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## It's Official—Deflation the Greater Near-Term Risk

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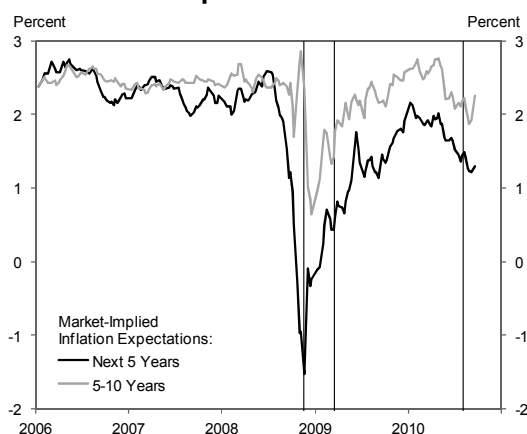
■ Earlier this week, the Federal Open Market Committee signaled—for the first time in at least half a century—that inflation has fallen to undesirably low levels. By linking the inflation outlook with the Fed's mandate and providing reassurance that Fed policymakers were “prepared to provide additional accommodation if needed,” the statement reinforced previous messages that monetary policy is likely to stay very easy for a very long time.

■ We have been worried for some time about the possibility of inflation falling too far. The basic reason for this view was that the slump in demand during the recession had opened up substantial excess capacity in the economy that would likely persist for years. The downward pressure from spare capacity clearly has dominated any incipient inflation from imported goods or commodities. Indeed, without additional countervailing forces, spare capacity would almost certainly push the US economy into deflation soon.

■ Luckily, other forces provide an important buffer against deflation. First, stable inflation expectations exert a “gravitational pull” on actual inflation—a pull that can be upward when inflation is very low. Second, nominal rigidities, in particular the reluctance of employers to impose wage cuts, reduces deflationary pressure, at least in the early stages. Third, the Federal Reserve is clearly prepared to scale up its unconventional easing if necessary to avoid a Japan-style deflation. We therefore think a pernicious deflation remains a low risk.

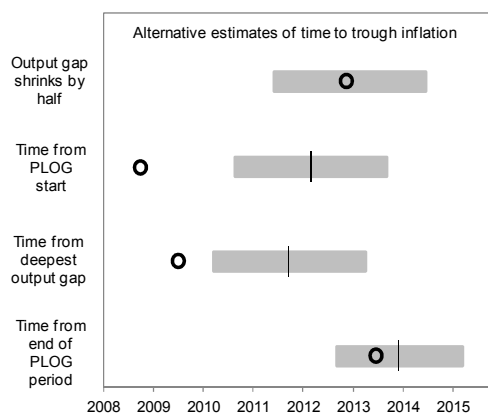
■ Eventually, inflation pressures will shift back to the upside as spare capacity diminishes and/or commodity or import prices accelerate. But a review of historical experiences in countries with large output gaps and financial crises suggests that it could well be late 2012 or 2013 before inflation bottoms out.

### Inflation Expectations Drift Lower



Note: Vertical lines denote Fed asset purchase announcements.  
Source: Federal Reserve Board.

### A Long Time Till Trough Inflation



Note: PLOG = persistent large (at least 1.5% of GDP) output gap.  
Source: Our estimates as described in text.

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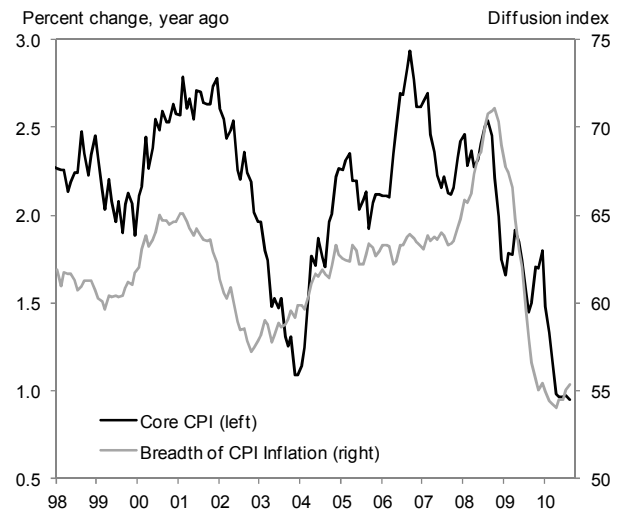
# I. It's Official—Deflation the Greater Near-Term Risk

Earlier this week, the Federal Open Market Committee signaled—for the first time in at least half a century—that inflation has fallen to undesirably low levels. The FOMC's policy statement described inflation as “somewhat below” optimal and “likely to remain subdued for some time before rising to levels the Committee considers consistent with its mandate.”<sup>1</sup> By linking the inflation outlook with the Fed's mandate and providing reassurance that Fed policymakers were “prepared to provide additional accommodation if needed,” the statement reinforced previous messages that monetary policy is likely to stay very easy for a very long time.

We have worried for a while about the possibility that inflation could fall too far. Since the early days of the financial crisis, we have been forecasting a sharp decline in inflation, and last year we published an extensive paper suggesting that—in spite of market fears about high inflation—deflation was actually the bigger risk.<sup>2</sup> The shift in data and market views in 2009 and 2010 has been remarkable. Inflation has moved significantly lower, with contributions from a broad array of goods and services (Exhibit 1). Market-based inflation expectations rebounded sharply in the months following the launch of the Fed's first quantitative easing program, but have since pulled back to below pre-crisis levels (Exhibit 2). And both households and market participants seem to have relaxed somewhat about tail risks, particularly on the high side: the variance of inflation expectations has declined (Exhibit 3), the frequency of Internet searches on words such as “hyperinflation” has declined dramatically, and anecdotally investors seem much less concerned about inflation.<sup>3</sup>

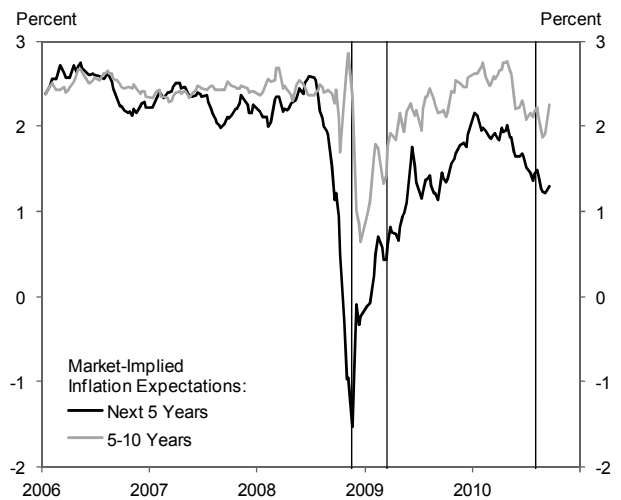
If nothing else, the past year has served as a reminder that the output gap—the difference between the economy's actual production and its sustainable capacity—matters for inflation. In Economics 101 terms, a shift to lower demand means lower output and lower prices (or at least lower inflation). The

**Exhibit 1: A Broad-Based Decline in Inflation**



Source: Department of Labor. Our calculations.

**Exhibit 2: Inflation Expectations Drift Lower**



Note: Vertical lines denote Fed asset purchase announcements.  
Source: Federal Reserve Board.

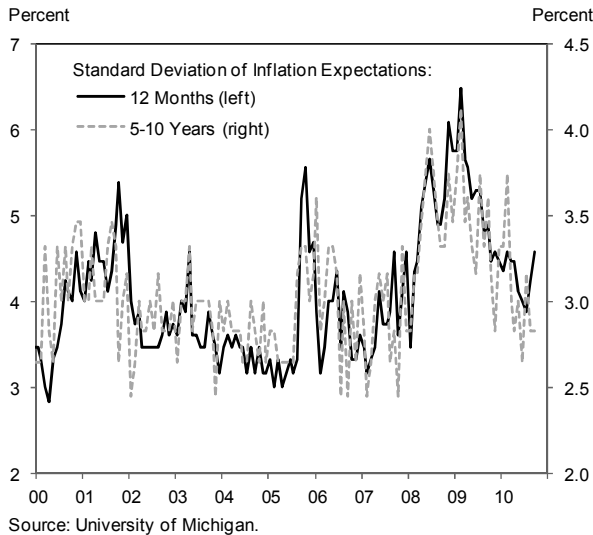
view that spare capacity is an important driver of inflation is, or at least was, still met with skepticism in some quarters, but the financial crisis has provided an unfortunate natural experiment and new research has re-emphasized its importance. A review of episodes of “persistent large output gaps” (PLOGs) in major developed economies by Andre Meier of the International Monetary Fund showed consistent declines in inflation, while a recent paper on inflation forecasting by James Stock and Mark Watson develops a measure of the “recession gap” as a

<sup>1</sup> Although the FOMC worried about downside risks to inflation early in 2003, it never formally indicated that inflation was actually too low. In January 2004, then-Fed Governor Ben Bernanke described inflation as “very nearly at the bottom of the acceptable range,” and core inflation indicators are slightly lower now.

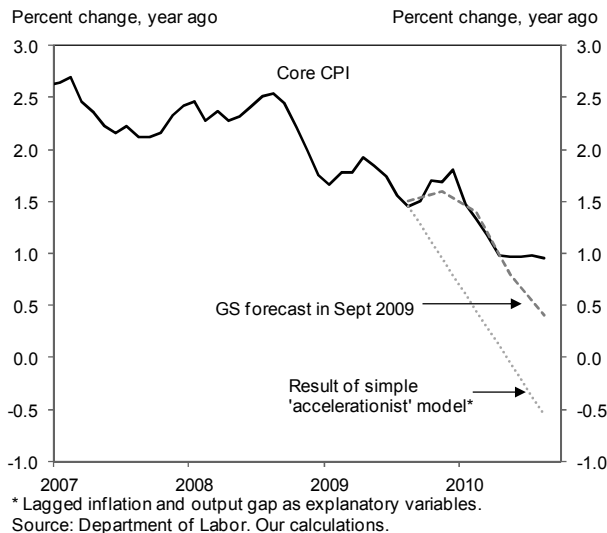
<sup>2</sup> See *GS Global Paper 190*, “Deflating Inflation Fears,” September 29, 2009.

<sup>3</sup> For example, clients ask us about inflation risks much less frequently than they did a year ago. For an update of the chart on Web search traffic in our global paper, see “From Fiscal Crisis to High Inflation? The Risks Remain Low,” *Global Economics Weekly 10/31*, September 8.

**Exhibit 3: Inflation Uncertainty Has Ebbed**



**Exhibit 4: Lower Inflation—But Not As Low as We Thought**



significant indicator of the disinflationary pressure from spare capacity after downturns.<sup>4</sup>

**Deflationary Guardrails**

Still, not everything has played out as we expected. In particular, while inflation has continued to decline, it has not fallen quite as far as we thought—and not nearly as far as a simple “accelerationist” model would suggest (Exhibit 4).<sup>5</sup> Several factors could explain this gap:

<sup>4</sup> “Still Minding the Gap—Inflation Dynamics during Episodes of Persistent Large Output Gaps,” Andre Meier, *IMF Working Paper 10/189*, August 2010, and “Modeling Inflation After the Crisis,” August 5, 2010.

<sup>5</sup> We focus on core inflation because it is a better measure of underlying inflation trends and receives

**1. Spare capacity could be overestimated.** The logic for our original low inflation forecast was demand-driven: the idea that the recession had opened up substantial excess capacity i.e. a large output gap. Directionally, this is clearly true, but we could have overstated the case for one of several reasons. First, the financial crisis resulted in huge cutbacks in investment and may have made capacity in some sectors (e.g. residential home construction) obsolete. However, we are already assuming modest effects of this sort, and based on industry-level data it would be hard to imagine a measurement error big enough to change the basic picture of overcapacity. Second, capacity might be badly matched to the sectors where demand is growing, resulting in inflationary pressures breaking out relatively soon despite a high level of capacity overall. Though we can’t rule this out entirely, the variation in capacity utilization across manufacturing sectors—the part of the economy where utilization is likely to be measured best—is almost precisely equal to its long-term average. A third possibility is that the output gap is simply not an appropriate capacity measure. However, alternatives such as the “recession gap” suggested by Stock and Watson, or simply the detailed capacity utilization rates in different parts of the economy, paint a broadly similar picture.

**2. Input price pressures have picked up.** Commodities, imported goods, and taxes are all potential sources of higher costs that businesses could ultimately pass through into higher consumer prices. Oil, the most important commodity for the US economy, has rebounded from very low levels early in 2009. More broadly, import prices excluding petroleum are up 3.1% year-over-year, after falling the year before. Although studies suggest that a significant portion of these pressures pass through into headline CPI (perhaps around ¼, with some dilution because of domestic supply chain costs), the impact on core inflation is much lower, given that commodity prices affect the core only indirectly. Still, the rebound in import and commodity prices may have partly offset disinflationary pressures from the output gap.

Another possible source of cost-push pressures is higher government taxes or reduced subsidies. The most obvious example here is tobacco; prices are up 7.7% year-over-year in part because of higher sales taxes; the increase over the prior year was a whopping 28%. Public transportation costs are up 6.6%, which may reflect budget pressures making their way into higher fares. And educational tuition—which includes fees from state institutions—is up 4.4% year-over-year. However, as a whole the contribution of

greater weight in Fed deliberations. See “The Case for Core,” *US Economics Analyst 07/28*, July 13, 2007.

these items to overall inflation is not much different than in prior years.

**3. Inflation expectations seem to have been a stabilizing force.** The higher the level of inflation going into a downturn, the more it drops in the aftermath (Exhibit 5).<sup>6</sup> The implication is that there is some other force mitigating the disinflationary pressures from spare capacity—a force that grows stronger at lower levels of inflation.

One candidate for this unseen force is the “gravity” of inflation expectations, which could pull inflation towards a low but positive level. Academic literature, including Fed Chairman Bernanke’s own writings, has emphasized the importance of expectations in the inflation process. In this light, it is interesting that many of the countries in Exhibit 5 (circled in chart) that saw inflation fall relatively more during PLOGs had recently adopted formal low inflation targets. The anchoring role of inflation expectations seems to have increased in recent years: Exhibit 6 estimates the coefficient on the gap between expected and actual inflation, using rolling regressions over 10 year windows, where the dependent variable is the change in year-over-year core CPI inflation, and expected inflation is the University of Michigan’s 5-to-10 year median measure (with the output gap and import price inflation as controls). But because inflation expectations have been so stable in recent years, it is hard to be confident about their precise effects.

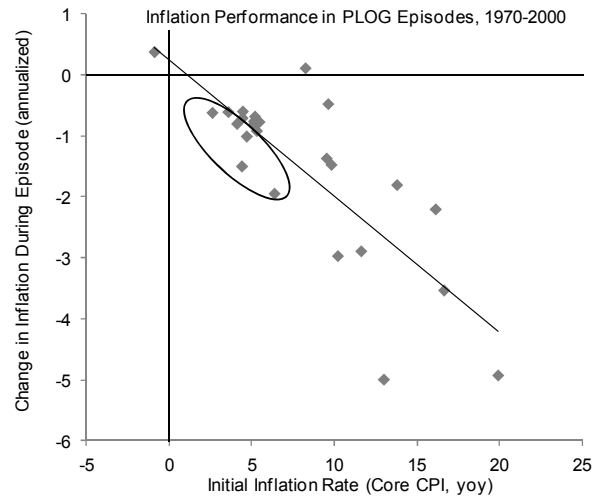
**4. Nominal rigidities may also slow disinflation.** An alternative, though not mutually exclusive, explanation for the relationship in Exhibit 5 is that “nominal rigidities”—in layman’s terms, costs associated with changes in prices or wages—may provide a buffer against deflation. A particularly relevant example would be the reluctance of employers to impose nominal wage cuts, which might provide some resistance to inflation falling below zero in the broader economy.

**Balance of Risks: Still Down, A Little...**

Are the risks still skewed towards deflation? We think the answer is yes. Both our cross-sectional regression on the PLOGs episodes and time series regressions on modern US data suggest an output gap coefficient in the neighborhood of 0.1-0.2. In other words, with the economy about 4% below potential by the OECD’s measure, the disinflationary pressure from the output gap would tend to push core inflation down 0.4-0.8 percentage point per year, leaving aside

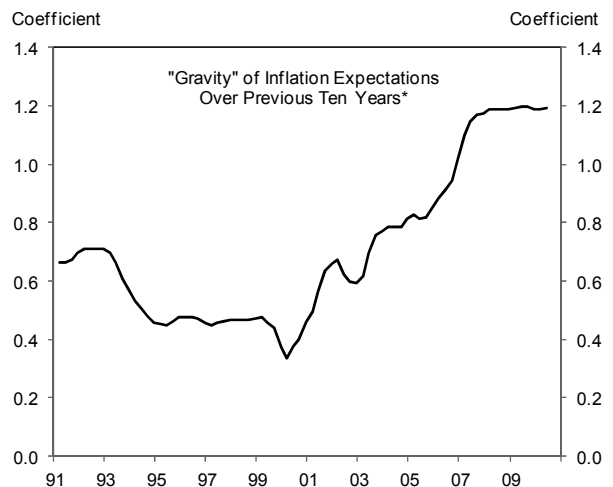
<sup>6</sup> This chart is replicated from Meier, pp. 11. The relationship between the initial level of inflation and its subsequent drop holds up even after we adjust for policy rates, exchange rate moves, and the depth of the output gap.

**Exhibit 5: Less Inflation Means Less Disinflation**



Source: Department of Labor.

**Exhibit 6: Inflation Expectations—A Stronger Anchor**



\* Details described in text. Source: Department of Labor. Our calculations.

other factors.<sup>7</sup> Inflationary pressure from imported goods (commodities or otherwise) is still much weaker, perhaps in the range of 0.2-0.4 percentage points if we assume a 10% pass-through from nonpetroleum import prices to core CPI inflation (a figure which looks high based on our own estimates).

Ultimately, we think the risk of a pernicious deflation is low. Inflationary expectations (and probably nominal rigidities as well) seem to be an important bulwark against deflation, as discussed earlier. If this is right, then the main risk is that inflationary

<sup>7</sup> We suspect the actual US output gap is bigger than this, but to enable comparability in our cross-country analysis, we’ve used the OECD measures, so that is the relevant figure here.

expectations themselves (particularly those of households and businesses) begin to move lower, like the market expectations shown in Exhibit 1. It is no coincidence that Fed announcements of asset purchases or reinvestments (indicated by the three vertical lines on that exhibit) have occurred at times when inflation expectations were notably lower than the long-term average. Clearly, Fed officials see a decline in inflation expectations and/or a heightened risk of deflation as quite costly—not a surprise given the Chairman’s writings on this subject—which is another important reason to think that deflation will probably not be the ultimate outcome.<sup>8</sup>

The bottom line is that core inflation is likely to be at very low but positive levels for a few years. Downward pressure from the output gap should keep inflation below target “for some time,” as the Fed predicts. But moderate, stable inflation expectations—supported by Fed unconventional easing when necessary—as well as any effect of nominal rigidities should keep a sustained deflation from developing.

### ...But Eventually, Inflation Risks Will Point Up

Over time, as spare capacity is eroded by growth and cautious investment, the disinflationary pressure from the output gap will fade. Our best guess is that inflation will bottom out sometime around 2013, although the uncertainty around this estimate is huge. We come to this figure in several (related) ways:

**1. Time until upside pressures from “cost-push” inflation offset downward pressures from spare capacity.** As noted above, current rates of import price inflation (including commodities) suggest a contribution of perhaps 0.2-0.4 percentage point to core inflation per year, a rough assessment to be sure. Given the aforementioned relationship between the output gap and inflation, this suggests that—at current rates of import inflation—the output gap would need to shrink by at least half before the balance of inflation risks would be to the upside. Our US growth forecasts suggest the output gap will shrink only slightly by the end of next year; even if it declined by one point per year thereafter, this criterion would not be met until sometime in mid-2013. Of course, this Rubicon could

<sup>8</sup> Some have argued that the costs of deflation may not be as high as popularly believed. See “Deflation in a historical perspective,” Michael Bordo and Andrew Filardo, Bank for International Settlements Working Paper No 186, November 2005. But deflation—particularly if expected to continue—is likely to be pernicious in a highly indebted economy. For further discussion of why deflation risks are probably still low, see “Deflation: A Rare but Present Danger,” Global Economics Weekly 10/32, September 15, 2010.

be crossed sooner if import prices or other cost-push pressures accelerated significantly.

**2. Time from emergence of a large output gap to trough inflation.** An analysis of the PLOG episodes described above suggests an average of 13 quarters from the emergence of a large output gap (GDP more than 1.5% below potential) to the trough in inflation. The US gap qualified as “large” beginning in the fourth quarter of 2008, so this would imply a trough in early 2012. If anything, this approach underestimates the time required, since many of the PLOG episodes we analyzed involved normal, “V”-shaped recoveries from recession; those linked with major financial crises lasted longer on average.

**3. Time from the peak of spare capacity to trough inflation.** On average, inflation reached its low nine quarters after the output gap was at its largest. With the US gap peaking in mid-2009, the historical pattern suggests a trough in late 2011. However, as above, the likelihood for a slower-than-usual recovery suggests risks are skewed to a longer lag.

**4. Time from the end of the “PLOG” period.** Core inflation typically troughed about two quarters after the last period with a “large” output gap. Per (1) above, this would suggest the fourth quarter of 2013.

The exhibit at the bottom of page 1 summarizes these calculations by showing the implied “trough date” for inflation in each, with a one-standard deviation band on either side. The circles on the chart indicate the reference dates (i.e. in the second row, the circle marks the fourth quarter of 2008, the time when the output gap first became “large”). The estimated trough dates overlap in late 2012 or 2013, suggesting that the trough in inflation is probably still some way off. Faster US growth, significant dollar depreciation, or higher inflation in countries that export to the United States could pull this time forward; a more protracted output gap or a decline in inflationary expectations would push it back.

Over the next few years, the core goods sector is likely to be the “canary in the coal mine” for higher inflation risks. Spare capacity in this sector is not as extreme as in housing or the labor market, and may shrink faster given the greater cyclicity of goods production. Also, because most international trade is in goods, cost-push pressures are most likely to show up in goods prices. Indeed, core goods inflation has already accelerated modestly, to about 1½% year-over year from roughly zero early in the crisis, even as rent and services inflation continues to ebb.

**Andrew Tilton**

## II. Forecast Highlights

**1. Real GDP crawls at a below-potential pace into early 2011.** Federal fiscal stimulus (including its multiplier effects) and stabilization in inventories account for most, if not all, of the 3% increase in real GDP reported for the past four quarters. These supports are now dissipating, as we had expected, and the continuation of recovery thus depends more heavily on the private sector, which faces several headwinds. Among them: (a) weakness in labor income, reflecting the impact of high unemployment on wages and employers' reluctance to rehire aggressively, (b) large overhangs of vacant homes and unused industrial capacity, which limit the potential for major improvements in private-sector investment and (c) limited credit availability from a financial sector that is still on the mend. As a result, we expect growth to average 1½% into early 2011. We then expect a slow reacceleration in growth to 3% in the fourth quarter of 2011 as the headwinds gradually dissipate.

**2. The unemployment rate drifts back up to 10% by the spring of 2011.** So far the "jobless recovery" pattern of the 1991-92 and 2001-03 recoveries has provided a better template for corporate hiring decisions than the more robust payroll rebounds of earlier cycles. Given our forecast for below-trend growth, we expect the unemployment rate to drift back up to 10% by the middle of 2011.

**3. Disinflation continues.** Under any reasonable economic scenario, the gap between actual and potential output—estimated at 6½% of GDP as of the second quarter of 2010 by the Congressional Budget Office—will require years of above-trend growth to eliminate. Accordingly, we expect core consumer inflation—which is already below the Federal Open Market Committee's (FOMC's) longer-term central tendency range—to trend down further, to 0.5% by late 2011.

**4. The FOMC resumes unconventional monetary easing later this year or in early 2011.** Chairman Bernanke outlined three viable options in his Jackson Hole speech. His analysis of each suggested that the order of preference would be (a) buying more assets (presumably Treasury securities, though he did not specify this), (b) strengthening the commitment to keep the federal funds rate low, and (c) cutting the interest rate on excess reserves (IOER). We expect the FOMC to take the first route, and—whether or not they announce the full amount up front—ultimately to expand the Fed's balance sheet by at least \$1 trillion.

**5. Treasury yields stay low.** Once again, the yield on 10-year Treasury notes has hit our target ahead of

schedule and remains close to 2.5%. For now, we expect the yield to trade around this level. However, it could move lower if the economic data push market fears of renewed recession up markedly further.

### A Tasty Cocktail for the Financial Markets

Both the economic data and the FOMC statement were broadly supportive of financial asset prices this week. Durable goods orders fell 1.3% overall, but gained a stronger-than-expected 2.0% excluding transportation equipment, and past data were revised up. The housing numbers showed a modest recovery, with a 10.5% increase in housing starts and a 7.6% rise in existing home sales. Although both new home sales and the homebuilders' index fell slightly short of expectations, and although initial jobless claims came in at a slightly higher-than-expected 465,000, the markets greeted the numbers positively.

More importantly, the FOMC signaled that it stands ready to inject additional stimulus into the economy, and did so in quite a clever way: rather than motivating the shift via a downgrade in its growth expectations, which might have been "scary" to the financial markets, the committee said for the first time that inflation was "somewhat below" its target and that additional easing might be needed to return it to the target (see the center section for a fuller discussion of the inflation outlook). The FOMC statement is consistent with our forecast of a return to quantitative easing. It's not a done deal yet, but the statement suggests that the November 2-3 FOMC meeting is a strong possibility for the announcement of such a shift.

**THE US ECONOMIC AND FINANCIAL OUTLOOK**

(% change on previous period, annualized, except where noted)

	2009 (f)	2010 (f)	2011 (f)	2010				2011			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>OUTPUT AND SPENDING</b>											
Real GDP				<b>3.7</b>	<b>1.6</b>	1.5	1.5	1.5	2.0	2.5	3.0
Year-to-year change	<b>-2.6</b>	2.6	1.8	<b>2.4</b>	<b>3.0</b>	3.0	2.1	1.5	1.6	1.9	2.2
Consumer Expenditure	<b>-1.2</b>	1.5	1.5	<b>1.9</b>	<b>2.0</b>	2.0	1.0	1.0	1.5	2.0	2.5
Residential Fixed Investment	<b>-22.9</b>	-4.0	-2.0	<b>-12.3</b>	<b>27.2</b>	-30.0	-10.0	0.0	5.0	10.0	15.0
Business Fixed Investment	<b>-17.1</b>	5.0	4.6	<b>7.8</b>	<b>17.6</b>	5.0	5.0	2.5	2.5	5.0	5.0
Industrial Production, Mfg	<b>-11.1</b>	5.7	2.5	<b>6.5</b>	<b>8.3</b>	4.5	1.0	1.0	2.0	3.0	4.0
<b>INFLATION</b>											
Consumer Price Index				<b>1.5</b>	<b>-0.7</b>	1.5	1.7	1.4	0.9	0.6	0.3
Year-to-year change	<b>-0.3</b>	1.6	1.1	<b>2.4</b>	<b>1.8</b>	1.2	1.0	1.0	1.4	1.1	0.8
Core Indexes (% chg, yr/yr)											
CPI	<b>1.7</b>	1.0	0.8	<b>1.3</b>	<b>1.0</b>	0.9	0.9	1.1	1.0	0.7	0.5
PCE*	<b>1.5</b>	1.4	0.8	<b>1.8</b>	<b>1.5</b>	1.3	1.1	1.0	0.9	0.8	0.5
Unit Labor Costs (% chg, yr/yr)	<b>-1.6</b>	-2.1	-0.4	<b>-2.9</b>	<b>-2.8</b>	-2.1	-0.4	0.1	-0.4	-0.6	-0.6
<b>LABOR MARKET</b>											
Unemployment Rate (%)	<b>9.3</b>	9.7	10.0	<b>9.7</b>	<b>9.7</b>	9.6	9.8	9.9	10.0	10.0	10.0
<b>FINANCIAL SECTOR</b>											
Federal Funds** (%)	<b>0.12</b>	0.15	0.15	<b>0.16</b>	<b>0.18</b>	0.15	0.15	0.15	0.15	0.15	0.15
3-Month LIBOR (%)	<b>0.25</b>	0.50	0.60	<b>0.27</b>	<b>0.54</b>	0.45	0.50	0.40	0.40	0.45	0.60
Treasury Yield Curve** (%)											
2-Year Note	<b>0.87</b>	0.40	0.75	<b>0.96</b>	<b>0.72</b>	0.40	0.40	0.40	0.50	0.50	0.75
5-Year Note	<b>2.34</b>	1.00	2.00	<b>2.43</b>	<b>2.00</b>	1.00	1.00	1.25	1.50	1.75	2.00
10-Year Note	<b>3.59</b>	2.50	3.25	<b>3.73</b>	<b>3.20</b>	2.75	2.50	2.50	2.75	3.00	3.25
Profits*** (% chg, yr/yr)	<b>5.1</b>	17.3	0.1	<b>27.0</b>	<b>25.3</b>	15.0	4.5	0.0	-5.0	0.0	5.5
Federal Budget (FY, \$ bn)	<b>-1,414</b>	-1,375	-1,300	-	-	-	-	-	-	-	-
<b>FOREIGN SECTOR</b>											
Current Account (% of GDP)	<b>-2.7</b>	-3.1	-2.8	<b>-3.0</b>	<b>-3.4</b>	-3.0	-2.9	-2.9	-2.8	-2.8	-2.7
Exchange Rates											
Euro (\$/€)**	<b>1.46</b>	1.35	1.38	<b>1.36</b>	<b>1.22</b>	1.22	1.35	1.37	1.38	1.38	1.38
Yen (¥/\$)**	<b>90</b>	83	90	<b>91</b>	<b>91</b>	85	83	87	90	90	90

\* PCE = Personal consumption expenditures. \*\* Denotes end of period. \*\*\* Profits are after taxes as reported in the national income and product accounts (NIPA), adjusted to remove inventory profits and depreciation distortions.

NOTE: Published figures are in bold

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# US Calendar

## Focus for the Week Ahead

- The most important indicator is the ISM manufacturing survey. Our preliminary estimate is a drop from 56.3 to 54.0, but we may revisit this based on the other business surveys—Richmond, Chicago, and the GS Analyst Index—that will be released this week. (October 1).
- Consumer confidence probably slipped a bit further in October, based on the decline in the University of Michigan Index (September 28).
- Core PCE inflation probably came in a bit higher than the 0.04% core CPI in August, in part because the very low readings for rent and owners' equivalent rent receive lower weights in the PCE index (October 1).

## Economic Releases and Other Events

Date	Time (EST)	Indicator	Estimate		
			GS	Consensus	Last Report
Mon	Sep 27	10:30 Dallas Fed Manufacturing Survey (Sep)	n.a.	-7.0%	-13.5%
Tue	Sep 28	9:00 S&P/Case Shiller Home Price Index (mom SA, Jul)	n.a.	Flat	+0.28%
		<b>10:00 Consumer Confidence (Sep)</b>	<b>51.5</b>	<b>52.3</b>	<b>53.5</b>
		10:00 Richmond Fed Survey (Sep)	n.a.	+6	+11
		17:30 Atlanta Fed Pres Lockhart spks on economy in Tennessee			
Wed	Sep 29	10:15 Minn Fed Pres Kocherlakota spks on economy in London			
		12:30 Fed Pres Plosser spks on economy in Vineland, NJ			
		13:00 Boston Fed Pres Rosengren spks at Forecasters Club; NYC			
		17:00 GS Analyst Index (Sep)	n.a.	n.a.	55.3
Thu	Sep 30	<b>8:30 Real GDP—Q2 Annualized (Third)</b>	<b>+1.6%</b>	<b>+1.6%</b>	<b>+1.6%</b>
		<b>8:30 Chain-Weight Price Index—Q2 Annualized (Third)</b>	<b>+1.9%</b>	<b>+1.9%</b>	<b>+1.9%</b>
		<b>8:30 Core PCE Price Index—Q2 Annualized (Third)</b>	<b>+1.1%</b>	<b>+1.1%</b>	<b>+1.1%</b>
		8:30 Initial Jobless Claims	n.a.	460,000	465,000
		8:30 Continuing Claims	n.a.	4,468,000	4,489,000
		<b>9:45 Chicago Purchasing Managers' Index (Sep)</b>	<b>56.0</b>	<b>56.0</b>	<b>56.7</b>
		11:00 Kansas City Fed Survey (Sep)	n.a.	n.a.	Flat
		18:00 Cleveland Fed Pres Pianalto spks at roundtable; NYC			
Fri	Oct 1	<b>8:30 Personal Income (Aug)</b>	<b>+0.2%</b>	<b>+0.3%</b>	<b>+0.2%</b>
		<b>8:30 Personal Spending (Aug)</b>	<b>+0.3%</b>	<b>+0.4%</b>	<b>+0.4%</b>
		<b>8:30 Core PCE Price Index (Aug)</b>	<b>+0.14%</b>	<b>+0.1%</b>	<b>+0.1%</b>
		8:30 NY Fed Pres Dudley spks at SABEW conference; NYC			
		9:55 Reuters/U. Mich Consumer Sentiment—Final (Sep)	n.a.	67.0	66.6
		<b>10:00 ISM Manufacturing Index (Sep)</b>	<b>54.0</b>	<b>54.5</b>	<b>56.3</b>
		<b>10:00 Construction Spending (Aug)</b>	<b>-0.4%</b>	<b>-0.4%</b>	<b>-1.0%</b>
		<b>Lightweight Motor Vehicles (Sep)</b>	<b>11.7M</b>	<b>11.5M</b>	<b>11.5M</b>
		<b>Domestic Motor Vehicles (Sep)</b>	<b>8.4M</b>	<b>8.7M</b>	<b>8.7M</b>
		15:15 Dallas Fed Pres Fisher spks in Vancouver on US economy			