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The US Economy in 2013-2016: Moving Over the Hump

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- We expect US economic growth to remain below 2% in the first half of 2013. The step-up in the pace of fiscal retrenchment is likely to outweigh the healing in the private sector and the bounce-back from the disruptions associated with Hurricane Sandy. The risk to our forecast is tilted to the downside; a full fiscal cliff outcome would likely result in renewed recession.

- But an update of our financial balances model suggests that growth is likely to improve starting in the second half of 2013. Homebuilding looks set to recover strongly, the corporate sector should start to spend a larger share of its cash flow, and the personal saving rate will probably edge down a little further.

- All told, the private sector is likely to deliver an impulse of around 1½ percentage points to real GDP growth in 2014-2015. Even with a continued drag from fiscal policy, this should result in solidly above-trend growth of 3% or a bit more. This would still not be a very rapid recovery by the standards of past cycles, but it would be clearly better than the 2%-2½% seen in the recovery so far.

- The growth pickup is likely to reduce the margin of economic slack only gradually. By our estimates, employment is about 4% below its potential level, and the unemployment rate will fall only slowly as more workers rejoin the labor force. This is likely to keep wage growth very subdued. With commodity prices more stable than in prior years, we expect inflation to remain slightly below the Fed's 2% target.

- Fed policy will remain geared toward promoting labor market recovery. We expect Fed officials to continue buying mortgage-backed securities and longer-term Treasuries at a pace of around $85 billion/month even after the end of "Operation Twist." They are also likely to revamp their forward guidance for the federal funds rate from a mid-2015 calendar date to an unemployment threshold rule, but this will probably not happen until the first quarter.

The US Economy in 2013-2016: Moving Over the Hump

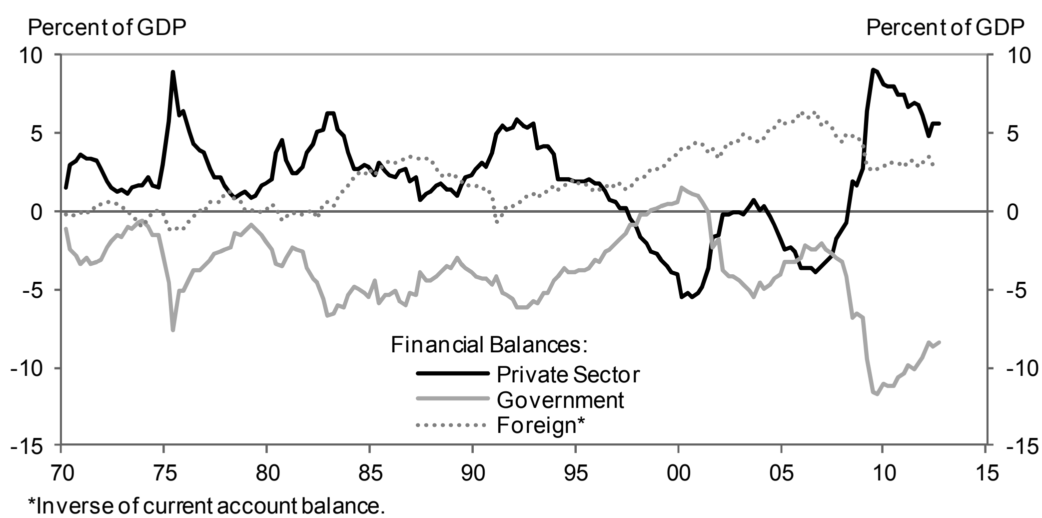
The key theme of our 2013-2016 economic forecasts is the "great race" between recovery in the private sector and an offsetting contraction in the government sector. Our baseline forecast is that this race will end in a draw in 2013—that is, trend or slightly below-trend growth—with risks that tilt to the downside if the resolution of the fiscal cliff results in even more retrenchment than the 1½%-2% of GDP that we currently assume. Beyond 2013, however, we see a pickup to an above-trend growth pace as the fiscal drag abates to ½%-1% of GDP.

This story is based on the financial balances model that we introduced last year. It starts from the accounting identity that one person's spending is always another person's income. This means that in the economy as a whole, total income must equal total spending, and the financial balances—the gaps between income and spending—of the different sectors of the economy must add up to zero. In turn, this means that the financial balance of the US private sector plus the financial balance of the US public sector must equal the financial balance of the rest of the world vis-à-vis the US. Since the latter is equal to the US current account balance, this implies

private sector balance *+ public sector balance = current account balance*

Exhibit 1 shows the current configuration of these financial balances. But while the equation above must always hold *ex post* in terms of national income accounting, it need not hold *ex ante* in terms of the spending intentions of the different sectors of the economy. If all sectors taken together try to reduce their financial balance—i.e. increase spending more than income and finance the difference by borrowing more or running down cash balances—the economy will tend to grow above potential. Conversely, if all sectors taken together try to increase their financial balance—i.e. increase spending less than income and use the difference to accumulate cash or pay down debt—the economy will tend to grow below potential.

Exhibit 1: Private Sector Surplus Offsets Government Deficit



Source: Department of Commerce.

For example, if an asset price boom induces households and firms to reduce their financial balance—i.e., increase their spending relative to their income and finance the difference by increased borrowing—and this move is not offset by public-sector restraint, there is an *ex* *ante* excess of spending over income and the economy will tend to grow above trend. The strength in economic activity results in stronger output and employment growth, which continues until total income in the economy has caught up with total spending and the accounting identities hold on an *ex post* basis.

Conversely, if concerns about fiscal sustainability induce governments to cut their budget deficits on a cyclically adjusted basis, and this move is not offset by private-sector expansion, there is an *ex ante* shortfall of spending versus income and the economy will tend to grow below trend. The weakness in economic activity continues until income has fallen to the level of spending in the economy as a whole and the accounting identities hold on an *ex post* basis.

From a practical forecasting perspective, the key challenge is to identify and predict the drivers of *ex ante* changes in financial balances. The approach taken in our financial balances model is to break up the overall national income accounting identity into a few major pieces—personal saving, net residential investment, the nonfinancial corporate sector, government, and the rest of the world—and then to estimate econometric equations that explain each piece with financial and real economic variables that we can project into the future with a reasonable degree of confidence.

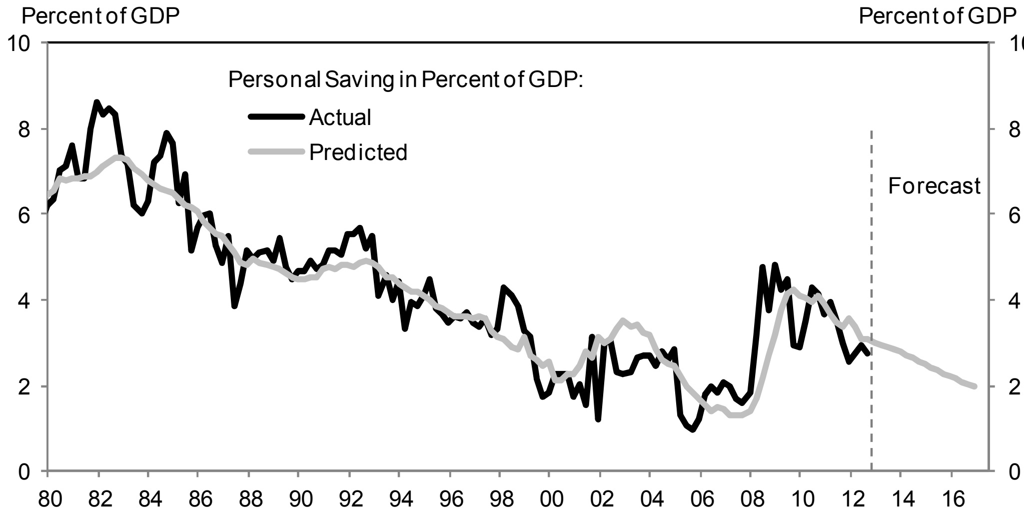
Today we present a refined version of our financial balances model. The most important change is that we have added one "residual" category that closes the national income accounting identity and captures the financial balance of the financial and noncorporate sectors as well as the statistical discrepancy between overall income and spending. In addition, we have re-estimated some of the other equations, specifically those for net residential investment and the nonfinancial corporate sector. We also use a slightly different measure of the fiscal impulse, namely the change in the cyclically adjusted primary deficit in the general government sector as estimated by the IMF, adjusted for our assumption that the upper-income Bush tax cuts will lapse at the end of 2012. In what follows, we discuss the outlook for each of the components of the national income accounting identity.

A Shrinking Financial Surplus in the Household Sector…

We break the household sector financial balance into two pieces, which we model separately, namely personal saving and net household (mainly residential) investment. We explain personal saving by three variables: the ratio of household net worth to disposable income, the availability of credit as measured by an accumulated version of the proportion of banks indicating greater willingness to make consumer installment loans, and the unemployment rate. Our specification closely follows that suggested in the 2010 *Economic Report of the President* and leaves important roles for both wealth effects and credit availability in the determination of personal saving.

As shown in Exhibit 2, this model fits the personal saving data remarkably well. It explains the large decline in the personal saving rate in the period from around 1990 to 2007 with the increase in the wealth/income ratio and the increase in the availability of credit. After 2007, the model explains the moderate increase in the saving rate with the fall in the wealth/income ratio and the deterioration in credit availability. Going forward, it implies a moderate decline in the saving rate assuming the wealth-income ratio moves sideways to higher (as implied by our house price and equity market forecasts) and credit availability improves a bit further.

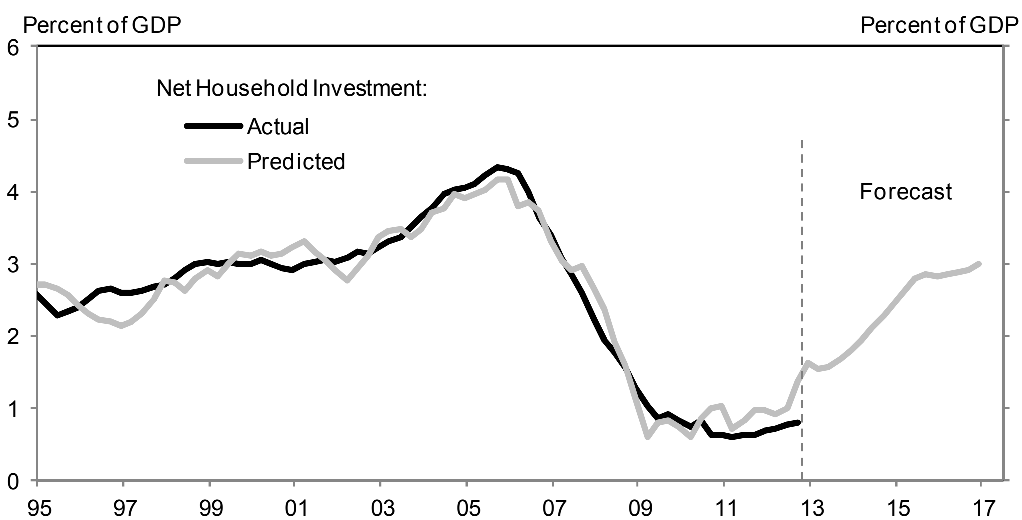
Exhibit 2: Personal Saving Is Likely to Edge Down Further



Source: Department of Commerce. GS Global ECS Research.

The other side of the household sector balance is the outlook for homebuilding (or more precisely, net household sector investment). Our approach is a more reduced-form version of our recent analysis of the homebuilding outlook, and assumes that homebuilding depends on the homeowner vacancy rate, the real mortgage rate, and bank lending standards for residential mortgage loans. As shown in Exhibit 3, homebuilding is likely to improve substantially based on better news on all of these factors; in fact, our model would already have pointed to a greater improvement than what we have seen and is now calling for a significant amount of catch-up growth. Our confidence in this improvement is relatively high.

Exhibit 3: A Forceful Recovery in Homebuilding



Source: Department of Commerce. GS Global ECS Research.

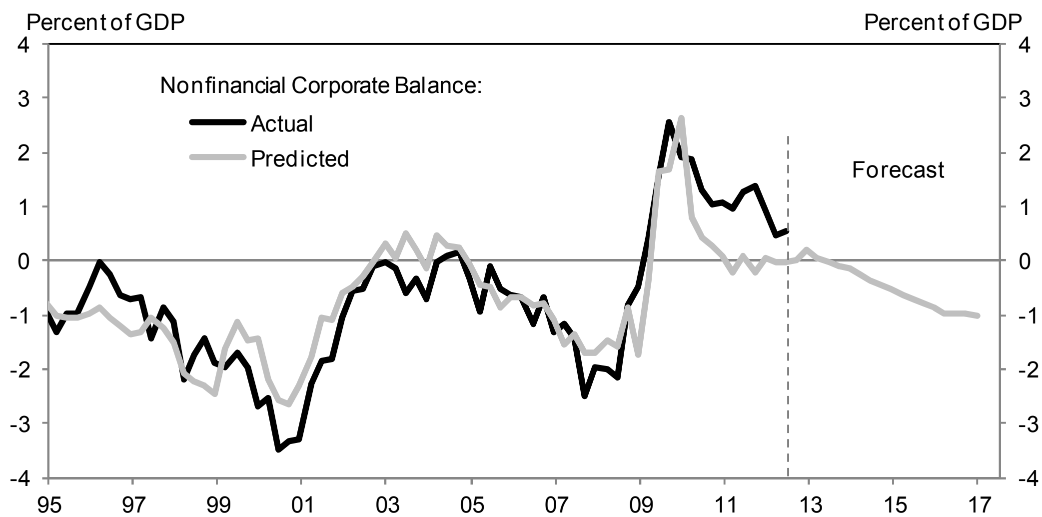
…As Well as the Business Sector

We also expect a decline in the corporate financial surplus, as business investment is likely to grow more quickly than corporate cash flow. We explain the nonfinancial corporate financial balance (the inverse of the "financing gap" in the Fed's flow of funds tables) by the level of Baa credit spreads, "Tobin's q" (the ratio of the market value of corporate equity to its replacement cost), and banks' willingness to lend to commercial and industrial borrowers.

As shown in Exhibit 4, nonfinancial corporations are running a financial surplus that is unusual by historical standards. We expect this surplus to diminish as credit spreads decline, Tobin's q increases in line with our more-upbeat equity market forecasts for 2013 and beyond, and bank lending standards continue to ease modestly. For similar reasons, we expect a decline in the—currently unusually large—surplus in the residual "other" category, which includes the financial sector, the noncorporate business sector, and the statistical discrepancy in the NIPAs.

Net external trade significantly cushioned the output effects of the 2008 collapse in US demand, but is unlikely to play a large role in the US business cycle over the next few years. We expect a slight deterioration as stronger US demand growth sucks in more imports.

Exhibit 4: Corporate Sector Likely to Move Back to Small Deficit

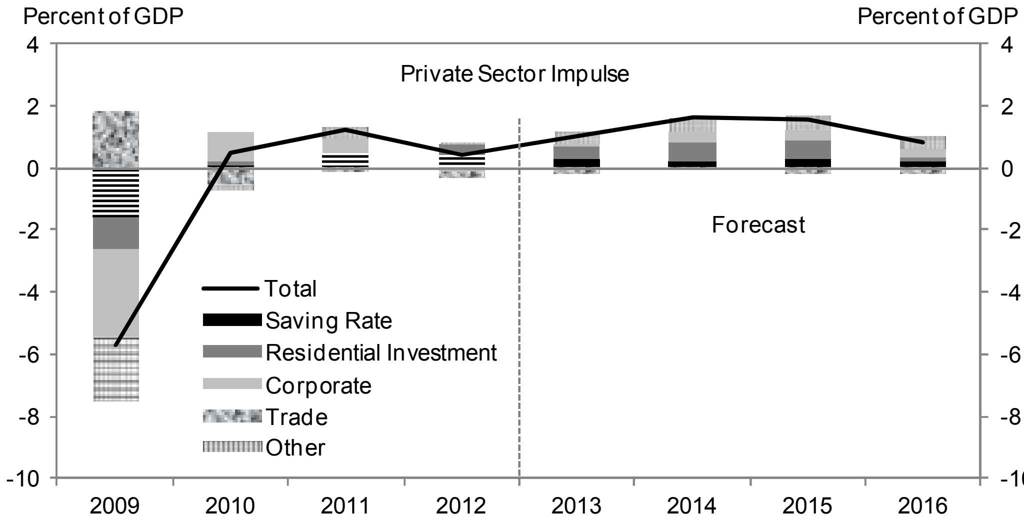


Source: Department of Commerce. GS Global ECS Research.

Pulling It All Together

Our analysis implies that the reduction in the ex ante private sector balance has delivered a modest boost to US GDP growth since 2010, and that this boost will grow in 2013-2014. Exhibit 5 shows that all parts of the domestic private sector are likely to contribute to this boost. If the private sector impulse had been the only driver of growth, our estimates imply that real GDP growth would have been slightly above trend over the past few years.

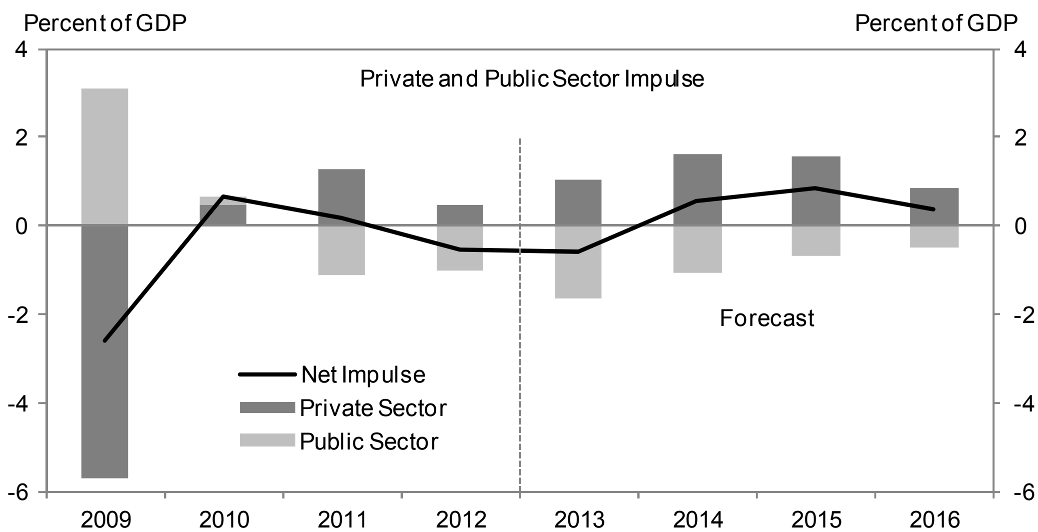
Exhibit 5: Private Sector Impulse Turns More Positive



Source: GS Global ECS Research.

However, the actual growth pace has only been around a trend pace—a little slower than trend if we look at the GDP data and a little faster than trend if we look at the labor market data. The reason is the increasing drag from fiscal policy, illustrated in Exhibit 6. We measure fiscal drag as the change in the cyclically adjusted primary balance of the general government (federal, state, and local) as estimated by the IMF.[1] Once we include fiscal policy, the predicted impulse from ex ante changes in financial balances disappears, and the overall picture becomes consistent with trend growth.

Exhibit 6: A Transition to Above-Trend Growth



Source: GS Global ECS Research.

[1] We adjust the series for differences between the IMF's fiscal policy assumptions and our own. In particular, we assume that the upper-income Bush tax cuts will expire in 2013, while the IMF assumes another one-year extension to 2014.

What can we expect in coming years? If our estimates and assumptions are correct, 2013 is likely to be a more extreme version of 2010-2012, with a bigger positive private sector impulse that is offset by a bigger negative public sector impulse but still leaves growth around trend. But we expect the net impulse to turn positive in subsequent years, assuming that 2013 marks the peak rate of fiscal contraction. By 2014-2015, the decline in the ex ante private sector balance should be contributing around 1½ percentage points to the overall growth impulse, but we currently assume that fiscal policy will subtract only ½-1 percentage point, for a net impulse of ½-1 point. This ought to be a recipe for clearly above-trend growth.

Jan Hatzius
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The US Economic and Financial Outlook

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

	2011	2012 (f)	2013 (f)	2014 (f)	2015 (f)	2016 (f)	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4
OUTPUT AND SPENDING														
Real GDP	**1.8**	*2.2*	*1.9*	*2.9*	*3.2*	*3.0*	**2.0**	**1.3**	**2.7**	*1.3*	*1.5*	*2.0*	*2.5*	*2.5*
Consumer Expenditure	**2.5**	*1.8*	*1.4*	*2.4*	*2.7*	*2.5*	**2.4**	**1.5**	**1.4**	*1.0*	*1.0*	*1.5*	*2.0*	*2.0*
Residential Fixed Investment	**-1.4**	*12.0*	*12.6*	*14.8*	*13.4*	*12.5*	**20.6**	**8.4**	**14.3**	*14.2*	*10.0*	*12.5*	*15.0*	*15.0*
Business Fixed Investment	**8.6**	*7.1*	*2.7*	*8.5*	*7.4*	*6.1*	**7.5**	**3.6**	**-2.2**	*0.2*	*2.0*	*4.0*	*7.8*	*8.6*
Structures	**2.8**	*9.5*	*2.1*	*7.9*	*7.4*	*5.9*	**12.8**	**0.6**	**-1.0**	*-0.8*	*2.0*	*4.0*	*5.0*	*7.5*
Equipment & Software	**11.0**	*6.2*	*3.0*	*8.7*	*7.4*	*6.2*	**5.4**	**4.8**	**-2.7**	*0.6*	*2.0*	*4.0*	*9.0*	*9.0*
Federal Government	**-2.8**	*-1.5*	*-1.4*	*-2.5*	*-1.9*	*-0.9*	**-4.2**	**-0.2**	**9.5**	*-5.0*	*-2.5*	*-2.5*	*-2.5*	*-2.5*
State and Local Government	**-3.4**	*-1.3*	*0.1*	*0.9*	*1.6*	*2.0*	**-2.2**	**-1.0**	**-0.4**	*0.3*	*0.0*	*0.0*	*1.0*	*1.0*
Net Exports ($bn, '05)	**-420**	*-408*	*-404*	*-380*	*-390*	*-402*	**-416**	**-407**	**-403**	*-389*	*-384*	*-380*	*-379*	*-378*
Inventory Investment ($bn, '05)	**31**	*57*	*81*	*78*	*83*	*83*	**57**	**41**	**61**	*68*	*80*	*87*	*82*	*75*
Industrial Production, Mfg	**4.3**	*4.1*	*1.1*	*2.8*	*3.7*	*3.1*	**9.8**	**0.7**	**-1.1**	*1.0*	*1.0*	*2.0*	*2.0*	*2.0*
HOUSING MARKET														
Housing Starts (units, m)	**0.6**	*0.8*	*1.0*	*1.1*	*1.3*	*1.5*	**0.7**	**0.7**	**0.8**	*0.8*	*0.9*	*0.9*	*1.0*	*1.0*
New Home Sales (units, m)	**0.3**	*0.4*	*0.4*	*0.5*	*0.6*	*0.7*	**0.4**	**0.4**	**0.4**	*0.4*	*0.4*	*0.4*	*0.4*	*0.5*
Existing Home Sales (units, m)	**4.3**	*4.7*	*5.5*	*6.0*	*6.4*	*6.6*	**4.6**	**4.5**	**4.7**	*5.0*	*5.1*	*5.6*	*5.6*	*5.7*
Case-Shiller Home Prices	**-4.4**	*2.4*	*2.9*	*2.9*	*3.3*	*3.7*	**1.6**	**2.4**	**1.1**	*2.0*	*2.0*	*2.0*	*2.9*	*2.9*
INFLATION (% ch, yr/yr)														
Consumer Price Index (CPI)	**3.0**	*2.4*	*2.0*	*1.7*	*2.0*	*2.0*	**2.8**	**1.9**	**1.7**	*2.2*	*2.1*	*2.5*	*2.4*	*2.0*
Core CPI	**2.2**	*1.9*	*1.8*	*1.8*	*1.9*	*2.0*	**2.2**	**2.3**	**2.0**	*1.9*	*1.9*	*1.8*	*1.8*	*1.8*
Core PCE*	**1.9**	*1.6*	*1.7*	*1.6*	*1.7*	*1.8*	**1.9**	**1.8**	**1.6**	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*
Unit Labor Costs	**1.9**	*1.2*	*1.4*	*1.5*	*1.8*	*2.1*	**0.2**	**1.0**	**1.1**	*2.4*	*1.3*	*1.3*	*1.6*	*1.5*
LABOR MARKET														
Unemployment Rate (%)	**8.9**	*8.1*	*7.8*	*7.3*	*6.7*	*6.3*	**8.2**	**8.2**	**8.1**	*7.9*	*7.9*	*7.9*	*7.8*	*7.7*
FINANCIAL SECTOR														
Federal Funds** (%)	**0.07**	*0.13*	*0.13*	*0.13*	*0.13*	*1.25*	**0.13**	**0.16**	**0.14**	*0.13*	*0.13*	*0.13*	*0.13*	*0.13*
3-Month LIBOR (%)	**0.56**	*0.33*	*0.30*	*0.30*	*0.30*	*1.50*	**0.47**	**0.47**	**0.39**	*0.33*	*0.30*	*0.30*	*0.30*	*0.30*
Treasury Yield Curve** (%)														
2-Year Note	**0.26**	*0.28*	*0.40*	*0.60*	*1.50*	*2.00*	**0.34**	**0.29**	**0.26**	*0.28*	*0.30*	*0.35*	*0.35*	*0.40*
5-Year Note	**0.89**	*0.71*	*1.20*	*1.75*	*2.50*	*3.00*	**1.02**	**0.71**	**0.67**	*0.71*	*0.85*	*0.90*	*1.00*	*1.20*
10-Year Note	**1.98**	*1.75*	*2.20*	*2.75*	*3.25*	*3.75*	**2.17**	**1.62**	**1.72**	*1.75*	*1.90*	*2.00*	*2.10*	*2.20*
30-Year Bond	**2.98**	*2.90*	*3.25*	*3.65*	*4.00*	*4.25*	**3.28**	**2.70**	**2.88**	*2.90*	*2.95*	*3.05*	*3.05*	*3.25*
INCOME														
Disposable Income	**3.8**	*3.0*	*2.2*	*3.5*	*3.6*	*3.7*	**6.3**	**2.9**	**2.1**	*3.4*	*-0.5*	*3.4*	*3.4*	*3.4*
Real Disposable Income	**1.3**	*1.1*	*0.2*	*1.9*	*2.1*	*2.1*	**3.7**	**2.2**	**0.5**	*-0.2*	*-2.4*	*1.8*	*1.9*	*2.0*
Saving Rate (%)	**4.2**	*3.6*	*2.7*	*2.5*	*2.2*	*2.0*	**3.6**	**3.8**	**3.6**	*3.4*	*2.6*	*2.7*	*2.8*	*2.8*
Profits*** (% chg, yr/yr)	**8.9**	*6.4*	*5.7*	*5.5*	*5.0*	*5.0*	**9.2**	**4.4**	*4.0*	*8.0*	*5.0*	*5.0*	*5.0*	*7.5*
Federal Budget (FY, $ bn)	**-1,296**	*-1,089*	*-950*	*-700*	*-550*	*-550*	--	--	--	--	--	--	--	--
FOREIGN SECTOR														
Current Account (% of GDP)	**-3.1**	*-2.9*	*-2.6*	*-2.8*	*-3.1*	*-3.3*	**-3.5**	**-3.0**	*-2.6*	*-2.6*	*-2.6*	*-2.6*	*-2.6*	*-2.6*
Euro ($/€)**	**1.32**	*1.30*	*1.40*	*1.40*	*1.35*	*1.25*	**1.32**	**1.25**	**1.29**	*1.30*	*1.25*	*1.33*	*1.37*	*1.40*
Yen (¥/$)**	**78**	*79*	*80*	*80*	*85*	*90*	**82**	**79**	**78**	*79*	*80*	*80*	*80*	*80*

* 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.

Source: GS Global ECS Research

US Calendar

Focus for the Week Ahead

- We expect modest payrolls growth of 75k in November, due in part to the impact of Hurricane Sandy. Unemployment likely remained at 7.9% (December 7).
- Our read of other November manufacturing surveys suggests ISM manufacturing will be around 51 (December 3).
- ISM nonmanufacturing was likely roughly unchanged in November. We expect 54.0 (December 5).

Economic Releases and Other Events

Date		Time (EST)	Indicator	Estimate GS	Estimate Consensus	Last Report
Mon	**Dec 03**	**10:00**	**Construction Spending (Oct)**	**+1.0%**	**+0.5%**	**+0.6%**
		10:00	**ISM Manufacturing Index (Nov)**	**51.0**	**51.5**	**51.7**
		12:15	Boston Fed Pres Rosengren spks at NY Fed mtge conf			
		13:40	St Louis Fed Pres Bullard spks on economy; Little Rock, AR			
		17:00	**Lightweight Motor Vehicle Sales (Nov)**	**15.0M**	**14.8M**	**14.2M**
		17:00	**Domestic Motor Vehicle Sales (Nov)**	**11.6M**	**11.5M**	**11.1M**
Tue	**Dec 04**	10:45	Fed Gov Tarullo spks at Brookings Institution conf; Wash DC			
Wed	**Dec 05**	8:15	ADP Employment Change (Nov)	n.a.	125,000	158,000
		8:30	Nonfarm Productivity (Q3 Final)	n.a.	+2.7%	+1.9%
			Unit Labor Costs	n.a.	-0.9%	-0.1%
		10:00	**Factory Orders (Oct)**	**+0.2%**	**Flat**	**+4.8%**
		10:00	**ISM Nonmanufacturing Index (Nov)**	**54.0**	**53.5**	**54.2**
Thu	**Dec 06**	8:30	Initial Jobless Claims	n.a.	380,000	393,000
		8:30	Continuing Claims	n.a.	3,275,000	3,287,000
Fri	**Dec 07**	**8:30**	**Unemployment Rate (Nov)**	**7.9%**	**7.9%**	**7.9%**
		8:30	**Nonfarm Payrolls (Nov)**	**75,000**	**95,000**	**171,000**
		8:30	**Average Hourly Earnings (Nov)**	**+0.1%**	**+0.2%**	**Flat**
		9:55	**Reuters/U. Mich Consumer Sentiment—Prel (Dec)**	**82.5**	**82.0**	**82.7**
		15:00	Consumer Credit (Oct)	n.a.	+$10.0bn	+$11.4bn

Source: GS Global ECS Research.

Disclosure Appendix

Reg AC

We, Jan Hatzius, Alec Phillips, Jari Stehn, Kris Dawsey, David Mericle and Shuyan Wu, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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