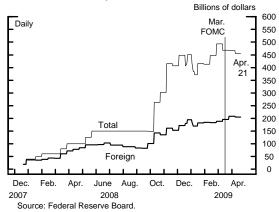


Source: Board of Governors of the Federal Reserve System, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

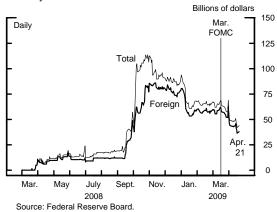
# Securities Held Outright



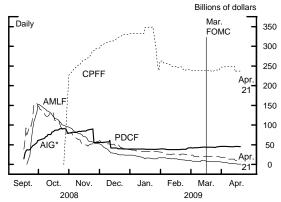
# **Term Auction Facility**



# **Primary Credit**



# Other Credit Extensions

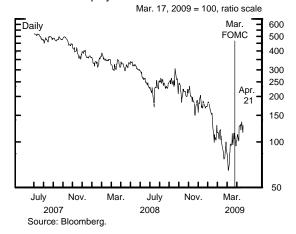


Note: AMLF is the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility; AIG is American International Group, Inc.; CPFF is the Commercial Paper Funding Facility; PDCF is the Primary Dealer Credit Facility.

\* Data for AIG extend through April 20. Source: Federal Reserve Board.

# **Financial Institutions and Short-Term Funding Markets**

# S&P Banks Equity Index

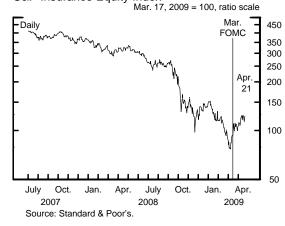


# Senior CDS Spreads for Bank Holding Companies Basis points Basis points

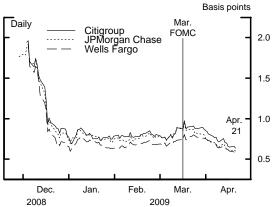


Note: Median spreads for 6 bank holding companies. Source: Markit.

# S&P Insurance Equity Index



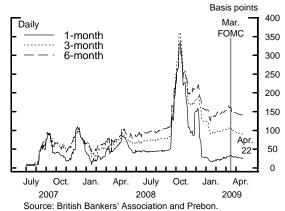
# Selected FDIC-Guaranteed Spreads



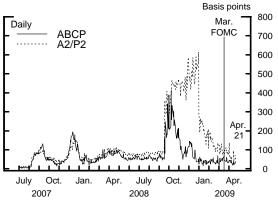
Note: Spreads to comparable-maturity Treasury securities for issues maturing around year-end 2011.

Source: Bloomberg.

# Libor over OIS Spread



# Spreads on 30-day Commercial Paper

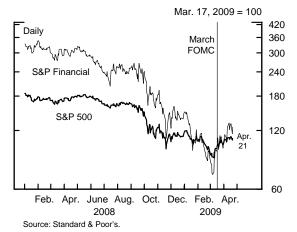


Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.

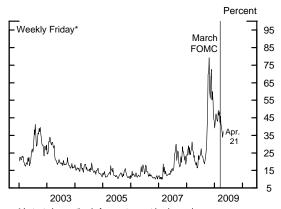
Source: Depository Trust & Clearing Corporation.

# Corporate Yields, Risk Spreads, and Stock Prices

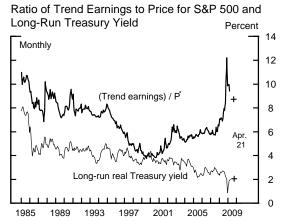
# Selected Stock Price Indexes



# Implied Volatility on S&P 500 (VIX)



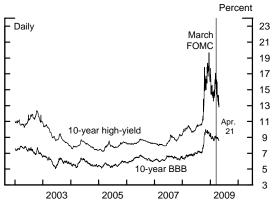
\* Latest observation is for most recent business day. Source: Chicago Board of Exchange



- \*Trend earnings are estimated using analysts' forecasts of
- year-ahead earnings from I/B/E/S.

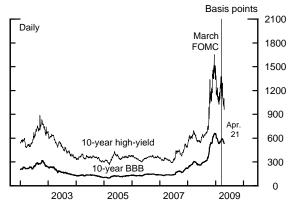
  + Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S. Source: Thomson Financial.

# Corporate Bond Yields



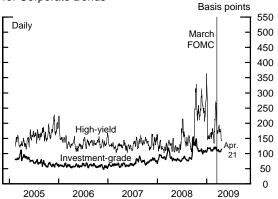
Note: Yields from smoothed yield curves based on Merrill Lynch bond data

# Corporate Bond Spreads



Note: Corporate yields from smoothed yield curves based on Merrill Lynch bond data and spreads measured relative to comparable-maturity Treasury securities.

# Estimated Median Bid-Asked Spread for Corporate Bonds



Source: Staff estimate using data from the National Assn. of Securities Dealers' Trade Reporting and Compliance Engine.

# **Business Finance**

# Gross Issuance of Securities by U.S. Corporations

(Billions of dollars; monthly rates, not seasonally adjusted)

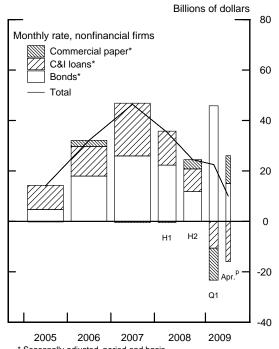
				20	08	20	09
Type of security	2005	2006	2007	H1	H2	Q1	Apr. <sup>p</sup>
Nonfinancial corporations							
Stocks <sup>1</sup>	4.6	4.7	5.5	3.5	4.0	2.9	2.5
Initial public offerings	1.7	1.8	1.6	.6	.1	.3	.0
Seasoned offerings	2.8	2.9	3.8	2.9	3.9	2.6	2.5
Bonds <sup>2</sup>	18.7	29.3	35.1	36.0	19.4	55.0	28.0
Investment grade	8.7	13.1	17.5	24.9	14.2	41.6	20.0
Speculative grade	5.2	6.2	7.5	3.1	.4	2.5	4.0
Other (sold abroad/unrated)	4.8	10.1	10.0	8.0	4.8	10.9	4.0
Memo							
Net issuance of commercial paper <sup>3</sup> Change in C&I loans at	2	2.4	4	5	3.7	-12.7	11.0
commercial banks <sup>3</sup>	9.6	11.7	20.9	13.4	9.0	-10.6	-16.0
Financial corporations		<b>5</b> 0	0.6	17.0	0.0	0	0.0
Stocks <sup>1</sup>	5.0	5.3	8.6	17.2	9.9	.9	8.0
Bonds <sup>2</sup>	170.4	180.6	151.7	66.2	24.6	38.4	20.0

Note: Components may not sum to totals because of rounding.

- 1. Excludes private placements and equity-for-equity swaps that occur in restructurings.
- 2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's.
- 3. End-of-period basis, seasonally adjusted.
- p Forecast based on preliminary data.

Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

# **Selected Components of Net Debt Financing**



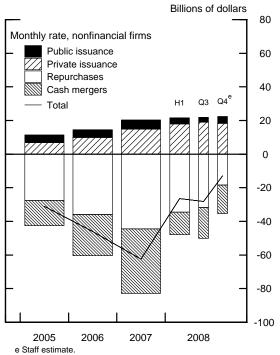
\* Seasonally adjusted, period-end basis. p Preliminary.

Source: Depository Trust & Clearing Corporation; Thomson

Financial; Federal Reserve Board.

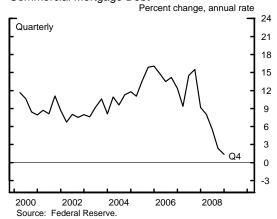
### Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

# **Components of Net Equity Issuance**

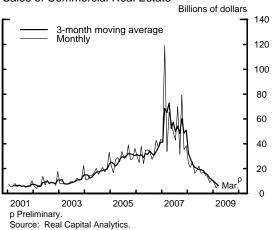


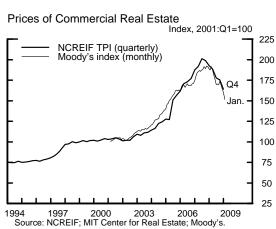
# **Commercial Real Estate**

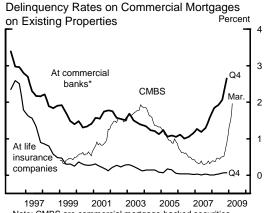
# Commercial Mortgage Debt



# Sales of Commercial Real Estate





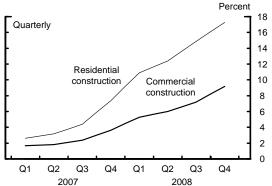


Note: CMBS are commercial mortgage-backed securities.

\*Excluding farmland.

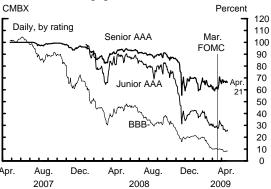
Source: Citigroup; Call Report; ACLI.

# **Delinquency Rates on Commercial Construction** Loans at Banks



Note: Data series for residential and commercial construction begin in 2007:Q1. Existing properties include nonresidential and multifamily. Source: Call Report.

# Commercial Mortgage CDS Index Prices

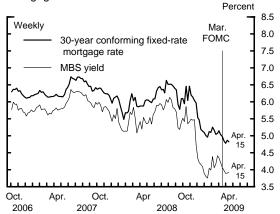


Note: Each index corresponds to pools of mortgages securitized in 2006:H1.

Source: JPMorgan Chase & Co.

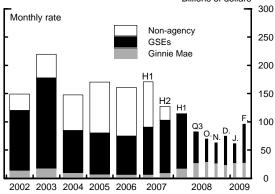
# **Residential Mortgages**

# Mortgage Rate and MBS Yield



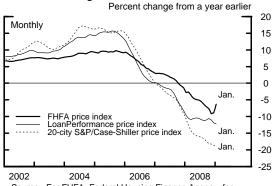
Note: For MBS yield, Fannie Mae 30-year current coupon rate. Source: For conforming, Freddie Mac; for MBS yield, Bloomberg.

# Agency and Non-Agency MBS Issuance Billions of dollars



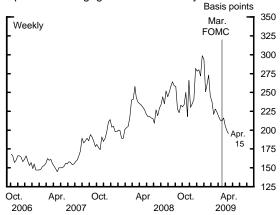
Source: For agency issuance, Fannie Mae, Freddie Mac, and Ginnie Mae; for non-agency, Inside Mortgage Finance.

# Prices of Existing Homes



Source: For FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor's; for LoanPerformance, First American CoreLogic.

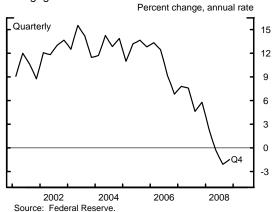
# Spread of Mortgage Rate to Treasury Yield



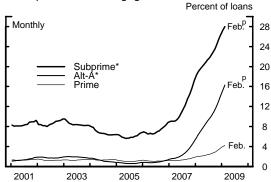
Note: Spread is of 30-year conforming fixed mortgage rate relative to the on-the-run 10-year Treasury yield.

Source: Bloomberg; Freddie Mac.

# Mortgage Debt



# Delinquencies on Mortgages



Note: Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages.

\* Among securitized loans only.

p Preliminary.

Source: For subprime and alt-A, LoanPerformance, a division of First American CoreLogic; for prime, McDash.

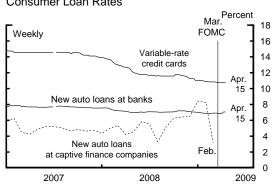
May

Aug.

2007

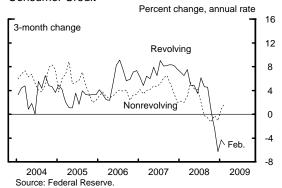
# **Consumer Credit and Household Wealth**

# Consumer Loan Rates



Source: For credit cards and auto at banks, Bankrate, Inc.; for auto at captive finance companies, Federal Reserve.

# Consumer Credit



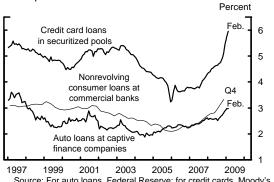
# AAA ABS Spreads over Swaps Basis points 700 Mar. **FOMC** 600 2-year credit card 2-year auto 500 400 300 200 100

2008 2009 Source: For credit cards and auto, Citigroup Global Markets.

Aug.

Dec.

# Delinquencies on Consumer Loans



Source: For auto loans, Federal Reserve; for credit cards, Moody's Investors Service; for nonrevolving consumer loans, Call Report.

# **Net Flows into Mutual Funds**

(Billions of dollars, monthly rate)

Fund type	2007	20	008		2009		Assets
		H1	H2	Jan.	Feb.	Mar.e	Feb.
Total long-term funds	18.6	11.9	-49.9	25.0	-12.1	-12.2	5,146
Equity funds	7.7	-3.4	-36.0	8.9	-25.0	-28.1	3,104
Domestic	-3.9	-4.8	-20.8	6.7	-14.3	-16.3	2,385
International	11.6	1.4	-15.3	2.2	-10.8	-11.8	719
Hybrid funds	1.8	1.4	-4.9	-0.4	-4.3	-3.9	441
Bond funds	9.0	14.0	-8.9	16.5	17.2	19.8	1,601
High-yield	-0.2	-0.2	0.1	3.1	1.2	4.1	118
Other taxable	8.4	11.2	-7.4	9.5	11.7	12.2	1,123
Municipals	0.9	2.9	-1.6	3.9	4.3	3.6	361
Money market funds	62.5	56.1	59.6	63.7	-10.1	-53.5	3,892

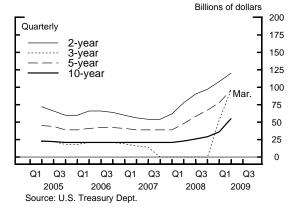
Note: Excludes reinvested dividends.

e Staff estimate.

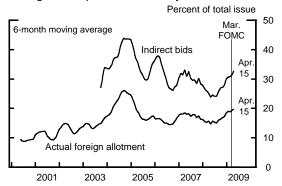
Source: Investment Company Institute.

# **Treasury Finance**

# **Treasury Auction Amounts**



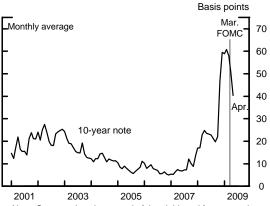
# Foreign Participation in Treasury Auctions



Note: Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2-, 5-, and 10year original auctions and reopenings.

Source: Federal Reserve Board.

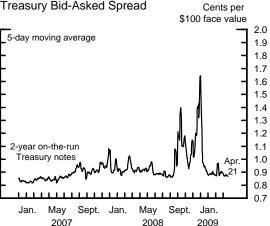
# Treasury On-the-Run Premium



Note: Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. March observation is the month-to-date average.

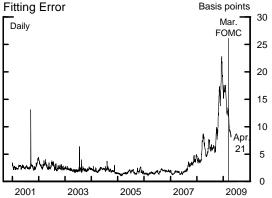
Source: Federal Reserve Bank of New York.

# Treasury Bid-Asked Spread



Source: BrokerTec Interdealer Market Data.

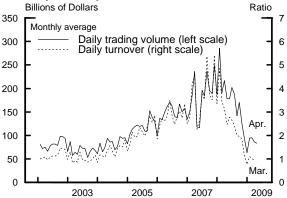
# Average Absolute Nominal Yield Curve



Note: Calculated from securities with 2 to 10 years until maturity, excluding on-the-run and first off-the-run securities.

Source: Federal Reserve Board.

# Daily Treasury Market Volume and Turnover



Note: April observation is the month-to-date average. Source: BrokerTec Interdealer Market Data.

# **State and Local Government Finance**

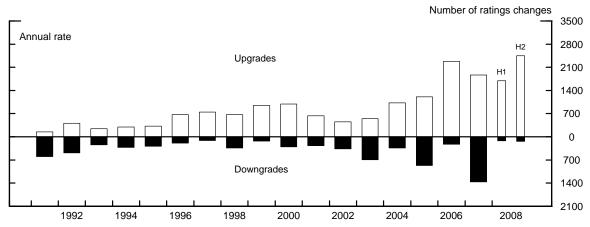
# **Gross Offerings of Municipal Securities**

(Billions of dollars; monthly rate, not seasonally adjusted)

				20	08	20	009
Type of security	2005	2006	2007	H1	H2	Q1	Apr. p
Total	38.4	36.1	40.4	41.6	33.1	30.6	30.0
Long-term <sup>1</sup>	34.2	32.5	35.5	38.0	26.6	28.8	29.0
Refundings <sup>2</sup>	15.6	10.6	12.6	18.0	11.0	10.7	10.0
New capital	18.6	21.9	22.9	20.1	15.6	18.1	19.0
Short-term	4.2	3.7	4.9	3.6	6.5	1.8	1.0
Memo: Long-term taxable	2.1	2.5	2.4	2.7	1.8	1.1	1.0

- 1. Includes issues for public and private purposes.
- 2. All issues that include any refunding bonds.
- p Forecast based on preliminary data through April 16, 2009. Source: Thomson Financial.

# **Ratings Changes**



Note: Recent upgrades reflect S&P's change of rating standard. Source: S&P's Credit Week Municipal; S&P's Ratings Direct.

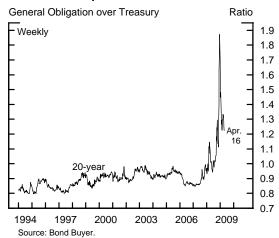
# **Municipal Bond Yields**

# Percent Weekly 20-year general 6 obligation 5 √www 3 7-day SIFMA 2 swap index\* 0 . 15 2005 2006 2007 2008 2009

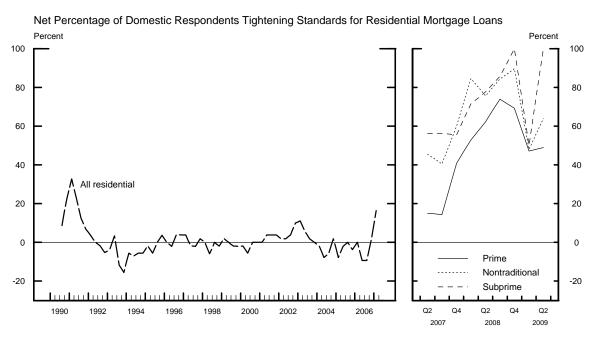
\* SIFMA is the Securities Industry and Financial Markets

Source: Municipal Market Advisors; Bond Buyer.

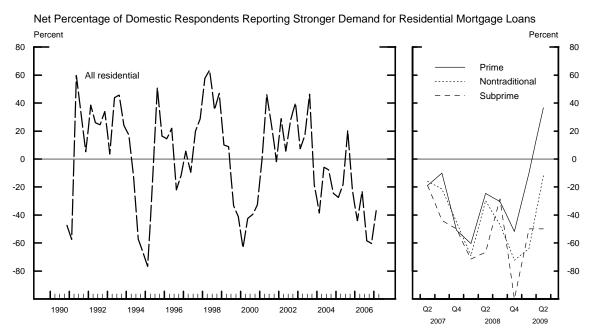
# **Municipal Bond Yield Ratio**



# Measures of Supply and Demand for Residential Mortgage Loans



Note: For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately.



Note: For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately.

# **International Developments**

April 24, 2009

# CURRENT ECONOMIC AND FINANCIAL CONDITIONS

# **Supplemental Notes**

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

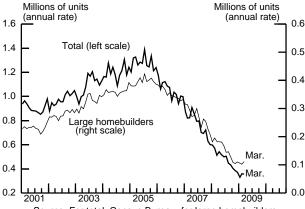
# **Correction to Part 1**

In the table that appears on page 13 of Part 1 of the Greenbook, two lines were inadvertently mislabeled. Specifically, the results reported as based on commercial loan credit standards from the Senior Loan Officer Opinion Survey are in fact based on the change in bank credit standards from the survey; the results reported for the change in bank credit standards are in fact based on commercial loan credit standards.

# **The Domestic Financial Economy**

# **Indicators of Single-Family Housing**

# New Single-Family Home Sales

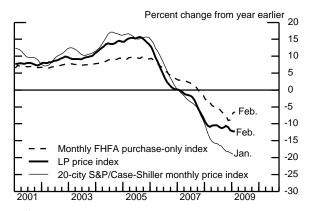


# Source: For total, Census Bureau; for large homebuilders, National Association of Home Builders.

# Existing Single-Family Home Sales

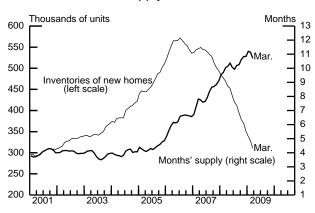


# Prices of Existing Homes



Source: For FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor's; for LP, LoanPerformance, a division of First American CoreLogic.

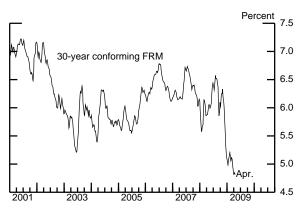
# Inventories of New Homes and Months' Supply



Note: Months' supply is calculated using the 3-month moving average of sales.

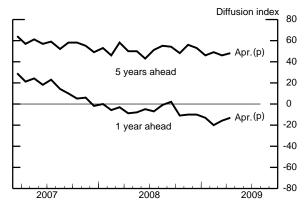
Source: Census Bureau.

# Mortgage Rates



Note: The April reading is a 2-week moving average of data available through Apr. 22, 2009. FRM is a fixed-rate mortgage. Source: Federal Home Loan Mortgage Corporation.

# House Price Expectations



Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase. p Preliminary.

p Preliminary. Source: Reuters/University of Michigan Surveys of Consumers.

**Commercial Bank Credit** (Percent change, annual rate, except as noted; seasonally adjusted)

Type of credit	2007	2008	H2 2008	Q4 2008	Q1 2009	Mar. 2009	Apr. 2009e	Level <sup>1</sup> Apr. 2009 <sup>e</sup>
Total	10.9	4.4	4.7	6.2	-6.7	-3.8	-14.8	9,325
Loans <sup>2</sup>								
Total To businesses	11.3	4.4	2.6	3.1	-6.4	-7.2	-11.9	7,023
Commercial and industrial	19.0	14.2	13.0	18.3	-9.7	-13.0	-18.3	1,520
Commercial real estate	10.7	6.4	2.9	2.0	-1.0	-1.7	-2.4	1,723
To households								
Residential real estate	6.8	-2.3	-3.8	7	5	2.5	-7.5	2,091
Revolving home equity	6.4	12.9	12.9	13.1	8.3	8.6	1.8	602
Closed-end mortgages	6.9	-7.1	-9.5	-5.8	-4.0	.0	-11.3	1,489
Consumer	6.6	7.9	7.4	6.0	7.3	-10.0	-15.5	881
Originated <sup>3</sup>	6.0	6.4	4.7	3.3	1.9	-7.3	-5.1	1,296
Other	17.1	-1.6	-4.5	-13.7	-36.7	-29.1	-27.2	808
Securities								
Total	9.5	4.6	11.2	16.0	-7.8	6.7	-23.5	2,303
Treasury and agency	-5.6	19.4	37.7	51.6	3.1	7.4	-35.2	1,354
Other <sup>4</sup>	31.1	-10.7	-16.8	-24.7	-22.8	5.7	-6.3	949

Note: Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FIN 39 and FAS 115), the initial consolidation of certain variable interest entities (FIN 46), and the initial adoption of fair value accounting. Data also account for the effects of nonbank structure activity of \$5 billion or more.

1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels.

2. Excludes interbank loans.

3. Includes an estimate of outstanding loans securitized by commercial banks.

4. Includes private mortgage-backed securities; securities of corporations, state and local governments, and foreign governments; and any trading account assets that are not Treasury or agency securities.

Estimated.

Source: Federal Reserve.

III-T-1 **Selected Financial Market Quotations** 

(One-day quotes in percent except as noted)

		2007		2009			ge to Apr. 23 fates (percentag	
Instrument		Aug. 6	Jan. 27	Mar. 17	Apr. 23	2007 Aug. 6	2009 Jan. 27	2009 Mar. 17
Short-term FOMC intended federal funds ra	ite	5.25	.13	.13	.13	-5.12	.00	.00
Treasury bills <sup>1</sup> 3-month 6-month		4.74 4.72	.13 .32	.24 .44	.10 .30	-4.64 -4.42	03 02	14 14
Commercial paper (A1/P1 rates) 1-month 3-month	2	5.26 5.29	.29 2.04	.44 .66	.30 .40	-4.96 -4.89	.01 -1.64	14 26
Large negotiable CDs <sup>1</sup> 3-month 6-month		5.34 5.27	1.08 1.57	1.08 1.83	.87 1.48	-4.47 -3.79	21 09	21 35
Eurodollar deposits <sup>3</sup> 1-month 3-month		5.33 5.35	.75 1.75	1.00 1.65	.90 1.50	-4.43 -3.85	.15 25	10 15
Bank prime rate		8.25	3.25	3.25	3.25	-5.00	.00	.00
Intermediate- and long-term U.S. Treasury <sup>4</sup> 2-year 5-year 10-year		4.49 4.52 4.82	.68 1.74 3.17	1.04 2.14 3.47	.90 1.98 3.30	-3.59 -2.54 -1.52	.22 .24 .13	14 16 17
U.S. Treasury indexed notes <sup>5</sup> 5-year 10-year		2.43 2.48	1.84 1.97	2.04 2.26	1.55 1.92	88 56	29 05	49 34
Municipal general obligations (F	Bond Buyer) <sup>6</sup>	4.51	5.13	5.03	4.57	.06	56	46
Private instruments 10-year swap 10-year FNMA <sup>7</sup> 10-year AA <sup>8</sup> 10-year BBB <sup>8</sup> 10-year high yield <sup>8</sup>		5.44 5.34 6.12 6.57 9.21	2.84 3.65 6.03 8.94 14.68	3.14 4.04 6.99 9.25 16.41	3.11 3.82 6.31 8.57 14.01	-2.33 -1.52 .19 2.00 4.80	.27 .17 .28 37 67	03 22 68 68
Home mortgages (FHLMC surv 30-year fixed 1-year adjustable	ey rate)	6.59 5.65	5.10 4.90	4.98 4.91	4.80 4.82	-1.79 83	30 08	18 09
	Record	high		2009		l	ange to Apr. 23 ected dates (pe	
Stock exchange index	Level	Date	Jan. 27	Mar. 17	Apr. 23	Record high	2009 Jan. 27	2009 Mar. 17
Dow Jones Industrial S&P 500 Composite Nasdaq Russell 2000	14,165 1,565 5,049 856	10-9-07 10-9-07 3-10-00 7-13-07	8,175 846 1,505 456	7,396 778 1,462 404	7,957 852 1,652 467	-43.82 -45.57 -67.27 -45.47	-2.66 .73 9.79 2.42	7.59 9.48 13.00 15.62
D.J. Total Stock Index	15,807	10-9-07	8,524	7,878	8,701	-44.95	2.07	10.45

- 1. Secondary market.
- 2. Financial commercial paper.
- 3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time.
- 4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities.
- 5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect.
- 6. Most recent Thursday quote.
- 7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities.
- 8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data.

# NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.

January 27, 2009, is the day before the January 2009 FOMC monetary policy announcement.

March 17, 2009, is the day before the most recent FOMC monetary policy announcement.