Prefatory Note

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Part 2

March 10, 2010

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Recent Developments

Prepared for the Federal Open Market Committee by the staff of the Board of Governors of the Federal Reserve System Class III FOMC - Internal (FR)

March 10, 2010

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

Domestic Nonfinancial Developments

Economic activity appears to have expanded at a moderate pace in early 2010. Business investment in equipment and software seems to have picked up, consumer spending increased further in January, and private employment would likely have turned up in February in the absence of the snowstorms that affected the East Coast. Moreover, output in the manufacturing sector has continued to trend up as firms have increased production to meet strengthening final demand and to slow the pace of inventory liquidation. On the downside, the recovery in the housing sector has faltered, and nonresidential construction has weakened further. Meanwhile, a sizable increase in energy prices has pushed up top-line consumer price inflation in recent months; in contrast, core inflation has been particularly soft.

Labor Market Developments

As best we can judge, the labor market seems to be bottoming out.¹ Private nonfarm payroll employment fell only 25,000, on average, in January and February and, in the absence of the storms, probably would have risen last month.² The average workweek for production and nonsupervisory workers fell back in February after ticking up to 33.3 hours in January—its highest level since early 2009—but the drop was likely due to the storms.

¹ This apparent bottoming out follows employment losses in 2009 that were significantly greater than suggested by the BLS's initial estimates. In the January employment report, the BLS incorporated the 2009 benchmark revision to the payroll survey, which sharply reduced the estimate of the level of employment in the first quarter of last year. Additionally, the BLS used the revised data to recalibrate its estimates of employment changes for the months after the benchmark period. The combination of these adjustments led to a cumulative downward revision to the level of private nonfarm employment of nearly 1.4 million by December. In addition to the annual benchmark revision, in January, the BLS introduced new series on the workweek, aggregate hours, and average hourly earnings for all employees. The trends in the series on the workweek and aggregate hours, which only go back to 2006, are mostly similar to the trends in hours worked for production and nonsupervisory workers.

² Although the uncertainty surrounding this calculation is considerable, we estimate that private payroll employment would have posted an increase of roughly 75,000 in February in the absence of the snowstorms. This estimate reflects the historical relationship between the payroll estimates and the number of individuals in the household survey who report not being at work due to bad weather—our best proxy for the effect of weather on the labor market. According to this measure, a bit more than 1 million people were not at work due to the weather in February, nearly one-half as many as the number recorded during the period that included the January 1996 blizzard. In the household survey, workers who are with a job but not at work because of bad weather are counted as employed; thus, the unemployment rate was probably not affected much by the storms.

Note: A list of abbreviations is available at the end of Part 2.

Changes in Employment

	1			, ,		1	
			20	2010			
Measure and sector	2009	Q2	Q3	Q4	Dec.	Jan.	Feb.
	A	verage mo	onthly char	nge	M	onthly cha	nge
Nonfarm payroll employment							
(establishment survey)	-395	-477	-261	-90	-109	-26	-36
Private	-388	-478	-233	-90	-83	-33	-18
Natural resources and mining	-8	-12	-5	0	0	4	3
Manufacturing	-107	-143	-49	-33	-18	20	1
Ex. motor vehicles	-97	-118	-59	-33	-17	-7	11
Construction	-84	-88	-72	-39	-36	-77	-64
Residential	-32	-37	-22	-6	-2	-15	-11
Nonresidential	-52	-51	-50	-33	-35	-61	-54
Wholesale trade	-19	-20	-11	-5	-4	-16	-1
Retail trade	-42	-30	-39	-23	-15	42	0
Financial activities	-29	-37	-20	-9	-9	-13	-10
Temporary help services	-12	-38	-11	62	50	50	48
Nonbusiness services ¹	-6	7	18	-12	-3	23	33
Total government	-7	2	-28	0	-26	7	-18
Federal government	4	4	3	2	-9	27	7
Total employment (household survey)	-450	-272	-423	-325	-589	541	308
Memo:							
Aggregate hours (percent change) ²							
All employees	-61	-8.8	-4 1	-15	- 4	3	- 3
Production workers	-5.6	-8.0	-2.9	-14	0		- 6
Average workweek (hours) ³	0.0	0.0	2.9	1.1	.0		.0
All employees	33.9	33.9	33.8	33.8	33.8	33.9	33.8
Production workers	33.1	33.1	33.1	33.1	33.2	33.3	33.1
Manufacturing	39.8	39.5	39.9	40.3	40.5	40.7	40.3
1,141141404411115	1 57.0	57.5	57.7	10.5	10.5	10.7	10.5

1. Nonbusiness services comprises education and health, leisure and hospitality, and "other."

Establishment survey. Annual data are percent changes from Q4 to Q4. Quarterly data are percent changes from preceding quarter at an annual rate. Monthly data are percent changes from preceding month.
Establishment survey.



Changes in Private Payroll Employment

Aggregate Hours and Workweek



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER. Source: U.S. Department of Labor, Bureau of Labor Statistics.

Selected Unemployment and Labor Force Participation Rates

			20	2010			
Rate and group	2009	Q2	Q3	Q4	Dec.	Jan.	Feb.
Civilian unemployment rate							
Total	93	93	97	10.0	10.0	97	97
Teenagers	243	23.1	25.4	27.2	27.1	26.4	25.0
20-24 years old	14.8	14.9	15.1	15.7	15.6	15.8	16.0
Men. 25 years and older	8.8	8.9	9.4	9.5	9.2	9.0	9.1
Women, 25 years and older	6.9	6.9	7.1	7.5	7.6	7.3	7.4
Labor force participation rate							
Total	65.4	65.7	65.3	64.9	64.6	64.7	64.8
Teenagers	37.5	38.3	37.4	35.8	35.6	35.2	35.1
20-24 years old	73.0	73.9	72.8	71.4	71.1	70.7	71.3
Men, 25 years and older	74.7	74.9	74.8	74.3	73.8	73.7	74.0
Women, 25 years and older	59.9	60.2	59.8	59.6	59.5	59.8	59.7

(Percent; seasonally adjusted)

Unemployment Rate and Persons Working Part Time for Economic Reasons



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Labor Force Participation Rate





Duration of Unemployment



*Unemployed more than 26 weeks. Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



Note: Thick line is the 3-month moving average. Source: U.S. Department of Labor, Bureau of Labor Statistics.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

Labor Market Indicators



Note: Data for initial claims are 4-week moving averages. Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for initial claims, U.S. Dept. of Labor, Employment and Training Administration.

Job Openings



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

Job Availability and Hard-to-Fill Positions







Administration.





Source: For hires, Job Openings and Labor Turnover Survey; for hiring plans, National Federation of Independent Business; Manpower, Inc.

Expected Labor Market Conditions



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

Sector	2007:Q4 to	2008:Q4 to	2009					
	2008:Q4	$2009:Q4^{1}$	Q1	Q2	Q3	Q4 ¹		
Nonfarm business All person All employees ²	1.4 .9	5.7 6.3	.9 1.7	7.6 8.5	7.8 7.7	6.5 7.4		

Output per Hour
(Percent change from preceding period at an annual rate;
seasonally adjusted)

1. Staff estimates.

2. Assumes that the growth rate of hours of non-employees equals the growth rate of hours of employees. Source: For output, U.S. Dept. of Commerce, Bureau of Economic Analysis; for hours, U.S. Dept. of Labor, Bureau of Labor Statistics.

The recent data from the household survey also point to a bottoming out in the labor market. After dipping to 9.7 percent in January, the unemployment rate held steady in February, and the fraction of workers on part-time schedules for economic reasons remained below the levels of late 2009. In addition, the number of new job losers as a fraction of employment continued to drop, while unemployment durations—as gauged by the average length of unemployment spells and the share of the unemployed who have been out of work for more than 26 weeks—fell back a bit from their historic highs in January. The labor force participation rate has inched up over the past two months. Nonetheless, on net, participation has fallen steeply since mid-2009 in response to the scarcity of employment opportunities; indeed, individuals' perceptions of job availability from February's Conference Board survey remain quite negative.

The message from other labor market indicators is mixed. After smoothing through the volatility induced by storms and various reporting problems, initial claims have risen a bit since the January Greenbook.³ However, help-wanted advertising has risen noticeably of late, and readings on future hiring plans from the Manpower survey are up, on net, since the start of 2010. In contrast, information from JOLTS—the layoff, job openings, and hiring rates—indicates little recent improvement in labor market conditions. Both the number of firms with hard-to-fill positions and hiring plans as reported in the NFIB survey are also little changed since the end of last year. Households' expectations of future labor market conditions remain well above their lows from early 2009.

We estimate that output per hour of all persons in the nonfarm business sector rose at an annual rate of 6.5 percent in the fourth quarter of 2009—the result of a surge in output

 $^{^{3}}$ The continuing high level of initial claims, along with large numbers of unemployed individuals exhausting their regular benefits and shifting into emergency and extended benefits programs, has pushed up the total number of UI recipients to around 10¹/₂ million.

Selected Components of Industrial Produc	tion
(Percent change from preceding comparable peri	od)

	Proportion	20001	2	009	2009		2010
Component	(percent)	2009*	Q3	Q4	Nov.	Dec.	Jan.
			Annu	al rate	N	Aonthly rat	te
Total	100.0	-4.7	6.4	6.6	.6	.7	.9
Previous	100.0	-4.5	6.9	7.0	.6	.6	
Manufacturing	79.8	-5.0	8.4	5.5	1.0	1	1.0
Ex. motor veh. and parts	76.0	-4.9	4.6	4.6	.9	1	.8
Mining	8.4	-5.8	5.8	7.7	2.1	2	.7
Utilities	11.9	-2.1	-5.3	13.8	-3.0	6.3	.7
Selected industries Energy	22.7	-3.4	-1.6	10.7	-1.2	3.2	.2
High technology	3.7	-2.7	10.8	8.2	.8	1.2	1.9
Computers	.8	-6.7	15.7	16.1	1.3	1.3	1.2
Communications equipment	1.4	-3.5	-11.3	7.2	2.9	2.2	2.9
Semiconductors ²	1.4	.5	32.1	4.8	-1.3	.3	1.3
Motor vehicles and parts	3.7	-7.3	122.6	24.0	2.2	3	4.9
Aircraft and parts	2.7	8.9	7.7	-2.4	-1.8	7	1
<i>Total ex. selected industries</i> ³	67.2	-5.8	4.5	4.7	1.1	1	.9
Consumer goods	23.0	-2.2	1.2	4.3	.4	2	1.0
Durables	3.4	-9.6	1.9	.6	.8	7	.2
Nondurables	19.5	8	1.1	5.0	.3	1	1.1
Business equipment	6.7	-11.5	2	3.9	4	1.4	.6
Defense and space equipment	1.3	1.4	14.9	-6.6	4	-1.4	2.5
Construction supplies	4.7	-13.5	1.7	-6.6	1.6	-1.7	1.0
Business supplies	7.4	-8.5	.5	4.0	1.5	4	.6
Materials	24.1	-5.4	10.4	8.5	2.2	.1	1.0
Durables	11.2	-13.1	10.5	9.4	1.7	.7	1.3
Nondurables	12.9	2.4	10.3	7.8	2.6	4	.8

From fourth quarter of preceding year to fourth quarter of year shown.
Includes related electronic components.
Includes manufactured homes (not shown separately).
Not applicable.
Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Capacity Utilization (Percent of capacity)

	1972-	1994-	1994-	1994-	2001-		2010	
Sector	average	95 high	low	Q2	Q3	Q4	Dec.	Jan.
Total industry	80.6	84.9	73.5	68.7	70.0	71.4	71.9	72.6
Manufacturing Mining Utilities	79.2 87.5 86.6	84.5 89.1 93.3	71.4 84.9 84.2	65.4 81.8 79.6	67.0 83.2 78.2	68.2 85.1 80.3	68.4 85.7 82.7	69.2 86.2 83.1
Stage-of-process groups Crude Primary and semifinished Finished	86.5 81.6 77.5	89.9 87.9 80.3	81.7 74.3 70.0	79.6 66.2 67.1	82.4 67.0 68.5	84.4 68.3 69.8	85.2 69.0 70.1	85.9 69.4 71.0

Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

and a small increase in hours. This rise was the third consecutive outsized quarterly gain in productivity and brought the increase over the four quarters of 2009 to 5.7 percent.

Industrial Production

After increasing briskly in the second half of 2009, industrial production (IP) continued to expand, on net, in the early months of 2010. IP shot up 0.9 percent in January, and indicators for February (including production worker hours and available product data) suggest that total IP was little changed as higher output at mines and utilities offset a decline in manufacturing production that was, at least in part, due to the effects of the East Coast snowstorms. In recent months, gains across industries have remained broadly based: The January reading of the diffusion index of three-month changes in manufacturing IP indicated that two-thirds of individual industries recorded increases in output relative to three months earlier. According to the staff's flow-of-goods system, recent production gains have reflected a pickup in final demand, both domestic and foreign, and efforts by firms to slow the pace of inventory liquidation.

Capacity utilization in manufacturing rose to 69.2 percent in January, 4 percentage points above its trough in June, but still some 10 percentage points below the longer-term average. As a result, incentives for firms to expand production capacity are weak. Indeed, based on data for investment, business surveys, and physical measures in some industries, factory capacity is estimated to decrease 1 percent in 2010 after declining 1.2 percent in 2009.⁴

Production of light motor vehicles declined a bit in February after stepping up in January. Over the first two months of 2010, assemblies averaged roughly 7½ million units at an annual rate, an increase of ½ million units from the pace in the fourth quarter. Production in February was held down somewhat by a disruption at Toyota, where a major safety recall led the firm to temporarily halt production and sales of several models in late January and early February.⁵ Dealers' inventories of light vehicles continued to expand in the first two months of 2010, and days' supply moved up to 63 days at the end of February. Although days' supply is currently slightly below the industry target of 65 days, automakers appear cautious about the outlook for sales, and manufacturers' initial assembly plans suggest that production will remain at an annual rate of about 7½ million units in the second quarter.

⁴ If realized, this two-year decline in capacity would far exceed the decline of 0.5 percent over 2003 and 2004, the only other contraction since the series began in 1948.

⁵ Toyota's suspension of production covered four U.S. assembly plants and lowered production 230,000 units at an annual rate in February. Toyota is also planning some additional downtime through mid-April for inventory-control purposes.



Weekly Production Index excluding Motor Vehicles and Electricity Generation

Motor Vehicle Assemblies











ISM Diffusion Index and Average of Regional New Orders Diffusion Indexes



Note: The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

	200	19	2010		2009		20	10
Item	Q3	Q4	Q1	Q2	Nov.	Dec.	Jan.	Feb.
U.S. production ¹	6.4	7.0	7.4	7.4	7.2	7.0	7.7	7.2
Autos	2.5	2.8	3.0	3.2	2.7	2.8	2.9	3.0
Light trucks	3.9	4.2	4.5	4.2	4.4	4.2	4.8	4.2
Days' supply ²	50	53	n.a.	n.a.	55	51	58	63
Autos	46	51	n.a.	n.a.	54	48	54	58
Light trucks	55	55	n.a.	n.a.	55	55	61	66
Inventories ³	1.38	1.43	n.a.	n.a.	1.48	1.43	1.53	1.60
Autos	.63	.65	n.a.	n.a.	.67	.65	.67	.71
Light trucks	.75	.79	n.a.	n.a.	.81	.79	.86	.89
Memo: U.S. production, total motor vehicles ⁴	6.5	7.2	7.6	7.6	7.3	7.2	7.8	7.3

Production of Domestic Light Vehicles

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

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

1. Production rates for February and the first and second quarters of 2010 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: Constructed from Ward's Communications data. Adjusted using FRB seasonals.



Indicators of High-Tech Manufacturing Activity

Elsewhere in the transportation sector, output of commercial aircraft is likely being held down by the slowing of Boeing's production of 777 passenger planes.

Production in high-tech industries increased moderately in the fourth quarter and posted a solid gain in January. In the fourth quarter, the output of communications equipment recorded its first quarterly increase in a year as telecommunications service providers continued to increase capital expenditures in order to boost cellular network capacity. U.S. computer spending surged in the fourth quarter, but this jump provided only a limited boost to domestic computer production because the increase in demand was concentrated in products that are primarily imported. Meanwhile, exports of high-tech products rose in December and have been climbing rapidly since mid-2009.

Upstream, domestic semiconductor production has edged up, on balance, in recent months. Microprocessor production has flattened out at a high level after surging in the middle of last year, but production of other chips and electronic components has increased steadily. More broadly, the global semiconductor industry, which slashed capacity during the downturn, has struggled to meet demand from downstream producers. As a result, prices have risen for some semiconductor components, and the industry is spending heavily on new equipment, much of which is manufactured in the United States.

Looking ahead, available indicators suggest that high-tech production will be supported by increased business spending in the coming months. Surveys indicate that businesses are intending to replace aging equipment and have increased IT budgets for 2010. With inventories of high-tech equipment already lean, any pickup in investment will likely lead to higher production. That said, outside forecasters generally expect revenues for major U.S. information technology companies to only move sideways in 2010, which would be consistent with just a modest increase in production.

Energy output has boosted IP in recent months. As a result of unseasonably cold weather, utilities output jumped in December and rose further in January; for February, weekly electricity data point to another solid increase in the output of utilities. In addition, weekly product data suggest that oil and gas drilling, which has risen sharply since mid-2009, moved up further in February and will boost the output of mined energy products for the month.

Outside of energy, motor vehicles and parts, aircraft and parts, and high-tech industries, production rebounded 0.9 percent in January after moving sideways in December. Gains

		2009		20	2010	
Category	Q2	Q3	Q4	Nov.	Dec.	Jan.
	A	nnual rate		Mo	onthly rate	;
Total real PCE	9	2.8	1.7	.4	.1	.3
Motor vehicles	-6.2	53.9	-24.0	3.0	1.8	-1.5
Goods ex. motor vehicles	-2.8	3.8	5.6	1.1	5	1.0
Services	.2	.8	1.2	1	.3	.1
Ex. energy	.7	.8	.7	.1	.2	.1
Memo: Real PCE control ¹ Nominal retail control ²	-2.5 -2.1	3.2 1.4	6.1 5.4	1.1 .9	3 3	.8 .8

Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Durables excluding motor vehicles, nondurables excluding gasoline, and food services.
Total sales less outlays at building material and supply stores, automobile and other

motor vehicle dealers, and gasoline stations.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Change in Real PCE Goods



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.



Change in Real PCE Services

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

were widespread across major market groups, as consumer goods, business equipment, construction supplies, and materials each increased about 1 percent. The available data suggest that production in February was likely little changed, as a number of industries were negatively affected by last month's snowstorms.

The available indicators of near-term manufacturing activity point to moderate gains in IP in the coming months. The new orders diffusion indexes from the national ISM survey and from the regional manufacturing surveys remain at levels consistent with a further expansion in production in the near term. The three-month moving average of the staff's series on real orders for durable goods (adjusted to exclude industries for which reported orders have little information content for predicting shipments) also suggests moderate gains in the near future.

Consumer Spending

Consumer spending has continued to move up. In total, real PCE rose a solid 0.3 percent in January after similar gains, on average, over the preceding three months. The rise in spending in recent months has been driven by sizable increases in outlays for a wide variety of goods, while real outlays for services have remained on a more gradual uptrend.

On average, sales of new automobiles and light trucks were at an annual rate of 10.6 million units in January and February, slightly less than in the fourth quarter of 2009. The softening was concentrated in the retail segment and appears to reflect, in part, the safety recall at Toyota, which led the firm to halt sales of eight models in late January and the first half of February.⁶ Smoothing through the effects of the Toyota suspension—as well as the unwinding of the "cash for clunkers" effects—we estimate that underlying consumer demand for light vehicles has been essentially steady in recent months, consistent with the stability in households' assessments of car-buying conditions. Incentive programs were little changed in January and February; however, in early March, Toyota announced an aggressive incentive program to lure customers back into showrooms, a move that was quickly followed by other automakers.

Household income looks less supportive of spending than at the time of the January Greenbook. After incorporating the unemployment insurance tax records for the third quarter of 2009, the Bureau of Economic Analysis (BEA) lowered its estimates for wages and salaries in the second half of last year by roughly \$100 billion at an annual rate; as a result, real DPI is now estimated to have risen just 1 percent over the year as a whole, and even this small gain reflected a substantial boost from fiscal stimulus. In January, real

⁶ Toyota estimated that the sales suspension reduced its sales by roughly 310,000 units at an annual rate in January and 240,000 units in February. However, these estimates appear to cover only the recalled models and thus do not include any spillovers to other Toyota vehicles.

· · · · · · · · · · · · · · · · · · ·					/		
			20	2010			
Category	2009	Q2	Q3	Q4	Dec.	Jan.	Feb.
Total	10.3	9.6	11.5	10.8	11.2	10.8	10.3
Autos Light trucks	5.4 4.9	4.9 4.7	6.4 5.1	5.7 5.2	5.9 5.3	5.7 5.1	5.4 4.9
North American ¹ Autos Light trucks	7.6 3.6 4.0	7.1 3.2 3.9	8.4 4.2 4.2	8.2 3.9 4.4	8.6 4.1 4.4	8.1 3.8 4.3	7.9 3.7 4.1
Foreign-produced Autos Light trucks	2.7 1.8 .9	2.4 1.6 .8	3.1 2.1 .9	2.6 1.8 .8	2.6 1.8 .8	2.6 1.9 .8	2.5 1.7 .8
Memo: Detroit Three market share (percent) ²	44.7	46.8	43.1	45.0	45.3	45.7	46.3

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

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. Includes domestic and foreign brands affiliated with the Detroit Three.

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





Source: Thomson Reuters/University of Michigan Surveys of Consumers.



Note: Weekly weighted average of customer cash rebate and the present value of interest rate reduction. Source: J.D. Power and Associates. Adjusted using FRB seasonals.



Fundamentals of Household Spending

Household Net Worth



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

Source: Thomson Reuters/University of Michigan Surveys of Consumers; Conference Board.

Change in Real Disposable Personal Income

			2010			
Sector	2009	Q3	Q4	Nov.	Dec.	Jan.
All units Starts Permits	.55 .57	.59 .57	.56 .60	.58 .59	.58 .65	.59 .62
Single-family units Starts Permits Adjusted permits ¹	.45 .44 .44	.50 .46 .48	.48 .47 .49	.49 .47 .49	.48 .51 .52	.48 .50 .52
New homes Sales Months' supply ²	.37 9.12	.41 7.72	.37 7.71	.36 7.82	.35 8.03	.31 9.09
Existing homes Sales Months' supply ²	4.57 8.34	4.65 8.06	5.23 6.89	5.71 6.26	4.76 7.62	4.43 8.15
Multifamily units Starts Built for rent Built for sale Permits	.11 .09 .02 .14	.09 .08 .01 .11	.08 .06 .02 .12	.09 n.a. n.a. .12	.10 n.a. n.a. .15	.11 n.a. n.a. .12
<i>Condos and co-ops</i> Existing home sales	.59	.63	.73	.78	.68	.62

Private Housing Activity

(Millions of units, seasonally adjusted; annual rate except as noted)

1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.

2. At current sales rate; expressed as the ratio of seasonally adjusted inventories to seasonally adjusted sales. Quarterly and annual figures are averages of monthly figures.

n.a. Not available.

Source: Census Bureau.

Private Housing Starts and Permits



Note: Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas. Source: Census Bureau.

DPI fell 0.6 percent, dragged down by a large increase in the BEA's estimate of personal taxes, and the personal saving rate dropped to 3.3 percent, ³/₄ percentage point below its fourth-quarter average, but still almost 2 percentage points above its pre-recession level.⁷

With equity prices having posted moderate gains and house prices holding steady in the fourth quarter of 2009, the ratio of household net worth to income was little changed after increasing appreciably over the prior two quarters. At the end of last year, the wealth-to-income ratio stood close to its long-run average, but the loss in household net worth from mid-2007 to the end of last year was still equivalent to nearly 1½ years of household income. So far in 2010, equity prices have moved up modestly, on net.

Housing

The recovery in the housing market seems to have stalled. Single-family housing starts moved sideways over the second half of 2009 and remained at an annual rate of about 480,000 in January. Unusually bad weather apparently depressed new construction in January (and likely did so again in February); this factor, along with the small positive gap between adjusted permits and starts in January, suggests that some improvement in starts may be in the offing once the weather returns to normal. However, reports from homebuilders and our industry contacts suggest that activity in the new home market is being held down by the large number of distressed properties on the market, new homes selling at prices below building costs, and difficulties in obtaining loans for land acquisition, development, and construction. In the multifamily sector, starts in January were 18 percent below their year-earlier level as tight credit conditions and elevated vacancy rates continued to restrain activity.

On the sales front, the Census Bureau's measure of new home sales agreements, which had posted sizable declines late last year, dropped a further 11 percent in January to an annual rate of 309,000 units—a record low for this series, which began in 1963.⁸ Meanwhile, sales of existing homes, which appear to have received a substantial boost last fall from the originally scheduled expiration of the homebuyer tax credit, fell considerably in December and January; pending home sales agreements also decreased in January.

⁷ The jump in personal income tax payments in January reflects the BEA's incorporation of the Administration's projection that net final settlements (final payments less refunds) on 2009 tax liabilities will rise sharply this spring; following its normal procedure, the BEA incorporated that projection in its estimates of the level of personal taxes in January and will carry a similar level of net final settlements in its monthly tax estimates through the end of 2010. The BEA's estimates of net final settlements are subject to substantial revision as information on actual payments and refunds is received.



Existing Single-Family Home Sales



Prices of Existing Homes





Inventories of New Homes

and Homeowner Vacancy Rate

Note: Homeowner vacancy rate is seasonally adjusted by Board staff. Source: Census Bureau.





House Price Expectations



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

Indicators of Single-Family Housing

The slowdown in sales notwithstanding, housing demand is being supported by a number of factors. Interest rates for conforming 30-year fixed-rate mortgages remain very low by historical standards, and the recent news on house prices is likely contributing to a perception that real estate values are near their bottom. The repeat-sales price index for existing single-family homes calculated by LoanPerformance was about unchanged in the fourth quarter of last year at a level 4 percent above its trough in April 2009. Moreover, in the Thomson Reuters/University of Michigan Surveys of Consumers for February, the number of respondents who expect house prices to increase over the next 12 months continued to exceed the number of respondents who expect prices to decrease.

After moving down dramatically through the end of last year, the inventory of unsold new homes remained at the very low level of 234,000 units in January. However, measured relative to the slow pace of sales in January, the months' supply of new homes moved back up to just above 9 months—only about one-fourth below its peak last January. More broadly, the vacancy rate for homes intended for owner occupancy (which includes both existing and completed new homes for sale) edged up in the fourth quarter of last year, and, although significantly below its peak in 2008, it remains high relative to pre-crisis levels.

Equipment and Software

Real spending on equipment and software increased at an annual rate of 18 percent in the fourth quarter of 2009 and appears to have risen further early in the first quarter. Purchases of high-tech equipment are apparently rising briskly, business outlays for motor vehicles seem to be holding up after a sharp increase in the fourth quarter, and incoming data point to some firming in outlays on other equipment.

Real spending on high-tech equipment and software increased at an annual rate of about 30 percent in the fourth quarter, and the latest monthly data for manufacturers' shipments and IP point to further gains in high-tech investment in early 2010. While demand stemming from the replacement of existing equipment likely remains a major driver of the step-up in high-tech investment, reports from major high-tech companies suggest that some firms may have moved beyond replacing aging capital to actually increasing capacity—for example, both Microsoft and Apple are in the early stages of building large data centers.

Business purchases of motor vehicles are also faring well. Deliveries of light vehicles to rental car companies and other businesses continued to increase, on average, in January and February. And although orders for medium and heavy trucks have fallen sharply since mid-autumn (a swing that likely is related to the new environmental regulations on diesel engines that took effect at the start of this year), truck sales were little changed between November and January after moving up, on net, over the preceding few months.

		20	009		2010
Category	Q3	Q4	Nov.	Dec.	Jan.
	Annu	ial rate		Monthly rat	e
			•		
Shipments	3.8	9.0	1.1	4.1	-4.0
Excluding aircraft	2.2	8.7	1.6	2.3	-1.7
Computers and peripherals	.1	22.0	2.5	2.2	7.9
Communications equipment	33.5	-5.0	-2.2	-3.0	.2
All other categories ¹	2	8.8	1.9	2.8	-2.8
Orders	28.6	1.6	-3.0	2.2	3.1
Excluding aircraft	14.1	13.5	3.2	3.0	-4.1
Computers and peripherals	5.5	26.4	7.7	.4	-6.9
Communications equipment	31.2	-10.4	2.6	3.7	-3.4
All other categories ¹	13.4	14.9	2.8	3.3	-3.9
Memo:					
Shipments of complete aircraft ²	36.4	39.8	37.0	48.3	32.1

Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

1. Excludes most terrestrial transportation equipment.

2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate.

Source: Census Bureau.

Communications Equipment



Note: Shipments and orders are deflated by a price index that is derived from the quality-adjusted price indexes of the Bureau of Economic Analysis and uses the producer price index for communications equipment for monthly interpolation. Source: Census Bureau.

Computers and Peripherals



Source: Census Bureau; FRB Industrial Production.





Medium and Heavy Trucks





Fundamentals of Equipment and Software Investment

User Cost of Capital



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Corporate Bond Yields



Note: End of month. March value as of March 8. Source: Merrill Lynch.





Note: Shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

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Nonresidential Construction and Indicators

(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q3 and by staff projection thereafter)



Manufacturing and Power

Total Structures



Source: Census Bureau

Vacancy Rates



Note: Industrial space includes both manufacturing structures and warehouses. p Preliminary. Source: Torto 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

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

30

20

eb 25

2010

2008

Statistics

Note: Both series are 3-month moving averages.

-1.5

-2.0

-25

Real business investment in equipment other than high tech and transportation posted another small decline in the fourth quarter, but the incoming data hint that an upturn may be under way. Shipments and orders for this broad category of nondefense capital goods have moved erratically in recent months, mainly because of swings in the volatile engine and turbines category. Excluding engines and turbines, shipments rose modestly in January and stood nearly 1½ percent above their average level in the fourth quarter. Meanwhile, new orders have been on a steep uptrend since mid-2009 and now stand just below shipments.

The recent step-up in investment spending is consistent with improvements in many indicators of business demand. Business output rose robustly in the fourth quarter, and the February readings of the ISM and Philadelphia Fed business sentiment indicators were near the top of their ranges for the past several years. Meanwhile, the cost of capital has fallen sharply over the past four quarters, and corporate bond yields are similar to those seen before the recession began. However, credit conditions for small businesses remain difficult, as a large number of NFIB survey respondents again reported having trouble obtaining credit in February.

Nonresidential construction

Conditions in the nonresidential construction sector generally remain bleak. After folding in the latest monthly construction data, we estimate that real outlays on structures outside of the drilling and mining sector fell at an annual rate of about 30 percent in the fourth quarter, and nominal expenditures dropped further in January. The weakness has been widespread across categories and likely reflects the drag from rising vacancy rates, plunging property prices, and difficult financing conditions for new projects. In addition, the current level of architectural billings is consistent with further declines in spending over the next six months, and the nonresidential construction industry has continued to shed workers.

In contrast, real spending on drilling and mining structures has picked up strongly in response to the rebound in oil and natural gas prices in the second half of last year. Spending was up about 70 percent at an annual rate in the fourth quarter, and increases in the number of drilling rigs in operation and footage drilled suggest that spending will remain robust in the first quarter. Nonetheless, this pickup follows a massive decline in the first half of 2009, and spending still stands well below late 2008 levels.

Business Inventories

The pace of inventory liquidation slowed dramatically in late 2009. Indeed, as measured in the NIPA, real nonfarm inventories excluding motor vehicles were drawn down at an annual rate of less than \$35 billion in the fourth quarter, compared with reductions of

Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

		2010				
Measure and sector	Q2	Q3	Q4	Nov.	Dec.	Jan.
Real inventory investment (chained 2005 dollars) Total nonfarm business Motor vehicles Nonfarm ex. motor vehicles	-163.1 -48.1 -115.1	-141.4 -4.6 -136.9	-13.5 ^e 20.9 ^e -34.5 ^e	•••	•••	•••
Manufacturing and trade ex. wholesale and retail motor vehicles and parts Manufacturing Wholesale trade ex. motor vehicles & parts Retail trade ex. motor vehicles & parts	-110.9 -39.8 -52.5 -18.6	-129.3 -55.3 -51.9 -22.1	-17.8 ^e -5.3 ^e -1.4 ^e -11.2	17.4 ^e -1.9 ^e 39.6 ^e -20.2	-62.8 ^e -19.6 ^e -42.2 ^e -1.1	n.a. n.a. n.a. n.a.
Book-value inventory investment (current dollars) Manufacturing and trade ex. wholesale and retail motor vehicles and parts Manufacturing Wholesale trade ex. motor vehicles & parts Retail trade ex. motor vehicles & parts	-152.6 -66.0 -62.9 -23.7	-124.7 -49.8 -50.7 -24.2	23.2 7.5 19.3 -3.6	74.0 10.5 74.3 -10.7	-37.5 -10.0 -36.3 8.8	n.a. 9.0 -7.0 n.a.

n.a. Not available. ... Not applicable.

e Staff estimate of real inventory investment based on revised book-value data.

Source: For real inventory investment, U.S. Dept. of Commerce, Bureau of Economic Analysis;

for book-value data, Census Bureau.



Inventory Ratios ex. Motor Vehicles

Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.

Source: Census Bureau; staff calculation.

ISM Customers' Inventories: Manufacturing



more than \$100 billion in each of the preceding two quarters.⁹ Inventory data for January are still incomplete, but the book-value figures for the manufacturing and wholesale trade sectors are consistent with a further small liquidation of real stocks early this year.

Information from the staff's flow-of-goods inventory system, which uses data on industrial production through January, also suggests that large-scale liquidations have substantially subsided. According to this system, inventories outside motor vehicles were little changed in January, and months' supply decreased further. In all, this months' supply measure has reversed about one-half of its run-up from mid-2008 to mid-2009. Among market groups, months' supply remains elevated for equipment, materials, and, to a lesser degree, construction supplies, while inventories of consumer goods and of business supplies appear low relative to demand. Meanwhile, the number of supply managers who described their customers' inventories as too low in the manufacturing ISM survey for February continued to exceed by a wide margin the number of supply managers who described these inventories as too high.

Federal Government Sector

Real purchases by the federal government were flat in the fourth quarter, as a hefty increase in nondefense spending was offset by a decrease in defense spending, which can be volatile from quarter to quarter. As for the current quarter, information from the Monthly Treasury Statement for January, along with our read of the Daily Treasury Statements for February, points to little, if any, increase in real defense purchases. Meanwhile, nondefense purchases should be bolstered by ongoing stimulus-related spending and by hiring for the decennial census, which began in earnest in February and will continue through May.¹⁰

The deficit in the unified federal budget widened further in the first four months of fiscal year 2010. Net receipts were about 10 percent lower in the October to January period relative to the same period a year earlier, primarily because of the effects of continued weakness in taxable income as well as the revenue-reducing provisions of stimulus legislation.¹¹ On the spending side, outlays declined about 2 percent in the first four months of the fiscal year relative to the same year-earlier period, mainly reflecting the substantial decrease in TARP-related outlays. Excluding outlays associated with the

⁹ In the main, the positive inventory swing in the fourth quarter reflected a widespread slowing in the pace of liquidation, but it also was influenced by a sizable accumulation of wholesale stocks of farm products as a result of last year's unusually large and delayed harvest.

¹⁰ We estimate that the four snow days in February had only a modest effect on real federal purchases in the first quarter because the vast majority of the federal workforce is outside of the geographic area hit by the storms.

¹¹ More recently, daily tax data indicate that individual refunds are running well above year-earlier levels, mainly because of the expansion of refundable tax credits in the 2009 stimulus package.

Federal Government Indicators

Total Real Federal Purchases



Unified Budget Deficit



Unified Outlays and Receipts



Source: Monthly Treasury Statement.

Real Defense Spending



Commerce, Bureau of Economic Analysis.

Federal Debt Held by the Public



Recent Unified Federal Outlays and Receipts

	Oct. 200	09-Jan. 2010
Function or source	Billions of dollars	Percent change*
Outlays National defense Major transfers ¹ Other primary spending Net interest	1124 235 651 168 70	-2.3 3.8 14.9 -43.0 12.2
Receipts Individual income and payroll taxes Corporate income taxes Other	693 580 37 76	-10.4 -11.5 -32.3 19.5
Deficit (-)	-431	14.5

Note: Adjusted for payment-timing shifts.

* Relative to same year-earlier period. Percent change in

deficit is calculated on an absolute-value basis. 1. Includes Social Security, Medicare, Medicaid, and income security programs.

Source: Monthly Treasury Statement.



Real Spending on Consumption and Investment

Net Change in Employment



State Revenues

Percent change from year earlier



Real Construction

Billions of chained (2005) dollars, annual rate



Local Revenues



State and Local Indicators

	12-mon	th change	3-mont	h change	1-montl	h change
			Annu	al rate	Month	nly rate
Measures	Jan. 2009	Jan. 2010	Oct. 2009	Jan. 2010	Dec. 2009	Jan. 2010
CPI						
Total Food Energy Ex. food and energy Core goods Core services Shelter Other services Memo: core ex. tobacco	.0 5.3 -20.4 1.7 5 2.5 1.8 3.6 1.6	2.6 4 19.1 1.6 2.9 1.0 2 2.8 1.3	3.0 .0 21.0 1.7 2.0 1.6 .6 3.5 1.6	2.3 1.9 25.6 .0 1.7 6 -1.6 2.1 1	.2 .1 .8 .1 .1 .1 .0 .2 .1	.2 2.8 1 .1 2 3 .1 1
Ex. food and energy 1	1.6	2.8 1.2				
PCE prices Total Food and bev. at home Energy Ex. food and energy Core goods Core services Housing services Other services Memo: core ex. tobacco Core market-based Core non-market-based	.5 5.9 -22.8 1.7 1 2.4 2.4 2.4 2.4 1.7 2.1 1	2.1 -1.4 19.5 1.4 1.2 1.5 .4 1.8 1.2 1.4 1.5	2.7 8 28.7 1.6 .2 2.1 4 2.9 1.6 1.5 2.6	2.0 1.6 26.9 .6 -1.3 1.2 6 1.8 .5 .3 2.6	.1 .2 .8 .1 .0 .1 .0 .2 .1 .1 .3	.2 .1 2.9 .0 2 .1 1 .1 .0 .0 .1
PPI Total finished goods Food Energy Ex. food and energy Core consumer goods Capital equipment Intermediate materials Ex. food and energy Crude materials Ex. food and energy	9 1.8 -18.1 4.2 4.3 4.0 -3.6 1.2 -27.7 -26.7	4.6 1.5 20.2 1.0 1.7 .1 4.6 1.1 25.2 35.2	5.7 7.6 27.7 -1.2 -1.1 -1.5 9.5 5.2 38.4 57.8	14.0 8.9 56.2 3.3 4.0 2.3 15.0 5.1 81.7 47 7	.4 1.3 .7 .0 .1 1 .6 .5 .8 4 5	1.4 .4 5.1 .3 .4 .3 1.7 .5 9.6 6.6

Price Measures (Percent change)

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.). ... Not applicable. Source: For consumer price index (CPI) and producer price index (PPI), U.S. Dept. of Labor, Bureau of Labor Statistics; for personal consumption expenditures (PCE), U.S. Dept. of Commerce, Bureau of Economic Analysis.

TARP, expenditures increased about 12 percent, boosted by both the effects of the weak labor market on low-income support programs (such as unemployment insurance and food stamps) and the spending from the stimulus package. In all, the CBO now estimates that the stimulus package will cost \$862 billion; by the end of February, about \$340 billion of the stimulus funds had been distributed in the form of spending increases and tax cuts.

In the Administration's *Budget of the U.S. Government: Fiscal Year 2011*, the OMB projected a deficit of \$1.4 trillion in fiscal 2010, assuming current policies; under the President's budget proposals, which included some additional stimulus, the deficit would reach \$1.6 trillion. The CBO's latest projections of this year's deficit are slightly lower than the OMB's, though not materially different.

State and Local Government Sector

Real purchases by state and local governments held up reasonably well in the face of difficult fiscal conditions for much of 2009, but they fell appreciably in the fourth quarter. Moreover, the incoming data suggest that these expenditures dropped further in early 2010, with considerable weakness in both employment and construction spending.

At the state level, revenues continued to decline in the fourth quarter, although the hemorrhaging of revenues that took a heavy toll on the sector's budgets for much of 2009 seems to be ending. Indeed, according to The Nelson A. Rockefeller Institute of Government, total state tax collections fell "just" 4 percent over the year ending in the fourth quarter of 2009, compared with average declines of 13 percent in the first three quarters of the year. States will also continue to receive significant amounts of federal stimulus aid over the next several quarters. Nonetheless, many are confronting budget gaps in the current fiscal year and are dealing with significant challenges as they prepare their budgets for the 2011 fiscal year (which begins on July 1 in most states). States are addressing their fiscal difficulties by paring expenditures, raising taxes, and drawing down reserve funds.

Prices

Although rising energy prices have continued to boost overall consumer price inflation, consumer prices excluding food and energy have been soft. Overall PCE prices increased 0.2 percent in January and have risen at an annual rate of $2\frac{1}{4}$ percent over the past six months. Core PCE prices were unchanged in January following increases of 0.1 percent in each of the preceding two months.¹² Over the past six months, core prices were up at

¹² The CPI excluding food and energy fell 0.1 percent in January, but we think the weakness in this index was exaggerated by a technical issue associated with the incorporation of updated expenditure weights; without that technical quirk, the core CPI would have been unchanged.

Consumer Prices

(12-month change except as noted)





















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



* 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

Total Gasoline Margin



preceding five years, plus or minus the standard deviation for each month. Monthly data through December 2009,

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.





Gasoline Price Decomposition



Natural Gas Prices







Broad Measure	es of Inflation
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(Percent change, Q4 to Q4)

Measure	2006	2007	2008	2009
Product prices				
GDP price index	2.9	2.7	1.9	.7
Less food and energy	3.0	2.8	1.7	.8
Nonfarm business chain price index	2.3	2.2	1.6	.6
<i>Expenditure prices</i> Gross domestic purchases price index Less food and energy	2.6 2.9	3.5 2.8	1.9 2.0	.6 .7
PCE price index	1.9	3.6	1.7	1.2
Less food and energy	2.3	2.5	2.0	1.5
PCE price index, market-based components	1.8	3.5	1.9	1.3
Less food and energy	2.2	2.2	2.3	1.6
CPI	1.9	4.0	1.6	1.5
Less food and energy	2.7	2.3	2.0	1.7
Chained CPI	1.7	3.6	1.8	1.6
Less food and energy	2.3	1.9	1.9	1.3
Median CPI	3.0	3.1	2.9	1.2
Trimmed mean CPI	2.6	2.8	2.9	1.2
Trimmed mean PCE	2.7	2.7	2.5	1.4

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for median and trimmed mean CPI, Federal Reserve Bank of Cleveland; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Surveys of inflation Expectations	Surveys	of I	nflation	Expectation	IS
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(Percent)

		Thomson Reuters/Michigan Survey				Professional	
	Actual	1 y	ear ²	5 to 10) years ³	(10 years) ⁴	
Period	inflation ¹	Mean	Median	Mean	Median	CPI	PCE
2008:Q2 Q3 Q4	4.4 5.3 1.6	6.4 5.4 3.0	5.0 4.7 2.8	3.8 3.6 2.9	3.3 3.1 2.8	2.5 2.5 2.5	2.2 2.2 2.2
2009:Q1 Q2 Q3 Q4	.0 -1.2 -1.6 1.4	2.4 3.4 3.1 3.1	2.0 2.9 2.6 2.7	3.3 3.1 3.2 3.1	2.9 2.9 2.9 2.9	2.4 2.5 2.5 2.3	2.2 2.3 2.2 2.1
2010:Q1	n.a.	n.a.	n.a.	n.a.	n.a.	2.4	2.1
2009:Oct. Nov. Dec. 2010:Jan. Feb.	2 1.8 2.7 2.6 n.a.	3.2 3.1 3.0 3.4 3.6	2.9 2.7 2.5 2.8 2.7	3.2 3.2 3.0 3.3 3.3	2.9 3.0 2.7 2.9 2.7	2.3 2.4	2.1 2.1

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.

n.a. Not available.

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



Inputs to Models of Inflation





6

3

0

5

Percent

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

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 1/19/10 ²	1/19/10 ² to 3/9/10	52-week change to 3/9/10
JOC industrials	-41.4	73.1	3.2	77.0
JOC metals	-48.2	101.7	2.6	91.2
CRB spot industrials	-35.1	53.0	.9	55.4
CRB spot foodstuffs	-14.1	20.4	1.8	26.3
CRB futures	-24.7	39.9	-3.7	36.5

From the last week of the preceding year to the last week of the year indicated.
 January 19, 2010, is the Tuesday preceding publication of the January Greenbook.

an annual rate of only a bit more than 1 percent, as a wide variety of goods and services exhibited persistently low inflation or outright price declines.

Consumer energy prices increased again in January. The PCE price index for energy rose almost 3 percent, led by a nearly 5 percent increase in gasoline prices. In addition, consumer prices for natural gas moved up 3¹/₂ percent, likely reflecting the effect of cold weather on spot prices. According to survey data through early March, gasoline prices have fallen, on balance, following their January surge.

The PCE price index for food and beverages edged up 0.1 percent in January after posting small increases over the preceding three months; even so, food prices in January were still 1¹/₂ percent below the level from a year earlier. Spot prices of farm commodities have changed little since the January Greenbook.

On a 12-month change basis, core PCE inflation slowed from 1³/₄ percent in January 2009 to 1¹/₂ percent in January 2010, as a marked (³/₄ percentage point) deceleration in marketbased core PCE prices was partly offset by a sharp acceleration in nonmarket prices. Meanwhile, the 12-month average of trimmed mean PCE inflation (as calculated by the Dallas Fed) has fallen 1¹/₄ percentage points from a year earlier, highlighting the widespread nature of the deceleration in PCE prices. Notably, housing services inflation slowed dramatically, likely because of the poor state of the housing market, while inflation for other market-based services stepped down considerably, possibly reflecting the deceleration in labor costs. Apart from tax-induced increases in tobacco prices and a rebound in motor vehicles prices, prices for core goods also decelerated over the past 12 months.

Movements in survey measures of inflation expectations over the intermeeting period have been small. Median near-term inflation expectations in the Thomson Reuters/University of Michigan survey ticked down 0.1 percentage point in February to 2.7 percent, while median inflation expectations over the next 5 to 10 years edged down 0.2 percentage point, to 2.7 percent—near the lower end of the narrow range that has prevailed over the past few years. According to the first-quarter reading of the Survey of Professional Forecasters, expected PCE inflation over the next 10 years held steady at 2.1 percent, and expected CPI inflation over the next 10 years edged up from a historic low to 2.4 percent. The TIPS-based measures of inflation compensation 5 years and 5 to 10 years ahead have both moved down somewhat since the January Greenbook.

At earlier stages of processing, the PPI for core intermediate materials has risen at a brisk pace in recent months. However, despite these increases, the index in January stood only 1 percent above its year-earlier level. In contrast, commodity prices—though up steeply over the past year—have increased more slowly of late. Since the January Greenbook,

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Hourly Compensation and Unit Labor Costs

(Percent change from preceding period at compound annual rate; based on seasonally adjusted data)

	2007:Q4 2008:Q4 to to			2009				
Category	2008:Q4	2009:Q4e	Q1	Q2	Q3	Q4 e		
Compensation per hour Nonfarm business	3.1	.8	-4.2	7.7	4	.4		
<i>Output per hour</i> Nonfarm business	1.4	5.7	.9	7.6	7.8	6.5		
<i>Unit labor costs</i> Nonfarm business	1.7	-4.6	-5.0	.1	-7.6	-5.7		

e Staff estimate.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



Average Hourly Earnings (Percent change from year-earlier period)



Unit Labor Costs (Percent change from year-earlier period) Percent

6



Markup, Nonfarm Business



	2008	2009					
Measure	Dec.	Mar.	June	Sept.	Dec.		
		Qi (com	uarterly char pound annua	ige il rate) ¹			
Total hourly compensation Wages and salaries Benefits	1.9 1.8 1.5	1.9 .7 .7 1.8 1.8 .7 .7 1.8 1.5 .7 .7 1.1					
	12-month change						
Total hourly compensation Wages and salaries Benefits	2.4 2.6 2.0	1.9 2.0 1.6	1.5 1.6 1.3	1.2 1.4 1.1	1.2 1.4 1.0		

Change in Employment Cost Index of Hourly Compensation for Private-Industry Workers

1. Seasonally adjusted.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Change in ECI Benefits (unpublished)*

(Private-industry workers; 12-month change)

Health Insurance



Nonproduction Bonuses







Workers' Compensation Insurance



*The data on the costs of individual benefits should be interpreted with care because, with the exception of health insurance, they do not meet BLS's standard publication criteria.

the *Journal of Commerce* index of industrial materials has risen 3¹/₄ percent, while the Commodity Research Bureau spot index of industrial materials has edged up 1 percent.

Labor Costs

Last year's deceleration in hourly compensation now appears to have been even sharper than had been indicated earlier. Based on the revised data on labor compensation from the NIPA (which were discussed in the "Consumer Spending" section) and updated estimates of hours worked, hourly compensation in the nonfarm business sector is now reported to have edged down in the third quarter of last year, and we estimate that it increased at a subdued ½ percent annual rate in the fourth quarter. For 2009 as a whole, hourly compensation rose only ¾ percent, 1½ percentage points less than suggested by previous BLS estimates and more than 2 percentage points less than the increase recorded over 2008. Given the limited increase in compensation and the sharp rise in productivity, unit labor costs are estimated to have plunged 4½ percent last year and the markup moved up further.

Other measures of compensation costs have decelerated as well. The employment cost index (ECI) for hourly compensation of private industry workers rose at an annual rate of $1\frac{1}{2}$ percent over the three months ending in December, with the indexes for wages and salaries and for benefits both posting small increases. Over the 12 months of 2009, the ECI increased $1\frac{1}{4}$ percent, down from $2\frac{1}{2}$ percent in 2008. This deceleration was led by a noticeable slowing in wage gains, a sharp fall in nonproduction bonuses, and a drop in employer contributions to retirement and savings plans.

The new BLS measure for average hourly earnings of all employees—now the main source data for the BEA's estimates of wages and salaries in quarters for which information from unemployment insurance records is not yet available—rose 0.1 percent in February to a level 1³/₄ percent higher than a year earlier; over the previous 12 months, the increase had been 3¹/₂ percent. As for the narrower average hourly earnings measure that covers only production and nonsupervisory workers, the 12-month change in February was 2¹/₂ percent, down from 3³/₄ percent in February 2009.

Last page of Domestic Nonfinancial Developments

Domestic Financial Developments

Overview

Financial conditions remained supportive of economic growth over the intermeeting period, despite economic data that were somewhat weaker than expected, on balance, and a temporary escalation in concerns about fiscal strains in Europe. Investors marked down the expected path of the federal funds rate, on net, over the period. Nominal Treasury yields were about flat, and TIPS-based measures of inflation compensation declined. Broad stock price indexes increased, boosted by positive earnings news, while risk spreads on corporate bonds were little changed. The expiration of many of the Federal Reserve's special liquidity facilities on February 1 had no significant effects in financial markets. Also, despite further tapering of the Federal Reserve's large-scale asset purchases of agency debt and agency-backed MBS and the imminent completion of the program at the end of this month, MBS yields were roughly unchanged. Conditions in both the commercial and residential mortgage markets remained strained, with delinquency rates rising further. Meanwhile, net debt financing by nonfinancial firms was roughly flat, as solid bond issuance was offset by declines in commercial paper and C&I loans. Consumer credit expanded in January for the first time in a year.

Policy Expectations and Treasury Yields

The expected path of monetary policy implied by futures market quotes moved lower, on net, over the intermeeting period. Implied rates on Eurodollar futures contracts maturing around year-end decreased about 10 basis points, and those on contracts maturing in early 2012 fell about 25 basis points. Although the outcome of the January FOMC meeting was largely in line with expectations, market participants reportedly read the statement's characterization of the economic outlook as somewhat more upbeat than they had anticipated, and Eurodollar futures rates rose a bit in response. However, subsequent economic data were somewhat weaker than expected, on balance, leading investors to mark down the expected policy path. The changes to terms for primary credit and TAF loans that were announced on February 18 resulted in a small increase in near-term futures rates, but this uptick proved short lived, as the statement and subsequent Federal Reserve communications—most notably the Chairman's congressional testimony the following week—emphasized that the modifications did not represent a shift in the overall stance of monetary policy.

Based on the staff's usual term premium assumption of 1 basis point per month, futures quotes currently indicate that the federal funds rate is expected to rise above 25 basis points at the end of the third quarter of 2010 and reach about 1³/₄ percent by the end of 2011. In contrast, quotes from the market for interest rate caps suggest that the most

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Selected Financial Market Quotations

(One-day quotes in percent except as noted)

		2008	2009	201	0	Chan selected da	ge to Mar. 9 fro ites (percentage	om e points)
Instrument		Sept. 12	Dec. 15	Jan. 26	Mar. 9	2008 Sept. 12	2009 Dec. 15	2010 Jan. 26
Short-term FOMC intended federal funds ra	ite	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills ¹ 3-month 6-month		1.46 1.80	.05 .17	.07 .14	.16 .21	-1.30 -1.59	.11 .04	.09 .07
Commercial paper (A1/P1 rates) 1-month 3-month	2	2.39 2.75	.13 .20	.14 .20	.25 .23	-2.14 -2.52	.12 .03	.11 .03
Large negotiable CDs ¹ 3-month 6-month		2.79 3.09	.22 .31	.20 .29	.21 .32	-2.58 -2.77	01 .01	.01 .03
Eurodollar deposits ³ 1-month 3-month		2.60 3.00	.32 .45	.28 .40	.28 .40	-2.32 -2.60	04 05	.00 .00
Bank prime rate		5.00	3.25	3.25	3.25	-1.75	.00	.00
Intermediate- and long-term U.S. Treasury ⁴ 2-year 5-year 10-year		2.24 2.97 3.93	.87 2.33 3.79	.85 2.38 3.80	.87 2.36 3.85	-1.37 61 08	.00 .03 .06	.02 02 .05
U.S. Treasury indexed notes ⁵ 5-year 10-year		1.33 1.77	.50 1.42	.38 1.37	.57 1.59	76 18	.07 .17	.19 .22
Municipal general obligations (E	Bond Buyer) ⁶	4.54	4.19	4.30	4.34	20	.15	.04
Private instruments 10-year swap 10-year FNMA ⁷ 10-year AA ⁸ 10-year BBB ⁸ 10-year high yield ⁸		4.26 4.36 6.62 7.22 10.66	3.74 4.08 5.04 6.09 9.29	3.72 4.14 5.04 5.74 8.76	3.75 4.15 5.05 5.74 8.70	51 21 -1.57 -1.48 -1.96	.01 .07 .01 35 59	.03 .01 .01 .00 06
Home mortgages (FHLMC surve 30-year fixed 1-year adjustable	ey rate)	5.78 5.03	4.94 4.34	4.98 4.29	4.97 4.27	81 76	.03 07	01 02
	Record	high	2009	201	0	Ch from sel	ange to Mar. 9 ected dates (pe	rcent)
Stock exchange index	Level	Date	Dec. 15	Jan. 26	Mar. 9	Record high	2009 Dec. 15	2010 Jan. 26
Dow Jones Industrial S&P 500 Composite Nasdaq	14,165 1,565 5,049	10-9-07 10-9-07 3-10-00	10,452 1,108 2,201	10,194 1,092 2,204	10,564 1,140 2,341	-25.42 -27.13 -53.64	1.08 2.94 6.34	3.63 4.42 6.21
Russell 2000	856	7-13-07	606	612	670	-21.75	10.44	9.39

D.J. Total Stock Index

1. Secondary market.

2. Financial commercial paper.

3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time.

15,807

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.

11,385

11,282

11,875

-24.88

4.30

5.26

6. Most recent Thursday quote.

7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities.

10-9-07

8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data.

NOTES:

September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy. December 15, 2009, is the day before the December 2009 FOMC monetary policy announcement. January 26, 2010, is the day before the most recent FOMC monetary policy announcement.

likely path of the federal funds rate—that is, the mode rather than the mean of the distribution—involves a later liftoff in the policy rate and was roughly unchanged over the intermeeting period. The results of the Desk's March primary dealer survey were about in line with those from the January survey, with one-half of the respondents expecting the first policy rate increase to occur by the end of the year.

Nominal Treasury yields were essentially unchanged over the intermeeting period. Yields may have been supported by an easing of flight-to-quality demands with a modest reduction in perceived downside risks to the economic outlook, broadly consistent with increases in equity prices and reductions in implied volatilities on Treasury securities over the period. TIPS-based measures of inflation compensation moved down at all horizons, likely reflecting the weaker-than-expected incoming economic data and the publication of lower-than-anticipated CPI figures. Survey measures of inflation expectations that were released during the period also pointed to slight declines in both short- and long-term inflation expectations. In addition, analysts reported that supply pressures may have boosted yields on TIPS somewhat relative to their nominal counterparts.

Federal Reserve Purchase Programs and Facilities

Over the intermeeting period, the Federal Reserve continued to taper its large-scale asset purchases. Cumulative Federal Reserve purchases of agency debt securities and agency MBS reached about \$171 billion and \$1.22 trillion, respectively. All purchases are expected to be executed by the end of March.

On February 18, the Federal Reserve announced an increase of 25 basis points in the primary credit rate, effective February 19, and a reduction in the typical maximum maturity for primary credit loans to overnight, beginning on March 18. These changes were made in light of recent improvements in financial market conditions.

The Federal Reserve's emergency lending facilities continued to wind down with no apparent adverse effects on markets or institutions. The expiration of the AMLF, CPFF, PDCF, TSLF, and the temporary liquidity swap arrangements with foreign central banks on February 1 had no significant effect on financial markets. The final two non-CMBS TALF subscriptions took place over the intermeeting period and supported a large number of deals relative to recent subscriptions, as sponsors reportedly sought TALF support for deals that would otherwise have been more difficult to bring to market. At the mid-February CMBS subscription, \$1.3 billion in loans collateralized by legacy CMBS were extended, an amount about in line with recent subscriptions. The final TAF

Policy Expectations, Treasury Yields, and Liquidity Facilities



4

1



Note: Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments. Source: CME Group.

Percent 5 Jan. Daily FOMC 5 to 10 years ahead 3 Mar 2 ç Next 5 years* 0 -1 -2 Jan. May Sept. Jan. May Sept. Jan. May Sept. Jan.

2007 2008 2009 2010 Note: Estimates based on smoothed nominal and inflationindexed Treasury yields.

*Adjusted for lagged indexation of Treasury inflation-protected securities

Source: Federal Reserve Board.

Percent 5.0 March 9, 2010 4.5 4.0 January 26, 2010 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 3 7 10 20 5 1 Years ahead

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 Board.

Usage of TALF and Other Lending Facilities

Billions of dollars Billions of dollars 1600 300 Jan. Daily FOMC 1400 250 1200 200 1000 800 150 600 100 Other facilities' Mar. 400 (left scale) 8 50 200 TALF (right scale) 0 0 Jan. July Jan. July Jan. July Jan. 2007 2008 2009 2010

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

Source: Federal Reserve Board.

Inflation Compensation

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auction occurred on March 8, offering \$25 billion in 28-day credit. The minimum bid rate for this auction was raised 25 basis points, to 50 basis points, consistent with the change in the primary credit rate. The auction was undersubscribed, with bids totaling just \$3 billion, compared with \$15 billion of maturing loans.

On March 8, the Federal Reserve Bank of New York announced plans to expand the list of counterparties with which it can conduct reverse repurchase agreements to include domestic money market mutual funds. The announcement elicited little price reaction.

Stock Prices and Corporate Interest Rates

Broad stock price indexes rose about 4 percent, on net, over the intermeeting period, boosted in part by favorable earnings reports from the retail sector. Bank equity prices slightly outperformed the broader equity markets. Option-implied volatility on the S&P 500 index dropped back to post-crisis lows after ratcheting up early in the period on concerns about Chinese monetary policy tightening and fiscal strains in Europe. Even so, the gap between the staff's estimate of the expected real equity return over the next 10 years for S&P 500 firms and the real 10-year Treasury yield—a measure of the equity risk premium—remained well above its average over the past decade.

Over the intermeeting period, yields on investment- and speculative-grade corporate bonds were little changed. As a result, spreads on corporate bonds remained at their lowest levels since early 2008. Spreads on A2/P2-rated commercial paper and AA-rated ABCP held steady at slightly above their pre-crisis levels.

Corporate Earnings and Credit Quality

Earnings news was generally favorable, particularly in the retail sector. Profits of nonfinancial corporations in the S&P 500 continued to rebound, with quarter-overquarter growth maintaining a double-digit pace in the fourth quarter. In contrast, financial corporations, in aggregate, continued to post near-zero profits. On balance, in the month ending mid-February, analysts again revised up their forecasts of earnings for S&P 500 firms over the coming year.

The credit quality of nonfinancial firms has continued to improve, on balance, in recent months. The aggregate ratio of debt to assets for nonfinancial corporations moved lower again in the fourth quarter, while the aggregate liquid asset ratio rose a bit further to a new high of about 11 percent. Moreover, the pace of nonfinancial corporate ratings downgrades by Moody's slowed again in the first two months of 2010 and was below the pace of upgrades. Meanwhile, the six-month trailing bond default rate for nonfinancial

III-6 Corporate Yields, Risk Spreads, and Stock Prices

Selected Stock Price Indexes

Expected Real Equity Return and



Implied Volatility on S&P 500 (VIX)



Corporate Bond Yields



+ 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 Spreads



Source: Staff estimates of smoothed corporate yield curves based on Merrill Lynch data and smoothed Treasury yield curve.



30-Day Commercial Paper Spreads



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.

III-7 **Corporate Earnings and Credit Quality**



Financial Ratios for Nonfinancial Corporations





Selected Default and Delinguency Rates

Source: For default rate, Moody's Investors Service; for

delinquency rate, Call Report data.

Revisions to Expected S&P 500 Earnings



* Revision in Feb. 2009 was -17.2%.

Source: Thomson Financial.

Bond Ratings Changes of Nonfinancial Companies





Expected Nonfinancial Year-Ahead Defaults

Source: Calculated using firm-level data from Moody's KMV.

Business Finance

Gross Issuance of Securities by U.S. Corporations

				20	09	20	10
Type of security	2006	2007	2008	H1	H2	Jan.	Feb. ^p
Nonfinancial corporations							
Stocks ¹	4.7	5.5	3.7	5.3	5.2	3.1	2.3
Initial public offerings	1.8	1.6	.3	.2	1.1	.0	.8
Seasoned offerings	2.9	3.8	3.4	5.1	4.1	3.1	1.5
Bonds ²	29.3	35.1	27.7	50.1	31.1	21.4	34.3
Investment grade	13.1	17.5	19.5	32.6	13.9	7.5	17.8
Speculative grade	6.2	7.5	1.8	5.3	7.8	3.6	7.8
Other (sold abroad/unrated)	10.1	10.0	6.4	12.2	9.5	10.3	8.7
Memo							
Net issuance of commercial paper ³	2.4	4	1.6	-12.4	-1.9	-3.0	6
Change in C&I loans at							
commercial banks ³	11.0	21.2	12.8	-17.4	-27.7	-23.7	-16.4
Financial corporations							
Stocks ¹	5.3	8.6	13.5	15.9	12.6	4.0	5.3
Bonds ²	180.6	151.7	45.4	44.5	33.9	33.7	23.7

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

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. For all nonfinancial firms; period-end basis, seasonally adjusted.

p Forecast based on preliminary data.

Selected Components of Net Debt Financing

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

Billions of dollars 80 Monthly rate, nonfinancial firms Commercial paper* 60 C&I loans* Bonds H1 Total 40 H2 Jan.-Feb. 20 0 -20 -40 -60 -80 2005 2006 2007 2008 2009 2010 * Seasonally adjusted, period-end basis. e Estimate.

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

firms edged down in January and February to the low end of its historical range. The rise in the C&I loan delinquency rate moderated a bit in the fourth quarter, and the year-ahead expected default rate for nonfinancial firms from Moody's KMV was roughly unchanged in February, although at a somewhat elevated level.

Business Finance

In January and February, the pace of gross bond issuance by nonfinancial corporations remained strong. In contrast, commercial paper outstanding continued to contract and C&I loans ran off steeply again. Overall, net debt financing by nonfinancial firms was about zero over the first two months of 2010, consistent with firms' weak demand for credit and banks' tight credit policies.

Gross public equity issuance by nonfinancial firms was robust in the fourth quarter of last year. Meanwhile, equity retirements from cash-financed mergers rose sharply as two large deals in the pharmaceutical industry were completed. In addition, equity retirements from share repurchases are estimated to have increased a bit from recent low levels. As a result, net equity issuance by nonfinancial firms, which had been positive in the first three quarters of 2009, turned negative in the fourth quarter. Since the turn of the year, gross public equity issuance has slowed somewhat, while announcements of both new share repurchase programs and cash-financed mergers and acquisitions have picked up.

Public equity issuance by financial firms declined in January and February following very strong issuance in December, when several large banks issued equity to facilitate the repayment of capital received under the TARP program. Gross bond issuance by financial firms remained solid.

Commercial Real Estate Finance

The contraction in commercial mortgage debt accelerated in the fourth quarter. The dollar value of commercial real estate sales remained at a very low level in February, and the share of properties sold at a nominal loss inched higher. Property prices in December were about 40 percent below their 2007 peaks. The delinquency rate on commercial mortgages in securitized pools increased to more than 6 percent in January, and the delinquency rate on commercial mortgages at commercial banks deteriorated further in the fourth quarter. The percentage of delinquent construction loans at banks also ticked higher in the fourth quarter. Nonetheless, commercial mortgage CDS index prices changed little, on balance, over the intermeeting period.

Commercial Real Estate







Note: NCREIF TBI series re-weighted by staff to exclude multifamily.

Source: NCREIF; MIT Center for Real Estate; Moody's Investors Service.





Delinquency Rates on Commercial Mortgages

60

50

40

30

20

10

0





Source: JPMorgan Chase & Co.

Commercial Mortgage CDS Index Prices

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Residential Mortgages

Percent

Mortgage Rate and MBS Yield



Bloomberg.

Residential Mortgage Debt



Delinquencies on Prime Mortgages



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



Prices of Existing Homes



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

Delinquencies on Subprime and FHA-Backed Mortgages



Note: Percent of loans 90 or more days past due or in foreclosure. For subprime mortgages, rates are for securitized loans.

Source: For FHA-backed mortgages, U.S. Department of Housing and Urban Development; for subprime mortgages, LoanPerformance, a division of First American CoreLogic.

Consumer Credit and Mutual Funds







Note: Spreads are relative to 2-year Treasury yields. For credit cards, monthly; for auto loans, weekly. Source: For credit cards, Mintel; for auto loans, PIN.

Billions of dollars 28 Monthly rate TALF eligible 24 Non-TALF 20 H1 16 Q3 12 H1 8 H2 Δ 0 2005 2007 2008 2006 2009 2010

Note: Credit card, auto, and student loan ABS. Source: Inside MBS & ABS; Merrill Lynch; Bloomberg; Federal Reserve Board.

Delinquencies on Consumer Loans

Gross Consumer ABS Issuance



Source: For auto loans, Federal Reserve Board; 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	Fund type 2008				2009			Assets
	H1	H2	H1	Q3	Q4	Jan.	Feb. ^e	Jan.
Total long-term funds	11.8	-49.4	23.4	47.9	34.0	46.8	26.5	7,670
Equity funds	-3.6	-35.2	-0.1	0.9	-4.4	16.3	-2.3	4,777
Domestic	-5.0	-20.1	1.0	-3.7	-10.8	6.2	-5.7	3,553
International	1.3	-15.1	-1.0	4.6	6.4	10.1	3.4	1,224
Hybrid funds	1.7	-5.0	-0.3	5.2	2.8	3.5	2.1	633
Bond funds	13.8	-9.3	23.8	41.8	35.7	26.9	26.8	2,260
High-yield	-0.2	0.1	2.8	1.4	0.5	0.7	-2.6	190
Other taxable	11.1	-7.7	16.2	31.8	30.4	21.7	24.5	1,606
Municipals	2.9	-1.6	4.8	8.7	4.8	4.5	4.9	464
Money market funds	56.1	59.6	-27.3	-81.1	-43.0	-83.0	-69.0	3,219

Note: Excludes reinvested dividends.

e Staff estimate.

Source: Investment Company Institute.

Household Finance

Mortgage interest rates and spreads were about flat, on net, over the intermeeting period. The average interest rate on 30-year conforming fixed-rate mortgages stayed around 5 percent, and its spread to the 10-year Treasury yield remained at the low end of its range over the past few years. Agency MBS yields were also little changed, on balance, despite some volatility surrounding the initial announcements and subsequent information about Freddie Mac's and Fannie Mae's buyouts of delinquent mortgages from agency MBS pools.¹ The tapering of the Federal Reserve's agency MBS purchases over the same period and the impending end of its asset purchase program seems to have had little effect on MBS yields to date. However, the high level of the Federal Reserve's purchases and the relatively low level of mortgage originations have reportedly contributed to reduced liquidity in the MBS market, leading to a higher incidence of secondary market fails-to-deliver.

Residential mortgage debt declined further in the fourth quarter. House price data for December were mixed: The FHFA price index decreased, while the LoanPerformance and S&P/Case-Shiller price indexes increased slightly. Delinquency rates on prime mortgages continued to climb in January, and the number of delinquent FHA-backed mortgages topped 530,000 in December, up from 320,000 a year earlier.

Consumer credit expanded at an annual rate of about 2 percent in January, its first increase since January 2009. The three-month percent change in revolving consumer credit became a bit less negative, while the respective change in nonrevolving consumer credit moved up to about zero. Despite low and stable consumer ABS spreads, the pace of ABS issuance in the first two months of the year was somewhat below that in the fourth quarter, reflecting the very weak pace of consumer credit originations late last year. The spread of credit card interest rates over the two-year Treasury yield ticked up in January, while spreads on new auto loans declined slightly, on net, over the intermeeting period. Delinquency rates on credit card loans in securitized pools and auto loans at captive finance companies remained elevated in January but were down a bit from their recent peaks.

Long-term mutual funds continued to receive sizable net inflows in January and February, largely driven by continued robust inflows into bond funds. Money market

¹ Financial Accounting Standards Nos. 166 and 167, implemented by the GSEs on January 1, 2010, removed mark-to-market capital expenses imposed on a GSE when it purchases a loan from its MBS pools. As a result, the GSEs have a strong incentive to purchase delinquent mortgages from their pools to avoid the costs associated with forwarding monthly payments of principal and interest to MBS investors.

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Treasury Finance



Daily Treasury Market Volume







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 Board.



Foreign Participation in Treasury Auctions

the Federal Reserve. Moving averages include 2-, 5-, and 10year original auctions and reopenings. Source: Federal Reserve Board.





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.



Fails-to-Deliver of Treasury Securities

Source: Federal Reserve Board, FR 2004, Government Securities Dealers Reports.

mutual funds, especially institutional funds, experienced further substantial net outflows, as yields paid by these funds remained extremely low.

Treasury Finance

During the intermeeting period, the Treasury issued about \$325 billion of nominal coupon securities across the term structure. The auctions were generally well received, with bid-to-cover ratios within their recent ranges. Measures of foreign participation in Treasury auctions remained elevated, although they have trended downward somewhat since late 2009. The Treasury also conducted the first 30-year TIPS auction since 2001. While the yield at the auction was 7 basis points above the when-issued rate prior to the auction, the bid-to-cover ratio was 2.45, and market participants generally characterized it as successful.

In its quarterly refunding statement, the Treasury announced that it expects nominal auction sizes to stabilize near current levels, while noting that TIPS issuance would gradually increase going forward. Following the passage of legislation raising the federal debt ceiling, the Treasury began increasing the balance in the Supplementary Financing Account; this account now stands at \$50 billion and will increase to \$200 billion by mid-April.

Treasury market functioning was about unchanged over the intermeeting period. The average absolute fitting error of the staff's nominal Treasury curve—a proxy for unexploited arbitrage opportunities in the nominal Treasury market—declined slightly over the period, and fails-to-deliver in the Treasury market remained low. On-the-run premiums on the 10-year Treasury note increased slightly, while trading volumes in the nominal and TIPS markets were little changed on net.

State and Local Government Finance

Conditions in the municipal bond market showed little sign of strain despite the growing evidence of budget problems faced by many states and municipalities. Gross issuance of long-term municipal bonds remained solid in January and February, mostly driven by continued strength in new capital issuance. In contrast, the pace of short-term issuance stayed subdued. The number of municipal bonds downgraded by Moody's rose further in the fourth quarter, far outpacing the number of upgrades, as a large number of small municipalities saw their ratings lowered. Even so, yields on long-term municipal bonds were about flat over the intermeeting period, and their ratios to yields on comparable-maturity Treasury securities were also roughly unchanged.

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State and Local Government Finance

Gross Offerings of Municipal Securities

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

				2009		20	010
Type of security	2006	2007	2008	H1	H2	Jan.	Feb.
Total Long-term ¹ Refundings ² New capital Short-term	36.1 32.5 10.6 21.9 3.7	40.4 35.5 12.6 22.9 4.9	37.6 32.6 14.6 17.9 5.0	36.6 33.0 11.6 21.3 3.6	42.7 35.5 13.1 22.5 7.2	34.7 32.6 10.1 22.6 2.0	28.0 26.9 12.0 14.9 1.1
Memo: Long-term taxable	2.5	2.4	2.3	4.5	9.9	11.4	8.0

1. Includes issues for public and private purposes.

2. All issues that include any refunding bonds.

Source: Thomson Financial.



Ratings Changes

Municipal Bond Yields







Association.

Source: Municipal Market Advisors; Bond Buyer.

		Percent change (annual rate) ¹									
			2009		2010		of dollars),				
Aggregate and components	2008	2009	Q3	Q4	Jan.	Feb. (p)	Feb. (p)				
M2	8.5	4.9	1.6	3.4	-8.6	7.9	8,519				
Components ²											
Currency	5.8	6.9	3.8	2.0	-1.4	8.5	867				
Liquid deposits ³	6.9	17.2	14.5	18.7	-1.8	17.5	5,749				
Small time deposits	12.3	-16.0	-23.6	-31.8	-29.5	-18.4	1,122				
Retail money market funds	13.0	-23.0	-32.2	-34.8	-33.6	-24.0	775				
Memo:											
Institutional money market funds	24.9	-1.9	-11.0	-27.6	-23.1	-39.4	2,105				
Monetary base	70.3	41.6	-1.9	62.1	-18.4	73.2	2,108				

M2 Monetary Aggregate

(Based on seasonally adjusted data)

For years, Q4 to Q4; for quarters and months, calculated from corresponding average levels.
 Nonbank traveler's checks are not listed.
 Sum of demand deposits, other checkable deposits, and savings deposits.
 Preliminary.
 Source: Federal Reserve Board.

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

(
Type of credit	2008	2009	H1 2009	Q3 2009	Q4 2009	Jan. 2010	Feb. ^e 2010	Level ¹ Feb. ^e 2010	
Total	4.9	-6.4	-5.4	-7.1	-8.3	-9.4	-13.4	8,921	
Loans ²									
Total	4.4	-9.6	-7.4	-12.4	-12.3	-11.9	-15.0	6,581	
Core To businesses	5.0	-7.6	-4.8	-9.5	-12.1	-14.5	-15.4	5,836	
Commercial and industrial	16.3	-17.0	-14.1	-19.8	-24.3	-22.2	-15.3	1,301	
Commercial real estate	6.1	-4.3	-1.6	-5.5	-8.8	-15.4	-5.6	1,620	
To households									
Residential real estate	-3.2	-5.3	-2.2	-7.8	-9.5	-5.8	-27.0	2,101	
Revolving home equity	13.0	.5	6.2	-4.5	-5.7	-5.2	-1.8	598	
Closed-end mortgages	-8.0	-7.4	-5.1	-9.1	-11.0	-6.1	-36.8	1,503	
Consumer	7.1	-2.2	2	-3.7	-4.8	-22.5	-4.3	814	
Memo: Originated ³	5.7	-3.6	-2.0	-4.6	-5.9	-12.0	-4.3	1,209	
Other	.4	-22.8	-25.3	-33.5	-14.1	8.8	-12.4	745	
Securities									
Total	6.8	4.1	1.3	9.6	4.0	-2.4	-8.8	2,341	
Treasury and agency	16.3	8.0	2.2	18.0	9.1	5.2	-2.2	1,443	
Other ⁴	-4.2	-1.4	.1	-2.2	-3.5	-14.2	-19.5	898	

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 (FAS 115) and the initial consolidation of certain variable interest entities (FIN 46) and off-balance-sheet vehicles (FAS 166 and 167). 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 that retained recourse or servicing rights.

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

e Estimate.

Source: Federal Reserve Board.

C&I Loan Rate Spread



Weighted average for all banks, adjusted for changes in the nonprice loan characteristics.



Loan Loss Provisions



Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). Vertical line represents the last business cycle peak, as defined by the NBER.

Money and Bank Credit

M2 decreased 8½ percent at an annual rate in January, reflecting in part a contraction in liquid deposits. Several institutions opted out of the FDIC's Transaction Account Guarantee Program because of higher fees associated with participation after the year end, reportedly driving depositors to transfer funds out of transaction accounts and into alternative investments outside of M2. In February, however, M2 expanded 8 percent at an annual rate, as liquid deposits resumed their growth. Small time deposits and retail money market mutual funds contracted in January and, to a lesser extent, in February, while currency declined a bit in January but advanced notably in February. Growth of the monetary base averaged 27½ percent at an annual rate in both months, as the increase in reserve balances resulting from the ongoing large-scale asset purchases more than offset the contraction in reserve balances associated with the decline in credit outstanding under liquidity and credit facilities.

Total bank credit contracted at an 11 percent average annual rate in January and February. Banks' securities holdings declined at a modest pace in both months after several months of steady growth. Total loans on banks' books continued to fall at a rapid pace.² C&I loans again declined steeply, as spreads of interest rates on C&I loans over comparable-maturity market instruments climbed further in the first quarter and nonfinancial firms' need for external finance likely remained subdued. Commercial real estate loans also posted substantial declines. Household loans on banks' books contracted as well, in part because of a pickup in banks' securitization of first-lien residential mortgages with the GSEs in February. The decline in consumer loans originated by banks was mostly associated with a big drop in credit card loans. In contrast, other consumer loans—including auto, student, and tax advance loans—were about flat over the two-month period.

According to Call Reports, bank profitability remained low in the fourth quarter, as slightly improved profits at banks in the 25 largest bank holding companies were about offset by a sixth consecutive quarterly loss at all other banks. The better results at larger banks primarily reflected higher noninterest income. Although the rate of banks' provisioning declined somewhat in the fourth quarter, provisions continued to be the most significant drag on earnings. Reduced provisions are consistent with signs of stabilization in delinquency and charge-off rates for certain categories of loans, particularly credit card loans.

² Available data indicate that, so far, about 20 banks have consolidated about \$300 billion in total assets onto their books in conjunction with the adoption of new accounting rules FAS 166 and FAS 167, and more banks are expected to do so by the end of the first quarter of 2010. The effects of these consolidations have been removed from the bank credit data presented here.

Call Report data also showed a continued decline in unused loan commitments, consistent with industry commentary suggesting that banks have moved to trim credit lines. The further drop in industry assets last quarter, combined with additional capital infusions from parent holding companies, boosted banks' aggregate regulatory capital ratios from already high levels.

Last page of Domestic Financial Developments

International Developments

International Developments

U.S. International Transactions

Trade in Goods and Services

The U.S. international trade deficit widened to \$40.2 billion in December, from \$36.4 billion in November, as a sharp rise in nominal imports outpaced an increase in exports.

		Α	nnual rat	e	М	onthly rat	te
	2009		2009			2009	
		Q2	Q3	Q4	Oct.	Nov.	Dec.
			P	ercent ch	ange		
Nominal BOP							
Exports	-1.5	8	24.8	28.6	2.7	.9	3.3
Imports	-7.2 -9.9		37.2	34.7	.7	2.6	4.8
Real NIPA							
Exports	8	-4.1	17.8	22.4	•••	•••	•••
Imports	-6.7	-14.7	21.3	15.3	•••	•••	•••
			В	sillions of	f dollars		
Nominal BOP							
Net exports	-380.7	-324.8	-389.4	-439.0	-33.2	-36.4	-40.2
Goods, net	-517.0	-461.8	-528.4	-581.7	-45.2	-48.4	-51.8
Services, net	136.3	137.0	139.0	142.7	12.0	12.0	11.7

Trade in Goods and Services

BOP Balance of payments.

NIPA National income and product accounts.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

The value of exports of goods and services moved up 3.3 percent in December after increasing about 1 percent in November. The December increase was fairly broadly based across product categories, with notable gains in industrial supplies, capital goods, and automotive products. Half of the increase in industrial supplies was driven by chemicals, while most of the increase in capital goods was due to strong aircraft sales following a decline in the previous month. Automotive products further added to increases that occurred in October and November, which were driven by strong increases in sales outside of North America.

In the fourth quarter, nominal exports jumped a robust 28½ percent at an annual rate, continuing to retrace the declines recorded in late 2008 and the first half of 2009. The fourth-quarter increase was broad based across all major categories of goods and services.



U.S. International Trade in Goods and Services

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

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	Levels				Change ¹			
	20	09	20	09	200)9	200)9
	Q3	Q4	Nov.	Dec.	Q3	Q4	Nov.	Dec.
Exports of goods and services	1569.1	1670.9	1657.1	171 2.4	84.5	101.8	14.0	55.3
Goods exports	1054.6	11 47.8	1133.5	1189.3	71.1	93.2	12.9	55.8
Gold	14.3	15.3	11.8	17.3	2.0	1.0	-5.0	5.5
Other goods	1040.3	1132.5	1121.7	1172.0	69.1	92.2	17.9	50.2
Capital goods	381.7	414.1	408.5	429.7	9.1	32.4	4.3	21.3
Aircraft & parts	70.2	76.7	70.4	84.1	-3.0	6.5	-5.2	13.7
Computers & accessories	37.5	40.9	41.2	41.7	1.9	3.4	1.5	.6
Semiconductors	38.5	42.9	44.7	42.3	3.5	4.4	3.2	-2.4
Other capital goods	235.5	253.7	252.1	261.6	6.7	18.2	4.9	9.5
Automotive	86.1	104.1	103.4	114.0	19.7	18.0	8.6	10.7
Ind. supplies (ex. ag., gold)	283.1	303.9	299.6	311.8	33.5	20.8	6	12.2
Consumer goods	149.9	160.2	156.2	159.6	5.8	10.3	-8.6	3.4
Agricultural	99.2	109.7	114./	115.1	-1.9	10.5	15.4	.4
All other goods	40.3	40.0	39.4	41.7	3.0	.3	-2.2	2.3
Services exports	514.5	523.1	523.5	523.1	13.4	8.6	1.0	4
Imports of goods and services	1958.4	2109.8	2093.7	2194.6	149.0	151.4	52.5	100.9
Goods imports	1583.0	1729 5	1714 6	1811 3	1377	146 5	52.0	96 7
Oil	275.6	301.5	293.8	337 3	477	25.9	20.3	43 5
Gold	8.8	10.6	11.1	9.8	.4	1.8	.3	-1.3
Other goods	1298.6	1417.4	1409.7	1464.2	89.6	118.8	31.4	54.6
Comital acorda	261 1	400.4	200 5	110 2	106	26.0	15.0	100
Aircraft & ports	201	400.4	399.3	410.5	10.0	30.0 1 C	13.9	10.0
Computers & accessories	05 /	1116	115 5	121 8	-2.5	10 2	-1.4	5.2
Semiconductors	22.4	23.6	23 3	23.1	1 8	19.2	-1.2	- 2
Other capital goods	217.7	231.5	231.5	241.0	8.4	13.8	-1.2 9.5	2 9.5
Automotive	177.4	207.4	200.2	219.5	51.2	29.9	-2.2	19.3
Ind. supplies (ex. oil, gold)	189.9	214.7	212.9	223.3	11.8	24.8	5.0	10.4
Consumer goods	422.4	449.1	454.3	454.3	3.5	26.8	15.3	0
Foods, feeds, beverages	80.8	82.8	80.9	8 4.7	5	2.0	-1.9	3.8
All other goods	63.6	62.9	61.9	64.2	5.0	7	7	2.3
Services imports	375.5	380.3	379.1	383.3	11.3	4.9	.5	4.2
Memo:								
Oil quantity (mb/d)	11.30	11.39	10.89	12.45	26	.10	.06	1.56
Oil import price (\$/bbl)	66.68	72.38	73.86	74.17	12.64	5.70	4.70	.31

U.S. Exports and Imports of Goods and Services (Billions of dollars; annual rate, balance of payments basis)

1. Change from previous quarter or month. Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

The value of imports of goods and services jumped 4.8 percent in December following a gain of 2.6 percent in November. Imports of oil accounted for more than one-third of the December increase, reflecting both higher prices and volumes. Most other major categories of imports also recorded gains in December, with the exception of consumer products, which were flat. A notable contributor to the rise in capital goods was computer products and accessories, which added to strong increases in the previous two months.

For the fourth quarter, nominal imports rose 34³/₄ percent at an annual rate, about the same pace as in the third quarter. However, as with exports, these increases have reversed only a portion of the earlier steep decline. The fourth-quarter increase was broadly based across major categories of imports.

Prices of Internationally Traded Goods

Non-oil imports. Prices of imported non-oil goods rose 0.6 percent in January, in line with their increases over the past five months. The pickup was driven by higher prices for material-intensive goods. Although prices for finished goods were flat, on net, prices for consumer goods increased slightly after several months of remaining unchanged.

Oil. The Bureau of Labor Statistics price index of imported oil rose 4.8 percent in January following a decrease of 1.4 percent in December. Similarly, the spot price of West Texas Intermediate (WTI) crude oil rose about 5 percent in January to average \$78.50 per barrel. Spot WTI fell back a touch in February to average about \$76.50 per barrel before rising once again to close most recently on March 9 at nearly \$82. Over the past 8 months, the spot price of WTI has generally traded between \$70 and \$80 per barrel.

Exports. Exported goods prices rose 0.8 percent in January, a bit faster than in December. The increase largely reflected higher prices for material-intensive goods, which rose 1.8 percent. Prices for finished goods increased 0.3 percent, a step-up from the pace of recent monthly changes. Prices for automotive products and capital goods pushed finished goods prices higher, more than offsetting declining consumer goods prices.



Prices of U.S. Imports and Exports

Prices of U	J.S. Imports	and Exports
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(Percentage change from previous period)

	A	Annual rate			Monthly rate		
		2009			2009 2010		
	Q2	Q3	Q4	Nov.	Dec.	Jan.	
	BLS prices						
Merchandise imports	14.9	12.0	10.3	1.5	.2	1.4	
Oil	246.9	88.4	34.7	5.4	-1.4	4.8	
Non-oil	-3.3	1.1	5.6	.6	.5	.6	
Core goods ¹	-1.2	2.3	6.1	.4	.5	.5	
Finished goods	5	.4	1.0	.0	.0	.0	
Cap. goods ex. comp. & semi.	-1.4	.4	.7	.1	.1	1	
Automotive products	.0	2.0	1.6	.1	1	1	
Consumer goods	1	4	.8	.0	.0	.2	
Material-intensive goods	-2.9	6.9	18.6	1.2	1.6	1.5	
Foods, feeds, beverages	.8	.9	8.6	1.0	.8	1.3	
Industrial supplies ex. fuels	-4.2	8.4	21.7	1.3	1.8	1.5	
Computers	-4.2	.3	-2.2	2	2	6	
Semiconductors	7.1	-5.4	7	1.2	-2.9	.8	
Natural gas	-74.8	-39.4	189.1	26.9	12.6	18.8	
Merchandise exports	2.4	3.4	3.4	.8	.6	.8	
Core goods ²	2.6	4.1	5.0	1.0	.8	1.0	
Finished goods	.4	2.1	1.0	.1	.0	.3	
Cap. goods ex. comp. & semi.	2.5	2.2	.9	.0	.1	.5	
Automotive products	6	5	.9	.1	.0	.2	
Consumer goods	-3.9	4.3	1.2	.2	1	3	
Material-intensive goods	5.3	6.5	10.0	2.2	1 .8	1.8	
Agricultural products	19.6	-7.8	2.0	3.9	1.7	1.4	
Industrial supplies ex. ag.	1.3	12.1	13.2	1.6	1.9	1.9	
Computers	-3.4	-1.5	4.9	1.0	-1.0	-2.3	
Semiconductors	12.3	8	-14.6	.0	5	.6	
	NIPA prices						
Chain price index							
Imports of goods & services	4.2	11.4	16.5	•••	•••	•••	
Non-oil merchandise	-3.9	.6	5.0	•••	•••	•••	
Core goods ¹	-2.3	1.3	4.7	•••	•••	•••	
Exports of goods & services	.1	4.6	5.6	•••	•••	•••	
Total merchandise	1.9	4.6	5.7	•••	•••	•••	
Core goods ²	2.4	5.1	5.7	•••	•••	•••	

Excludes computers, semiconductors, and natural gas.
 Excludes computers and semiconductors.

 Not applicable.

 BLS Bureau of Labor Statistics.
 NIPA National income and product accounts.
 Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Bureau of Labor Statistics.

U.S. International Financial Transactions

Since the previous Greenbook, we have received Treasury data on international financial transactions through January and partial custody data from FRBNY through early March. In several respects, U.S. financial flows have returned to their pre-crisis levels. In particular, foreign official inflows, bank lending, and outflows associated with U.S. purchases of foreign securities have returned to near pre-crisis levels. The one notable exception is foreign private purchases of U.S. corporate debt securities. These purchases have declined steadily since mid-2007 and remain well below their pre-crisis level.

Foreign official inflows slowed a bit in January to \$13 billion (see line 1 of the table "Summary of U.S. International Transactions"; see also the figure "Foreign Official Financial Inflows through January 2010").

Net official financial inflows in January also received a boost from a further \$10 billion decline in outstanding drawings by foreign central banks on the Federal Reserve swap lines (line 2). Drawings on the swap lines involve Federal Reserve purchases of foreign currency, which are recorded as an official claim on foreigners, and repayments of those drawings therefore generate inflows. These swap lines, which were closed in February, had a balance of only \$100 million at the end of January, down from a high of \$583 billion in December 2008.

When swap line drawings were on-lent by foreign central banks, they were generally priced at a backstop or penalty rate. As such, the reduction in drawings reflect a renormalization of funding markets. Indeed, the small net bank lending abroad in January (line 3) reflects a return to a more normal pattern.

Private foreigners purchased, on net, \$6 billion of Treasury securities in January, in line with the pattern of net purchases prior to the crisis (line 4a; see also the figure "Private Securities Flows through January 2010"). These purchases reflected strong acquisitions of bonds and notes that were partly offset by reductions in bills (not shown separately) – a pattern similar to that of official holdings. Private foreign investors continued to show interest in U.S. equities (line 4d) in January but continued to sell, on net, agency (line 4b) and corporate bonds (line 4c). This lack of interest in U.S. corporate debt can be attributed to several factors, including the structure of U.S. issuance, a rebound in issuance by foreign firms, and an increase in general home bias on the part of foreigners. These considerations are discussed further in the box entitled "Recent Weak Foreign Demand for U.S. corporations' Debt Securities" in Greenbook Part I.

U.S. investors purchased, on net, \$18 billion of foreign securities in January, about the pace recorded for 2009 (line 5). These purchases of foreign securities were concentrated in foreign bonds (line 5a), along with small net purchases of foreign stocks (line 5b).
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Summary of U.S. International Transactions (Billions of dollars; not seasonally adjusted except as noted)

	2008	2009			2009			2010
			Q1	Q2	Q3	Q4	Dec.	Jan.
Official financial flows	-54.1	919.8	321.3	315.2	122.1	161.3	40.3	22.5
1. Change in foreign official assets	400 5	205.0	70 7	100 5	70 0	110.4		10.0
in the U.S. (increase, +)	480.5	385.9	78.5	123.7	70.3	113.4	28.2	12.9
a. Long-term Treasury securities	203.8	402.6	35.0	103.2	99.7	164.7	61.5	36.1
b. Short-term Treasury securities	272.4	68.4	84.8	21.2	25.8	-63.4	-52.3	-25.8
c. Long-term agency securities	66.9	-30.5	1.0	-1.3	-28.1	-2.1	-2.3	2.2
d. Other ¹	-62.7	-54.8	-42.4	0.6	-27.2	14.2	21.3	0.6
2. Change in U.S. official								
assets (decrease, +) ²	-534.6	534.0	242.8	191.4	51.9	47.8	12.1	9.5
Private financial flows Banks	559.1	n.a.	-285.9	-251.9	-83.8	n.a.	•••	•••
3. Change in net foreign positions								
of banking offices in the U.S. ³	-4.6	-445.4	-288.7	-180.9	38.8	-14.6	35.0	8.6
Securities ⁴ 4. Foreign net purchases (+) of U.S.								
securities	70.1	35.9	2.7	-5.0	13 .8	24.4	15.3	-26.7
a. Treasury securities	196.1	32.5	52.7	-22.4	-11.7	13.9	7.3	6.3
b. Agency bonds	-186.2	-45.4	-49.0	2.9	6.7	-6.0	-0.7	-10.2
c. Corporate and municipal bonds	3.1	-86.4	-10.9	-22.5	-32.3	-20.7	-10.1	-27.7
d. Corporate stocks ⁵	57.2	135.2	9.9	37.0	51.1	37.2	18.8	5.0
5. U.S. net acquisitions (-) of foreign								
securities	46.5	-219.7	-33.5	-91.3	-48.0	-46.9	-19.5	-17.6
a. Bonds	46.8	-151.1	-32.4	-54.3	-21.1	-43.3	-17.9	-12.4
b. Stocks ⁵	-0.4	-68.7	-1.1	-37.0	-26.9	-3.6	-1.6	-5.2
Other flows ⁶								
6. U.S. direct investment (-) abroad	-332.0	n.a.	-40.3	-47.4	-6 2.7	n.a.	•••	•••
7. Foreign direct investment in the U.S.	319.7	n.a.	23.9	37.0	40.0	n.a.		•••
8. Net derivatives (inflow, +)	-28.9	n.a.	7.2	11.3	11.5	n.a.	•••	•••
9. Foreign acquisitions of U.S. currency	29.2	n.a.	11 .8	-1.9	4.2	n.a.	•••	•••
10. Other (inflow, $+$) ⁷	459.2	n.a.	31.0	26.4	-81.4	n.a.		
U.S. current account balance ⁶	-706.1	n.a.	-104.5	-98.0	-108.0	n.a.		•••
Capital account balance ⁸	1.0	n.a.	-0.7	-0.7	-0.7	n.a.	•••	•••
Statistical discrepancy ⁶	200.1	n.a.	69.8	35.4	70.4	n.a.	•••	•••

Note: Data in lines 1 through 5 differ in timing and coverage from the balance of payments data published by the

Department of Commerce. Details may not sum to totals because of rounding. 1. Includes foreign official net purchases of stocks, bonds, short-term securities, and changes in other bank-reported liabilities to foreign official institutions.

2. Includes changes in U.S. official reserve assets (other than allocations of Special Drawing Rights) and in

outstanding reciprocal currency swaps with certain foreign central banks. 3. Changes in dollar-denominated positions of all depository institutions and bank holding companies plus certain transactions between broker-dealers and unaffiliated foreigners (particularly borrowing and lending under repurchase agreements). Includes changes in custody liabilities other than U.S. Treasury bills.

4. Includes commissions on securities transactions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce.

5. Includes stocks acquired through nonmarket means such as mergers and reincorporations.

6. Quarterly data; seasonally adjusted.

7. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business.

8. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers.

n.a. Not available. Not applicable. Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.



Foreign Official Financial Inflows (+) through January 2010

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2005 2008 2009 2007 2008 2006 2007 Note: Total foreign official inflows consists of net purchases of Treasury securities, long-term age curities, shortcurities. corporate stocks and bonds, and bank flows.

Source: U.S. Treasury International Capital reports with staff adjustments and the Federal Reserve Bank of New York.



Private Securities Flows through January 2010 (Billions of dollars; monthly rate, not seasonally adjusted)

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U.S. Net Acquisitions (-) of Foreign Securities

40

20

0

-40

-60



Foreign Financial Markets

The trade-weighted value of the dollar, as measured by the staff's broad nominal index, has risen a little more than 1 percent since the January Greenbook, as the euro fell 5 percent against the dollar and the British pound fell 9 percent. The dollar's strength against the euro owed to disappointing euro-area data and the heightened focus on the risks posed by the fiscal situation in Greece and some other euro-area countries. The appreciation against the pound owed to weak U.K. economic data, including sluggish fourth-quarter GDP and January retail sales and the first January budget deficit on record, as well as to concerns that a potential political deadlock after the upcoming elections could significantly hinder future deficit reduction. The dollar was little changed on net against most emerging market currencies; although it appreciated against many currencies early in the period following reports that Chinese authorities were moving to restrain bank lending, this appreciation was largely reversed as data for emerging markets came in, on average, stronger than the market had expected.

The large fiscal deficits in Greece and, to a lesser extent, in Ireland, Italy, Portugal, and Spain, coupled with questions about their ability and willingness to take meaningful steps to shrink their deficits, have led to elevated spreads on sovereign bonds yields relative to German bonds. Greek sovereign bond spreads have been volatile and are currently just above 300 basis points, about 50 basis points higher than at the time of the January Greenbook. Spreads of other peripheral euro-area countries over German bonds are down slightly, on average, over that period. Last week Greece announced further plans to reduce its 2010 deficit, and EU officials stated that these plans put Greece "on track," likely indicating that the EU will not take action to sanction Greece. Sentiment was also aided by reports that EU countries were assembling a plan to help Greece in the event it is necessary, reportedly involving potential purchases of Some Greek sovereign debt. After these announcements, the government was able to successfully issue €5 billion in a syndicated debt auction. Market estimates indicate Greece must finance €13-€15 billion in maturing debt and deficit spending before the end of May.

Yields on benchmark German government bonds have fallen about 15 basis points since the January Greenbook, as concerns about sovereign risk prompted flows from peripheral European countries into core countries. Other major foreign sovereign benchmark yields are little changed. Weak incoming data have pushed back market expectations for policy tightening by both the ECB and BOE. Market-based measures of expectations for policy tightening in the United Kingdom and the euro area point to tightening in the first and fourth quarters of 2011, respectively, about two quarters later than at the time of the January Greenbook. The Bank of Canada is expected to tighten late in the third quarter of this year, and the Bank of Japan is expected to remain on hold for the foreseeable future; both of these expectations are little changed.

Foreign equity prices are down, on net, although most of the decline took place shortly after the time of the January Greenbook following reports that Chinese authorities were acting to restrain bank lending and following the announcement of the Obama Administration's proposal to place limits on the activities of big banks. Japanese and euro-area equities are down roughly 3 percent, since the January Greenbook. Emerging market equity prices are down less than 5 percent on average.

Exchange Value of the Dollar and Stock Market Indexes

_	Latest	Percent change since January Greenbook
Exchange rates*		
Euro (\$/euro)	1.3586	5.0
Yen (¥/\$)	89.890	-1.4
Sterling (\$/£)	0.0150	9.1
Canadian dollar (C\$/\$)	1.0249	-0.7
Nominal dollar indexes*^		
Broad index	102.9	1.1
Major Currencies index	75.8	2.2
OITP index	132.3	0.1
Stock market indexes		
DJ Euro Stoxx	271	-2.8
TOPIX	924	-2.7
FTSE 100	5602	1.6
S&P 500	1140	-0.9

* Positive percent change denotes appreciation of U.S. dollar.

^ Indexed to 100 in Jan. 1997 for the Broad and OITP indexes and Mar. 1973 for the Major Currencies index.







110

106

102

98

94

90

Industrial Countries: Nominal and Real Interest Rates

	3-m	onth Libor	10-ye	ar nominal	10-ye	ar indexed
	Latest	Change since Jan. Greenbook	Latest	Change since Jan. Greenbook	Latest	Change since Jan. Greenbook
Germany	0.60	-0.02	3.13	-0.15	0.76	-0.10
Japan	0.25	-0.01	1.31	-0.01	1.69	0.12
United Kingdom	0.64	0.03	4.05	0.02	0.94	0.13
Canada	0.40	-0.05	3.51	0.02		
United States	0.26	0.01	3.71	-0.02	1.57	0.10

... Not applicable. Libor: London interbank offered rate.







Inflation-Indexed 10-Year Government Bond Yields Weekly





Measures of Market Volatility



2005 2006 2007 2008 *Annualized standard deviation of 60-day window of daily returns.

Emerging Markets: Exchange Rates and Stock Market Indexes

	LACHAINE V			Demonst alleges alleges
	Latest	Jan. Greenbook*	Latest	Jan. Greenbook
Mexico	12.6275	-0.2	32514	0.1
Brazil	1.7894	0.7	69576	-0.5
Venezuela	4.29	0.0	57058	-4.4
China	6.8263	-0.0	3069	-5.5
Hong Kong	7.7597	-0.0	21208	-2.2
Korea	1135.2	0.5	1661	-2.9
Faiwan	31.80	-0.1	7442	-9.8
Fhailand	32.71	-0.5	719	-2.4

* Positive percent change denotes appreciation of U.S. dollar.









Emerging Markets: Short-Term Interest Rates and Dollar-Denominated Bond Spreads

	Short-term interest rates*		Dollar-do bond s	enominated preads**
	Latest	Change since Jan. Greenbook	Latest	Change since Jan. Greenbook
Mexico	4.44	-0.09	1.32	-0.38
Brazil	9.13	0.12	1.85	-0.20
Argentina	10.81	0.13	7.08	0.29
China	•••	•••	0.88	0.38
Korea	2.10	0.00		
Taiwan	1.24	0.01		
Singapore	0.31	0.00		
Hong Kong	0.08	0.02		

*One-month interest rate except 1-week rate for Korea. (No reliable short-term interest rate exists for China.) **EMBI+ Spreads or EMBI Global Spreads over similar-maturity U.S. Treasury securities. ... Not applicable. Korea, Taiwan, and Hong Kong have no outstanding dollar-denominated sovereign bonds.

EMBI+ Spreads Weekly











Developments in Advanced Foreign Economies

Economic performance in the advanced foreign economies was mixed in the fourth quarter, with real GDP advancing sharply in Canada and Japan but rising only slightly in the euro area and the United Kingdom. That divide appears to have persisted in the first quarter, as indicators point to continued rapid economic growth in Canada and moderate expansion in Japan but somewhat anemic growth in Europe. Manufacturing PMIs and industrial-sector confidence indicators continued to rise in all major countries, spurred by rebounding global trade. However, retail sales showed weakness recently in the euro area and the United Kingdom. Furthermore, consumer confidence turned down in the euro area, as the turmoil over Greek debt depressed asset prices and raised concerns over economic prospects.

Amid rising energy prices, 12-month headline inflation for January rose in all major countries but remained below their respective targets except in the United Kingdom, where an increase in the value-added tax helped push inflation to 3½ percent. Excluding food and energy, inflation in the advanced foreign economies remained subdued. All major foreign central banks kept their policy rates unchanged.

Advanced Foreign Economies



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1, 21	

Component	20081	20001		20	09	
r	2008	2009	Q1	Q2	Q3	Q4
GDP	-4.4	9	-12.3	5.2	.0	4.6
Total domestic demand	-1.9	-2.8	-9.9	-1.9	-1.4	2.4
Consumption	-1.8	1.0	-5.2	4.6	2.4	2.7
Private investment	-5.3	-15.7	-29.5	-18.7	-12.9	1.3
Public investment	-8.6	6.7	15.0	28.4	-6.2	-6.4
Government consumption	5	2.0	3.4	1.1	.5	3.3
Inventories ²	.5	-1.0	-2.0	-2.1	2	.2
Exports	-13.4	-5.3	-66.3	42.2	37.8	21.7
Imports	.9	-15.5	-53.9	-14.7	23.3	5.3
Net exports ²	-2.3	1.0	-5.5	5.9	2.1	2.2

Japanese Real GDP (Percent change from previous period except as noted, annual rate)

1. Q4/Q4.

2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

In **Japan**, real GDP increased 4.6 percent at an annual rate in the fourth quarter according to the initial estimate, but growth was revised down from 1.3 percent to zero in the previous quarter. The recovery continued to benefit from the rebound in global trade and showed signs of spreading through the economy. Domestic demand, which had fallen since the first quarter of 2008, finally rose in the fourth quarter, as private and public consumption accelerated and private investment turned up.

Recent indicators suggest that the Japanese economy has continued to expand in the first quarter. Real exports rose in January at a pace just below the fourth-quarter average, while real imports accelerated, pointing to a positive but moderating contribution of net exports to GDP growth. Other January data suggest that the recovery continues to spill over to the domestic sector. Industrial production rose 2.5 percent, the eleventh consecutive monthly gain; retail sales increased 2.9 percent, the fastest growth in six years; and housing starts, which had fallen to a record low last August, continued to rebound. In addition, more than half a million jobs were added in January, driving down the unemployment rate to 4.9 percent from 5.2 percent in December. Furthermore, consumer and business confidence edged up during the first quarter. In contrast, new car registrations fell for the second straight month in February and machinery orders slipped in January.

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Economic Indicators as noted)

(1 crocht chia	(reforme thange nom previous period except us noted)									
		2009		20	09	2010				
Indicator	Q2	Q3	Q4	Nov.	Dec.	Jan.	Feb.			
Housing starts	-14.3	-7.2	11.0	3.8	3.3	5.4	n.a.			
Machinery orders ¹	-4.9	9	.5	-11.3	20.1	-3.7	n.a.			
Household expenditures	1.1	.6	.8	.0	.7	1.0	n.a.			
New car registrations	13.2	20.1	9.6	4.7	1.2	-1.2	-7.5			
Business sentiment ²	-45.0	-38.0	-32.0							
Wholesale prices ³	-5.5	-8.3	-5.2	-5.0	-3.9	-2.1	-1.5			

Private sector excluding ships and electric power.
Tankan survey, diffusion index. Level.
Percent change from year earlier; not seasonally adjusted.
n.a. Not available. ... Not applicable.
Source: Haver Analytics.

The 12-month inflation rate rose 0.4 percentage point in January, to negative 1.3 percent, but the so-called core-core inflation, which excludes both fresh food and energy prices, remained at negative 1.2 percent, the lowest rate since records began in 1971. Preliminary data for February, available only for the Tokyo metropolitan area, suggest that deflationary pressure may have eased a bit, and Japanese 12-month wage growth turned positive in January for the first time in 20 months.

On February 18, the Bank of Japan left its policy rate near zero and repeated its commitment to overcome deflation and return to a sustainable growth path with price stability. On March 2, the Japanese parliament advanced a record large budget for the next fiscal year. The new budget includes increased transfers to households and local governments but also substantial cuts to public works projects.

			_			
Component	20081	20001		20	09	
c omb output	2008	2008 2009		Q2	Q3	Q4
GDP	-1.8	-2.1	-9.6	5	1.7	.5
Total domestic demand	4	-2.8	-8.4	-3.3	1.5	9
Consumption	7	6	-1.9	.3	7	1
Investment	-5.9	-8.7	-19.9	-6.7	-3.7	-3.3
Government consumption	2.3	1.8	2.2	2.4	3.1	5
Inventories ²	.7	-1.0	-3.6	-2.4	2.1	.1
Exports	-7.0	-5.2	-29.3	-4.5	11.9	7.0
Imports	-4.0	-6.9	-27.2	-11.0	11 .8	3.7
Net exports ²	-1.4	.7	-1.2	2.8	.1	1.3
Memo: GDP of selected countries						
France	-1.7	3	-5.3	1.4	.7	2.4
Germany	-1.8	-2.4	-13.4	1.8	2.9	.0
Italy	-2.9	-2.8	-10.5	-1.9	2.4	8

Euro-Area Real GDP (Percent change from previous period except as noted, annual rate)

1. Q4/Q4. 2. Percentage point contribution to GDP growth. Source: Haver Analytics.

In the **euro area**, real GDP grew at an anemic annual rate of 0.5 percent in the fourth quarter. Import growth slowed more than export growth so that net exports made a 1¹/₄ percentage point contribution to GDP growth, but final domestic demand continued to decline and inventory adjustment made a negligible contribution to growth. Among countries, German GDP stagnated after two quarters of growth; Italian GDP retreated 0.8 percent after one quarter of growth; and Spanish GDP declined 0.4 percent, a significant improvement over the previous three quarters. France was the one major country with strong growth at 2.4 percent.

Other recent data also suggest little near-term momentum in the euro-area economy. The euro-area composite PMI has been about flat, on net, since November. Continued improvement in the manufacturing PMI has been offset by declines in January and February in the services PMI, as the export-driven recovery in manufacturing has been slow to spread to the domestic economy. Euro-area retail sales fell 0.3 percent and new passenger car registrations declined 8.5 percent in January, consistent with continued weak household demand. Consumer sentiment retreated in February amid deteriorating prospects for personal finances and the overall economy. Euro-area industrial production declined 1.7 percent in December, but data for individual countries pointed to a rebound in January.

Indicators for Greece since the last Greenbook point to worsening economic conditions and increasing fiscal strains. Output fell 3 percent in the fourth quarter, economic sentiment turned down notably in January and February, and the purchasing managers' survey stayed in recessionary territory for January. Since last fall's announcement of revised deficit projections of almost 13 percent of GDP for 2009, market sentiment toward Greece has turned sharply negative. An ambitious 3-year consolidation plan presented in January called for budget cuts of 4 percent of GDP this year and 3 percent in each of the following two years. In addition, as part of negotiations with the European Union related to the Stability and Growth Pact, the Greek parliament recently approved further austerity measures, including lowering public sector wage costs and increasing a number of taxes. Moreover, so far this month there have been additional indications that European aid could be made available to Greece, if needed.

In February, 12-month inflation in the euro area eased slightly to 0.9 percent according to the flash estimate. Core inflation, excluding energy and unprocessed food, was 0.9 percent in January, the lowest rate in 10 years.

The ECB kept its benchmark policy rate unchanged at 1 percent at its February and March meetings but took further steps to unwind its enhanced credit support measures. The ECB announced on March 4 that it would return to variable-rate tender procedures in its three-month refinancing operations starting on April 28 but with allotment amounts aimed at "ensuring smooth conditions in money markets." The ECB said it will continue to conduct its main refinancing operations (of one-week funds), as well as its special one-month operations, as fixed-rate tenders with full allotment as long as necessary, and at least until October 12. The ECB has continued to implement plans to buy \notin 60 billion worth of covered bonds; by early March, it had purchased \notin 40 billion in such bonds.



Economic Sentiment



Percent balance Consumer confidence Industrial confidence

20

10

0

-10

-20

-30

-40





Economic Indicators ange from previous period except as noted) (Percent ch

	2009				2010		
Indicator	Q2	Q3	Q4	Oct.	Nov.	Dec.	Jan.
Industrial production ¹	-1.3	1.9	.2	7	1.4	-1.6	n.a.
Retail sales volume ²	2	1	2	.4	6	.5	3
New car registrations	12.2	2.8	1.2	1.0	8	-1.6	-8.5
Employment	5	5	n.a.			•••	
Producer prices ³	-5.2	-7.1	-4.1	-6.0	-3.9	-2.2	6
M3 ³	4.8	2.7	3	.2	3	7	8

Excludes construction.
Excludes motor vehicles.
Eurostat harmonized definition. Percent change from year earlier. n.a. Not available. ... Not applicable. Source: Haver Analytics.

In the **United Kingdom**, real GDP expanded at an annual rate of 1.1 percent in the fourth quarter, the first quarterly increase since 2008:Q1. Many analysts had expected households to bring forward consumption expenditures ahead of the expiration of the value-added-tax cut on January 1, 2010. The rise in private consumption was modest, however, and was more than offset by a sharp drop in investment spending. Inventories contributed nearly 2 percentage points to GDP growth, as the decline in manufacturers' stocks slowed markedly. Imports rebounded more strongly than exports, despite weak domestic demand and the relatively low level of the pound, leading to a negative contribution from trade.

(8	F	F	F	,)		
Component	20081	20001	2009					
F	2008	2009	Q1	Q2	Q3	Q4		
GDP	-2.1	-3.3	-10.2	-2.5	-1.2	1.1		
Total domestic demand	-3.4	-2.7	-9.1	-3.7	.2	2.0		
Consumption	9	-2.0	-5.7	-3.7	.3	1.3		
Investment	-9.1	-14.2	-25.8	-22.4	6.6	-11.7		
Government consumption	3.3	2.0	-1.4	3.0	1.4	4.9		
Inventories ²	-2.1	.5	8	2.1	-1.2	1.8		
Exports	-3.6	-5.4	-26.5	-6.2	.4	15.9		
Imports	-8.1	-4.4	-24.3	-10.9	5.4	17.6		
Net exports ²	1.5	2	1	1.5	-1.3	8		

U.K. Real GDP (Percent change from previous period except as noted, annual rate)

1. Q4/Q4.

2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

Incoming data suggest that overall activity has continued to expand at a moderate pace. The February readings of the PMIs for services and manufacturing were consistent with GDP growth at its historical average, and confidence indicators have more than retraced their year-end losses. Moreover, the level of employment has been roughly stable in the second half of 2009.

The nascent recovery remains fragile, however, as several sectors continue to stagnate. Construction orders were flat in the fourth quarter, and industrial production in December remained close to its nadir. Investment intentions improved only marginally in January, while the volume of retail sales dropped nearly 2 percent. However, net lending to individuals increased more than expected in January. The 12-month change in consumer prices jumped to 3.5 percent in January, prompting Bank of England (BOE) Governor Mervyn King to write an open letter to the chancellor of the exchequer, explaining that headline inflation had exceeded the 2 percent target because of three factors: the expiration of the temporary value-added-tax cut on January 1, 2010; the recent increase in oil prices; and the effects of the sharp depreciation in sterling in 2007 and 2008. The BOE judged that inflation is more likely than not to fall below target over the coming year as these "short-run factors wane and spare capacity builds."

The BOE completed its £200 billion asset purchase program at the end of January. Gilts accounted for almost all (£198.3 billion) of assets purchased. The BOE voted to keep the size of its quantitative easing program unchanged in February and March but left the door open to further purchases should the outlook warrant it.



United Kingdom

-5

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(Percent change from previous period except as noted)								
	2009			20)09	2010		
Indicator	Q2	Q3	Q4	Nov.	Dec.	Jan.	Feb.	
Industrial production	5	-1.0	.4	.3	.5	n.a.	n.a.	
Producer input prices ¹	-8.9	-8.7	4.0	4.2	7.4	7.7	6.9	
Retail sales volume	1.3	1.8	.5	4	3	-1.8	n.a.	
Business confidence ²	-22.0	-7.0	.3	4.0	-7.0	4.0	7.0	
Consumer confidence ²	-19.9	-14.1	-8.8	-8.3	-9.7	-5.1	-2.2	
Trade balance ³	-12.9	-13.6	-14.1	-4.6	-4.2	-6.1	n.a.	

1. Percent change from year earlier. 2. Percent balance. 3. Level in billions of U.S. dollars. n.a. Not available. Source: Haver Analytics; FRB staff calculations.

Real GDP in **Canada** rose 5.0 percent at an annual rate in the fourth quarter following an upwardly revised 0.9 percent increase in the third. The strong growth was driven primarily by domestic demand, as private consumption, residential investment, and government expenditures all rose robustly. In contrast, nonresidential fixed investment fell and inventory accumulation subtracted from growth. Net exports contributed about 1½ percentage points to GDP growth. Exports surged, boosted by strong gains in automotive exports; the rise in imports also was concentrated in automotive products.

(i ereent enunge nom												
Component	20081	20001	2009									
1	2008 2009		Q1	Q2	Q3	Q4						
GDP	-1.0	-1.2	-7.0	-3.5	.9	5.0						
Total domestic demand	-1.1	3	-11.8	.7	7.1	3.8						
Consumption	.2	1.9	-1.3	1.6	3.7	3.6						
Investment	-3.6	-5.4	-27.5	-6.1	10.6	6.5						
Government consumption	3.1	4.4	2.0	3.5	6.2	5.8						
Inventories ²	-1.1	-1.1	-4.7	.3	1.3	7						
Exports	-7.3	-7.5	-30.2	-19.1	12.2	15.4						
Imports	-7.7	-4.0	-39.2	-5.7	36.0	8.9						
Net exports ²	.7	-1.0	4.3	-4.2	-6.3	1.5						

Canadian Real GDP	
(Percent change from previous period except as noted, annual rate)

1. Q4/Q4.

2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

Acceleration in activity late in the fourth quarter, combined with a few positive indicators for the first quarter, points to robust near-term growth. The pace of monthly GDP growth increased over the fourth quarter, rising from an annual rate of 4 percent in October to 7.5 percent in December. The gains were widespread across industries. Consumer credit, which remained relatively strong throughout the downturn, has accelerated lately, rising 7.9 percent over the 12 months ending in December.

The Canadian housing market has continued to rebound forcefully. Building permits have increased more than 80 percent from their February 2009 lows to a level near the average of the boom years of 2006 and 2007, and prices for new houses are increasing.

The business sector continues to lag behind the household sector. Manufacturing industrial production in December was only 2.7 percent above its June 2009 low and

remained more than 20 percent below its January 2006 peak. Manufacturing orders, however, rose a robust 13 percent in December, and the Bank of Canada's Business Outlook Survey indicates strong growth and healthy investment in 2010.

Labor market conditions continued to improve in January, as total employment rose by 43,000. Total hours of work also rose following a strong increase in December. The unemployment rate fell slightly to 8.3 percent in January.

Consumer prices rose 1.9 percent over the 12 months ending in January, up 0.6 percentage point from December. Excluding food and energy, inflation jumped to 1.3 percent from 0.7 percent in December. The increase in inflation was due to a rise in gasoline prices and a sharp increase in the prices of passenger vehicles, which were up 3.2 percent in the 12 months to January, the first 12-month increase since June 2007.

At its March meeting, the Bank of Canada maintained its policy rate at 0.25 percent and reiterated its intention, conditional on the outlook for inflation, to keep rates at this level until at least the end of the second quarter of 2010.

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Unemployment Rate









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Economic Indicators (Percent change from previous period except as noted)

	<u> </u>		-				
	2009				2010		
Indicator	Q2	Q3	Q4	Oct.	Nov.	Dec.	Jan.
Industrial production	-3.8	-1.2	2.1	.5	.5	1.3	n.a.
New manufacturing orders	-1.8	2.0	5.3	-1.4	-2.7	13.2	n.a.
Retail sales	.5	1.4	1.2	.8	-1.3	.6	n.a.
Employment	3	0	.3	1	.4	2	.3
Wholesale sales	.8	3.0	n.a.	.5	2.1	n.a.	n.a.
Ivey PMI ¹	53.4	56.4	55.2	61.2	55.9	48.4	50.8

1. PMI Purchasing managers index. Not seasonally adjusted. 50+ indicates expansion. n.a. Not available. Source: Haver Analytics; Bank for International Settlements.

Economic Situation in Other Countries

Economic activity in the emerging market economies continued to expand in the fourth quarter, although performance was somewhat uneven across countries. In emerging Asia, growth was robust in China, and several other economies, but stalled in Korea, and slipped into negative territory in India and Singapore. Inventory restocking, along with increased domestic and foreign demand, appears to have supported activity for a number of countries. Exports continued to pick up, although merchandise trade balances declined for some countries where strong domestic demand caused imports to outpace exports. In Latin America, economic activity also remained strong, particularly in Mexico, where it was supported by continued expansion in manufacturing and exports to the United States. However, the severe earthquake in Chile is having a negative impact on activity there. Although inflation has moderated a bit in parts of emerging Asia, headline inflation remained elevated in much of the emerging market world and moved up in Mexico and Brazil. Adverse weather-related food price increases remained the key driver of inflation in most cases.

In **China**, real GDP growth remained robust in the fourth quarter. Recent indicators point to a continuation of strong growth in the current quarter. The PMI for the manufacturing sector edged lower to 52 in February, but still signals expansion. Auto sales in January set a monthly record, with 1.7 million cars sold, up 126 percent from their year-earlier level. Both imports and exports rose in January and February, keeping the average trade surplus over the two months about the same as in the fourth quarter. Authorities reported a \$284 billion current account surplus for 2009, down from \$426 billion in 2008.

In February, the People's Bank of China raised required reserve ratios 50 basis points, to 16¹/₂ percent for large banks and 14¹/₂ percent for smaller banks, the second increase this year. Chinese authorities acted partly in response to an acceleration in bank lending in January and an upward trend in consumer price inflation since the middle of last year, although inflation edged lower in January. In addition, the China Banking Regulatory Commission ordered banks to limit new lending to investment companies set up by local governments; these companies have been the primary vehicles by which local governments have funded stimulus spending.

Indicator	2008	2000		2009		2010	
	2008	2009	Q3	Q4	Dec.	Jan.	Feb.
Real GDP ¹	7.0	10.8	10.8	10.1	• • •	• • •	• • •
Industrial production	4.3	19.5	4.8	3.0	1.0	n.a.	n.a.
Consumer prices ²	1.2	1.9	-1.3	.7	1.9	1.5	n.a.
Merch. trade balance ³	298.1	195.8	133.7	165.9	159.0	119.9	204.3

Chinese Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

1. Gross domestic product. Annual rate. Quarterly data estimated by staff from reported 4-quarter growth rates. Annual data are Q4/Q4.

2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.

3. Billions of U.S. dollars, annualized. Imports are valued at cost, insurance, and freight. n.a. Not available. ... Not applicable.

Source: CEIC.

In **India**, real GDP contracted in the fourth quarter, marking the first quarter of negative growth since 2004. The contraction was primarily driven by a decline in agricultural output, which reflected a poor harvest following a drought in the summer. Industrial production continued to grow at a strong pace in the fourth quarter. The merchandise trade deficit widened sharply in December, with a run-up in imports at the end of the year, but narrowed somewhat in January. Recent indicators point to a continuation of momentum in manufacturing activity in the first quarter: The PMI for manufacturing shot up to $58\frac{1}{2}$ in February, indicating the fastest pace of expansion since June 2008.

Headline consumer price inflation continued to increase, reaching 15¹/₄ percent on a 12-month basis in January. The rise in inflation primarily reflected rapidly rising food prices. However, more recent indicators point to a moderation of inflationary pressures from food prices.

Indicator	2009	2009					2010
	2008	2009	Q3	Q4	Nov.	Dec.	Jan.
Real GDP ¹	3.2	6.0	8.0	-1.9	• • •	• • •	• • •
Industrial production	4.4	6.5	5.3	2.7	3.3	3.3	n.a.
Consumer prices ²	9.7	13.9	11.8	12.6	12.5	13.9	15.2
Wholesale prices ²	6.1	7.3	1	4.7	5.6	7.3	8.6
Merch. trade balance ³	-126.2	-88.4	-74.9	-113.9	-103.0	-153.3	-135.1
Current account ⁴	-31.0	n.a.	-50.5	n.a.	• • •	•••	•••

Indian Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

Gross domestic product. Annual rate. Annual data are Q4/Q4.
Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.
Billions of U.S. dollars, annualized.
Billions of U.S. dollars, not seasonally adjusted, annualized.
Not available. ... Not applicable.
Source: CEIC.



Merchandise Trade Balances



Gross External Debt













Percent of reserves

China and India

In the **newly industrialized economies** (**NIEs**), real GDP growth slowed sharply during the fourth quarter in Korea and Singapore but rose in Taiwan and Hong Kong.¹ According to the advance estimate, growth slowed to less than 1 percent at an annual rate in Korea, partly reflecting frontloading of production into the previous quarter due to the lunar holiday in October. The rapid increase in fourth-quarter real GDP in Taiwan and Hong Kong reflected broad-based gains in both domestic and external demand. In Taiwan, there was also a large contribution from inventory accumulation. Recent indicators point to a continuation of recoveries in manufacturing and exports, with Singapore's manufacturing sector appearing to be particularly strong.

Headline inflation in the NIEs has generally risen this year from very low levels. Within the region, Korea experienced the largest increase in consumer prices—2.7 percent in February from a year earlier—largely reflecting rising food prices; core inflation, which excludes food and energy, has moderated in recent months. To date, central banks in the region have kept policy rates on hold.

	2008	2009 2009		09		2010	
	2008	2009	Q3	Q4	Nov.	Dec.	Jan.
Real GDP ¹						1	
Hong Kong	-2.9	2.5	1.7	9.5	• • •		
Korea	-3.4	6.3	13.6	.7		• • •	• • •
Singapore	-4.1	4.0	11.5	-2.8	• • •	• • •	• • •
Taiwan	-6.3	8.5	10.2	18.0	• • •	•••	•••
Industrial production							
Hong Kong	-6.6	n.a.	-2.6	n.a.	• • •	• • •	• • •
Korea	3.4	-1.3	6.9	1.2	1.8	2.4	.0
Singapore	-4.2	-4.3	8.4	-12.1	-9.8	18.5	15.4
Taiwan	-1.8	-8 .1	8.0	9.7	5.4	4.6	1.1

Economic Indicators for Newly Industrialized Economies: Growth (Percent change from previous period, seasonally adjusted, except as noted)

1. Gross domestic product. Annual rate. Annual data are Q4/Q4. n.a. Not available. ... Not applicable. Source: CEIC.

¹ The NIEs are Hong Kong, Singapore, South Korea, and Taiwan.

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance (Billions of U.S. dollars; seasonally adjusted, annualized)

	2008	2000		2009		20	10
		2009	Q3	Q4	Dec.	Jan.	Feb.
Hong Kong	-25.9	-28.9	-39.3	-40.5	-42.9	-66.7	n.a.
Korea	5.7	56.1	56.9	56.8	71.9	35.4	n.a.
Singapore	18.4	24.1	23.7	34.6	35.3	34.9	n.a.
Taiwan	4.4	20.3	20.4	10.4	13.8	11.1	2.8

Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation (Non-seasonally adjusted percent change from year earlier except as noted)

	2008 ¹	20001		2009	2010		
		2009	Q3	Q4	Dec.	Jan.	Feb.
Hong Kong	2.1	1.2	9	1.3	1.3	1.0	n.a.
Korea	4.1	2.8	2.0	2.4	2.8	3.1	2.7
Singapore	5.5	5	3	8	5	.2	n.a.
Taiwan	1.3	2	-1.3	-1.3	2	.3	2.4

1. Dec./Dec. n.a. Not available. Source: CEIC.

Industrial Production Jan. 2000 = 100 205 185 165 145 125 105 85 65

2003 2004 2005 2006 2007 2008 2009 2010 Source: CEIC.





Gross External Debt









Newly Industrialized Economies

In the Association of Southeast Asian Nations (ASEAN-4), real GDP grew rapidly in Thailand and Malaysia in the fourth quarter, reflecting a rapid rise in inventories after several quarters of destocking.² In addition, economic activity was boosted by a new fiscal stimulus package and the recovery of private consumption in Thailand, and a continued increase in investment in Malaysia. Real GDP in Indonesia and the Philippines expanded at a moderate pace, led by domestic demand. Within the region, indicators for the current quarter are only available in Thailand, where consumer confidence and exports continued to improve in January; industrial production declined after a spike in December, but remained above the average level of the fourth quarter.

Headline inflation in the region continued to rise this year on a 12-month basis. Core inflation is also following an upward trend, amid an economic recovery, most notably in Thailand and the Philippines. Inflationary pressures from food prices remained significant in Thailand, but eased elsewhere. Inflation generally remained below central bank target ranges, except in the Philippines. In early March, Malaysia's central bank raised its main policy rate 25 basis points to 2.25 percent, the first rate hike in the ASEAN region.

Indicator	2008	2000	2009				2010
	2008	2009	Q3	Q4	Nov.	Dec.	Jan.
Real GDP ¹							
Indonesia	5.4	5.2	7.7	4.3	• • •	• • •	• • •
Malaysia	.2	4.5	9.9	16.4	• • •	• • •	• • •
Philippines	2.6	1.8	3.1	3.5	• • •	• • •	
Thailand	-4.1	6.0	6.9	15.3	•••	•••	•••
Industrial production ²							
Indonesia ³	3.0	1.3	9	4.1	7	.7	n.a.
Malaysia	.7	-7.6	3.4	2.5	-4.2	2.9	n.a.
Philippines	.3	-12.9	6.1	8.1	2.0	6.0	n.a.
Thailand	5.3	-5.2	3.8	9.3	2	10.7	-5.6

ASEAN-4 Economic Indicators: Growth (Percent change from previous period, seasonally adjusted, except as noted)

Note: ASEAN is the Association of Southeast Asian Nations.

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

2. Annual data are annual averages.

3. Staff estimate.

n.a. Not available. ... Not applicable. Source: CEIC.

² The ASEAN-4 is Indonesia, Malaysia, the Philippines, and Thailand.

Indicator	2008	2000		20	09		2010	
	2008	2009	Q3	Q4	Nov.	Dec.	Jan.	
Indonesia ¹	7.9	19.7	16.2	27.0	29.6	21.6	21.5	
Malaysia	42.7	33.6	29.2	38.9	32.0	40. 1	42.5	
Philippines	-7.7	-4.7	-2.7	-2.7	1.5	-8.5	n.a.	
Thailand	.1	19.4	15.9	5.0	6.0	-6.3	14.3	

ASEAN-4 Economic Indicators: Merchandise Trade Balance (Billions of U.S. dollars; seasonally adjusted, annualized)

Note: ASEAN is the Association of Southeast Asian Nations. 1. Imports prior to 2008 do not include trade through Indonesia's bonded zone, causing a break in the trade balance in 2008.

n.a. Not available.

Source: CEIC; Bank of Thailand; Philippines Economic Indicators Telegram (PEIT).

ASEAN-4 Economic Indicators: Consumer Price Inflation

(Non-seasonally adjusted percent change from year earlier except as noted)

Indicator	20081	20001		2009		20	10
	2008	2009	Q3	Q4	Dec.	Jan.	Feb.
Indonesia Malaysia Philippines Thailand	11.1 4.4 8.0 .4	2.8 1.1 4.4 3.5	2.8 -2.3 .3 -2.2	2.6 2 3.0 1.9	2.8 1.1 4.4 3.5	3.7 1.3 4.3 4.1	3.8 n.a. 4.2 3.7

Note: ASEAN is the Association of Southeast Asian Nations.

1. Dec./Dec.

n.a. Not available.

Source: CEIC; Haver Analytics; IMF International Financial Statistics database.

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Merchandise Trade Balances



Gross External Debt



Source: CEIC; Bank for International Settlements.





0 2003 2004 2005 2006 2007 Source: Bloomberg; Haver Analytics. 2008 2009 2010



In **Mexico**, real GDP grew at a strong 8.4 percent pace in the fourth quarter, led by surprisingly rapid expansion in the manufacturing sector, and an increase in exports. A competitive exchange rate and a surge in demand for durable goods from the United States supported the rise in manufacturing exports. However, growth in the services sector remained subdued as still-weak employment and tight credit conditions weighed on consumer demand. Incoming data suggest that the economy continued to expand in the current quarter, albeit at a slower pace. The PMI edged up higher in February for the services sector but decreased a bit for the manufacturing sector. The trade surplus narrowed as imports rose more than exports.

Twelve-month headline inflation jumped to 4.5 percent in January and increased further to 4.8 percent in February, above the 2-to-4 percent target range of the Bank of Mexico (BOM). The increase in inflation primarily reflected the effects of the recent hikes in taxes and administered prices. Unusual weather conditions also boosted prices of fresh fruits and vegetables. In late February, Mexico's Foreign Exchange Commission— composed of officials from the BOM and the Ministry of Finance—announced a revival of the foreign exchange reserve mechanism that was in place during the 1996-2001 period. The BOM will auction \$600 million worth of put options to domestic financial institutions at the end of each month. The owners of the options will have the right to sell U.S. dollars to the BOM in exchange for pesos at the previous day's fix rate, whenever that rate in pesos per dollar is lower than its average over the previous 20 days. With this mechanism, the Mexican authorities aim to accumulate reserves on a gradual basis without putting too much pressure on the peso.

Indicator	2008	2009	2009			2010	
	2008		Q3	Q4	Dec.	Jan.	Feb.
Real GDP ¹	-1.2	-2.4	10.4	8.4		• • •	•••
Overall economic							
activity	1.3	-6.4	2.6	2.2	.4	n.a.	n.a.
Industrial production	9	-7.0	1.9	2.2	1.0	n.a.	n.a.
Unemployment rate ²	4.0	5.5	5.8	5.6	5.5	5.6	n.a.
Consumer prices ³	6.5	3.6	5.1	4.0	3.6	4.5	4.8
Merch. trade balance ⁴	-17.3	-4.7	-5.9	2.3	2.1	-4.3	n.a .
Merchandise imports ⁴	308.6	234.4	236.5	259.1	266.4	274.2	n.a.
Merchandise exports ⁴	291.3	229.7	230.6	261.4	268.5	269.9	n.a.
Current account ³	-15.8	-5.2	-14.8	-2.8	•••	•••	•••

Mexican Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

Percent; counts as unemployed those working 1 hour a week or less.
Non-seasonally adjusted percent change from year-earlier period, except annual data,

which are Dec./Dec.

Billions of U.S. dollars, annualized.
Billions of U.S. dollars, not seasonally adjusted, annualized.

n.a. Not available. ... Not applicable.

Source: Haver Analytics; Bank of Mexico.

In **Brazil**, economic activity was strong in the fourth quarter, with industrial production and retail sales growing briskly. Activity appears to have continued to expand in the first quarter, albeit at a more moderate pace. In January, industrial production was boosted by still-strong growth in output of consumer durables, which has benefitted from tax breaks introduced in response to the financial crisis. Consumer confidence continued to rise. The PMI for manufacturing declined in February, but remained in expansionary territory. Although the government has begun to withdraw fiscal stimulus measures, governmentdirected credit continued to expand and reached 42 percent of total credit in January, up from 34 percent in September 2008. The trade balance narrowed in January and February, with imports rising more than exports.

Headline inflation increased to 4.8 percent in February on a 12-month basis, above the central bank's inflation target of 4¹/₂ percent. Central bank officials have expressed concern about inflationary pressures. In late February, the central bank announced changes in its complex system of reserve and liquidity requirements that partially unwind the unconventional measures enacted in the fall of 2008. There is policy uncertainty amid speculation that central bank President Henrique Meirelles might leave his post to run for political office in the upcoming elections in October.
Indiantar	2008	2009	2009			2010	
Indicator			Q3	Q4	Dec.	Jan.	Feb.
Real GDP ¹	.9	n.a.	5.1	n.a.	• • •	• • •	• • •
Industrial production	3.1	-7.4	4.7	3.8	2	1.1	n.a.
Unemployment rate ²	7.9	8.1	7.9	7.7	7.9	7.5	n.a.
Consumer prices ³	5.9	4.3	4.4	4.2	4.3	4.6	4.8
Merch. trade balance ⁴	25.0	25.3	23.0	15.8	14.3	13.8	11.3
Current account ⁵	-28.2	-24.3	-19.7	-48.9	-71.4	-46 .1	n.a.

Brazilian Economic Indicators

(Percent change from previous period, seasonally adjusted, except as noted)

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

2. Percent.

3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Price index is IPCA.

4. Billions of U.S. dollars, annualized.
5. Billions of U.S. dollars, not seasonally adjusted, annualized.
n.a. Not available. ... Not applicable.
Source: Haver Analytics; IMF International Financial Statistics database; Intituto Brasileiro de Geografia e Estatistica.



Latin America

Last page of International Developments

Abbreviations–Part 2

ABCP	asset-backed commercial paper
ABS	asset-backed securities
AMLF	Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity
	Facility
ASEAN-4	Association of Southeast Asian Nations (Indonesia, Malaysia,
	the Philippines, and Thailand)
BEA	Bureau of Economic Analysis, Department of Commerce
BLS	Bureau of Labor Statistics, Department of Labor
BOE	Bank of England
BOM	Bank of Mexico
CBO	Congressional Budget Office
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CPFF	Commercial Paper Funding Facility
CPI	consumer price index
DPI	disposable personal income
ECB	European Central Bank
ECI	employment cost index
EU	European Union
EUC	emergency unemployment compensation
FAS	Financial Accounting Standards
FHA	Federal Housing Administration, Department of Housing and Urban
	Development
FHFA	Federal Housing Finance Agency
FOMC	Federal Open Market Committee; also, the Committee
FRBNY	Federal Reserve Bank of New York
GDP	gross domestic product
GSE	government-sponsored enterprise

IP	industrial production
ISM	Institute for Supply Management
IT	information technology
JOLTS	Job Openings and Labor Turnover Survey
MBS	mortgage-backed securities
NFIB	National Federation of Independent Business
NIEs	newly industrialized economies (Hong Kong, Singapore, South Korea,
	and Taiwan)
NIPA	national income and product accounts
OMB	Office of Management and Budget
PCE	personal consumption expenditures
PDCF	Primary Dealer Credit Facility
PMI	purchasing managers index
PPI	producer price index
TAF	Term Auction Facility
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TIPS	Treasury inflation-protected securities
TSLF	Term Securities Lending Facility
UI	unemployment insurance
WTI	West Texas Intermediate