

Special Report

The US economic outlook for 2013

- **The expansion will soldier on in 2013, in spite of headwinds from fiscal policy**
- **Expected GDP growth of 2.0% would be similar to 2012, but tax hikes will make for a weaker 1H13**
- **Housing is increasingly the bright spot, outlook for capex uncertain but looking better recently**
- **Inflation low and going lower will keep the Fed's foot on the monetary gas pedal**

The year 2012 began much like 2011 and 2010: with high expectations that the economy was finally reaching escape velocity. And like the prior two years that enthusiasm gave way to a resignation that the recovery would be a long slog. The beginning of 2013 shares some similarities with the prior three years, as certain green shoots offer reasons to be optimistic. However, that optimism is more cautious this year in the knowledge that fiscal policy is turning more restrictive. While some elements of the fiscal cliff are unresolved, namely the sequestration (or automatic spending cuts) and the debt ceiling, we at least appear to have dodged the most adverse outcomes. The realized outcome appears to be one in which accommodative fiscal policy is removed at a gradual enough pace to allow the economy to continue modestly recovering in 2013, with the sources of private sector growth undergoing rotation.

Trillion dollar deficits did not materialize out of thin air, but rather resulted from efforts to soften the blow of the downturn and slow recovery. For this reason, it is difficult to separate the performance of the private sector—which has been registering modest but steady growth and exhibited signs of financial healing—from the fiscal issues: the government support measures that may get trimmed were crucial to the convalescence of the private sector in the early stages of the expansion. The key forecast call is that the economy has regained enough health so that policymakers can remove some of the intravenous tubes providing support to the economy, but that the patient will continue recovering.

Housing takes the baton

If this call is right, housing will take a leading role. In 2012 household formation began to pick up and inventories of unsold homes declined substantially. The result was a tighter demand/supply balance that spurred the first phase of a recovery in homebuilding and more gradual recovery in house prices. These influences will support further rapid gains in home building in 2013, and we anticipate that real residential investment will grow 22% this year, the fastest since the early 1980s. If this forecast is realized—and the recent housing data flow is consistent with this view—housing could add around 0.5%-pt to overall economic growth in 2013.

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Housing got off to a slow start in this recovery but is now accelerating. Exports, in contrast, jumped out of the gate in 2009, but have since steadily decelerated and actually appears to have contracted in 4Q12. J.P. Morgan's global economic outlook anticipates some stabilization and modest firming in growth among the US's major export markets. However, the pace of growth will likely remain subpar, thus limiting the degree to which the US can "hitch its wagon" to global growth. US manufacturers have become increasingly cost-competitive, particularly with respect to labor costs, and so talk of a manufacturing renaissance is not mere hype. But even cost-competitive producers need healthy markets to sell to, and foreign growth is unlikely to reaccelerate to the pace seen earlier in the expansion.

Weaker foreign demand may be one reason behind the biggest economic mystery of 2012: the sharp slowing in capital spending growth through last fall. Business capital spending had been growing briskly through early 2013, and some moderation was expected as early cycle catch-up spending became exhausted. What happened instead was a much sharper slowing than anticipated, with capex essentially flat in the middle two quarters of the year. There were good reasons for business to turn more cautious. During the spring and summer the economy was facing external threats from a potential Euro area financial crisis and a potential hard landing in China as well as an internal threat from the looming domestic fiscal cliff. But by early 4Q12 the first two threats, from the Euro area and China, were greatly diminished, and core capital goods orders rebounded convincingly in October and November. With domestic fiscal policy risks also now also much lower (despite the prospect for acrimonious debate about government spending and the debt ceiling over the next couple months), the forecast looks for capital spending to accelerate to roughly 6% growth this year.

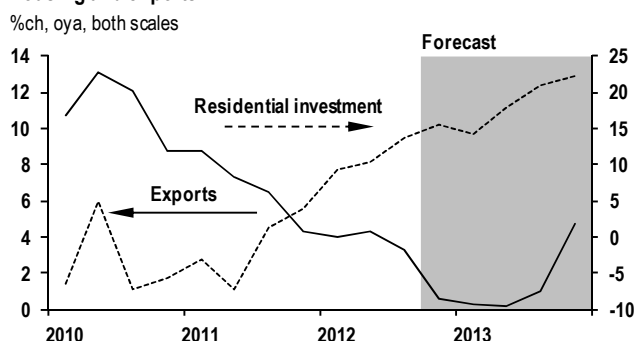
Hiring steady, but wages have been weak

The slowing in capital spending was an unwelcome development, but things could have been much worse had business caution also extended to their labor market behavior. Instead, private sector hiring averaged 159,000 per month on average in 2012. Moreover, except for a little wobble in the late spring, the pace of expansion in labor market activity has been quite steady. Employment growth has been "helped" by relatively weak productivity growth, necessitating that businesses add more workers even to meet fairly slow increases in demand. With levels of investment spending still low, we expect productivity growth to remain muted in 2013 and employment to register gains of around 175,000 jobs per month, on average.

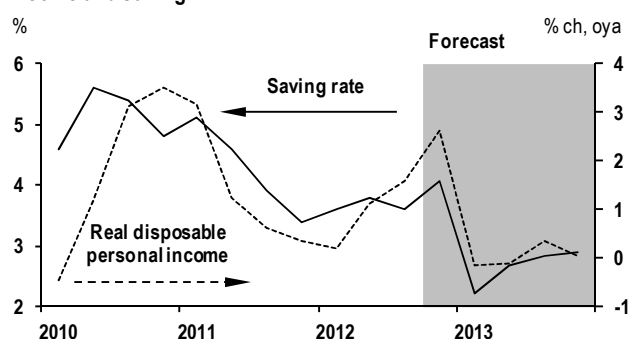
J.P. Morgan US forecast

	4Q12	1Q13	2Q13	3Q13	4Q13
Real GDP	1.5	1.0	1.5	2.5	3.0
Consumption	2.2	0.3	0.4	1.9	2.5
Core PCE prices	0.9	1.2	1.3	1.5	1.5
Unemployment rate (level)	7.8	7.8	7.7	7.7	7.6
Nonfarm employment (Ch., 000s)	151.0	140.0	170.0	180.0	200.0

Housing and exports



Income and saving



Job growth has been steady in 2012, but wage gains have been soft. In the 12 months ending in December, average hourly earnings increased only 2.1%. It's not hard to see why: still-elevated unemployment rates have left workers little leverage to bargain for greater pay. This has been great for corporate profits, but has presented challenges for consumer spending. In spite of this, consumers have not wilted, and spending has more than kept pace with the meager real income gains. One source of support in this regard that we expect to persist into next year: rising house prices and declining debt burdens have helped to clean up the consumer's balance sheet. Even with better balance sheets, we think the consumer will be challenged in the first half of next year as incomes are squeezed by the \$125 billion increase in payroll taxes associated with the expiration of the payroll tax holiday, as well as higher taxes on upper-income individuals and households. We see real consumer spending growth slumping to below 1% in the first half of next year. A second-half revival—as in our forecast—is dependent on labor income firming.

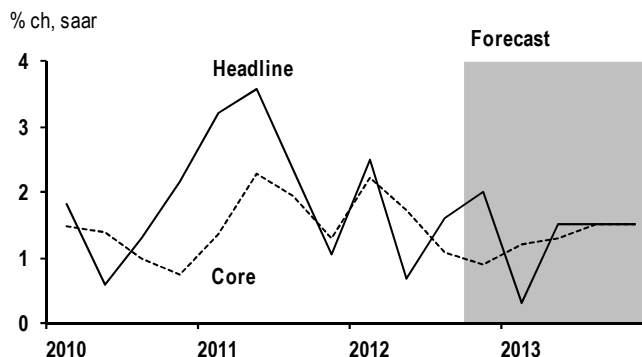
Low inflation and easy monetary policy

Not only is the pace of wage gains central for the consumer outlook, but it is a critical determinant of the inflation picture. Through the early years of this expansion, global developments were putting upward pressure on domestic inflation, as import prices were running quite hot. In spite of this, overall consumer price inflation remained tame, thanks to depressed labor costs. More recently, import price inflation has cooled, while domestic labor cost increases have remained near all-time lows. The combination should not only keep a lid on inflation but push it even lower, to around 1.5%.

Low inflation, along with high unemployment and lingering downside risks to growth, will keep the Fed firmly in accommodation mode. At the historic September FOMC meeting, the Fed not only introduced open-ended QE, but shifted its communications strategy to indicate that it will keep accommodation in place long after the recovery strengthens. This was supplemented at the December FOMC meeting with open-ended Treasury purchases. These will continue until there is evidence of "substantial" improvement in the labor market. We interpret this to mean sometime in the first half of 2014. The minutes to the meeting at which the Fed agreed on this course of action suggest the late 2013 served as more of a focal point in the Committee's thinking. We do not see this as too far off of our forecast for two reasons. First, the FOMC has a more upbeat forecast, 2.7% GDP growth this year, relative to ours, 2.0% growth. Second, over the last several years, the dovish wing of the FOMC has had the final word, and we believe that the Fed will err on the side of providing more, rather than less, accommodation.

The December meeting also brought an historic shift in the way in which the Fed provided forward guidance on the fed funds rate target. In place of giving a calendar date through which overnight rates would remain near zero, the Committee has now stated that near-zero rates will persist at least until the unemployment rate is below 6.5%, provided that the medium-run inflation outlook does not first get above 2.5%. Of these two conditions, we think the threshold for the unemployment rate is more likely to be crossed before the threshold for inflation. Over this cycle the behavior of the unemployment rate has bedeviled forecasters, as an unprecedented drop in the labor force participation rate has caused to the unemployment rate to drop faster than would be expected based on economic growth (or the so-called Okun's Law relation). Even so, we expect these regularities to re-assert themselves, which would imply the unemployment rate threshold would not be met before late 2015.

PCE inflation



Fiscal cliff: J.P. Morgan current forecast

Measure	\$ bn	Assumed multiplier	Share realized	Drag as % of GDP
Sunsetting of Bush tax cuts	309	0.75	0.15	0.2
Expiration of payroll tax holiday	125	0.75	1.00	0.6
Emergency unemployment benefits	30	0.90	0.00	0.0
Budget control act spending cuts	111	1.00	0.20	0.1
Total	575			1.0
Memo: Obamacare taxes	20	0.75	1.00	0.1

I. Fiscal policy looms large

Early in the expansion fiscal policy played an important supportive role, helping to cushion the downturn and support the fledgling recovery. (Moreover, US exporters also benefited from stimulative fiscal policies abroad.) With the moment of crisis having passed, policymakers have more recently geared fiscal policy toward consolidation rather than accommodation. State and local policymakers were the first to turn in this direction—not necessarily by choice but often because they faced hard constraints in the form of balanced budget rules. The drag exerted on the economy by state and local austerity looks to be moderating some recently, though it will almost certainly continue. The greater concern for the upcoming year is federal fiscal austerity. Even without the fiscal cliff concerns (discussed below), federal spending was set to be cut back for a few reasons, including ongoing reductions in military spending and the drying up of stimulus spending from the 2009 Recovery Act.

In addition, although the ongoing resolution of the fiscal cliff appears to have averted the worst-case outcome, it is still the case that some of the fiscal tightening associated with the fiscal cliff will be realized. In sum, we expect that cliff-related drag will subtract about a percentage point from growth this year. The major items associated with the fiscal cliff are, (i) the Bush tax cuts, (ii) the payroll tax holiday, and (iii) the sequestration, or automatic spending cuts, associated with the Budget Control Act of 2011. We discuss each in turn.

Bush tax cuts. The origin of the current dispute lies with the 2001 and 2003 tax cuts, which reduced tax rates across the board and also made the tax code less onerous through several non-rate provisions, such as increased generosity of certain deductions and credits. The total annual value of these tax reductions was over \$300 billion. In the New Year's Day agreement, the vast majority of these tax reductions were left intact, as all the tax provisions that related to lower- and middle-income taxpayers were left unchanged. Taxes were raised on upper-income households, however, through a variety of means, including higher marginal income tax rates, higher dividend and capital gains taxes, and an increase in the estate tax. In total, these tax increases will subtract about \$40 billion from household disposable personal income this year. Note that the taxes associated with the Affordable Care Act, or Obamacare, will commence at the beginning of 2013. These were generally excluded from the fiscal cliff discussions, but represent an additional tax burden of about \$25 billion per year for upper-income households. The short-run marginal propensity of upper-income households to consume out of income is almost certainly lower than that for households with less means, but it is not zero. On net we would expect the drag on consumer spending from upper-income tax increases to amount to 0.2%-0.3% off GDP in 2013.

Payroll tax holiday. In late 2010 Congress and the President agreed to a one-year 2%-point reduction in payroll taxes. In late 2011 this payroll tax holiday was extended for another year. At the end of 2012, however, the payroll tax holiday expired as scheduled. The resulting hit to household purchasing power this year is quite large, subtracting about \$125 billion from disposable personal income.

The expiration of the payroll tax holiday is unquestionably a large hit to income growth, as this would subtract about 4%-points from the annualized growth rate of personal income in 1Q13. The less certain issue is how much this hit to income would affect spending. While estimates of this "marginal propensity to consume" vary, the evidence suggests that perhaps around 75 cents of every dollar in reduced payroll taxes is spent. In this vein, if we assume a multiplier of around 0.75, then consumer spending next year would be reduced by close to \$100 billion, or about 0.6% of GDP. If this adjustment were to occur entirely in 1Q13, then the drag on annualized GDP growth that quarter would be -2.4%-pts, clearly a major restraint. Even if the adjustment is spread out over the first two quarters of the year, which seems more consistent with past experience, the headwind to growth should be noticeable.

Sequestration + debt ceiling. The debt ceiling fiasco in the summer of 2011 was resolved with the Budget Control Act

(BCA), which tasked the so-called Supercommittee with finding \$1.2 trillion of deficit reductions over the ensuing 10 years. When the Supercommittee failed to come to an agreement, the BCA stipulated automatic federal spending cuts (or sequestration) of \$100 billion per year beginning in early 2013. The New Year's Day agreement pushed back sequestration for two months to March 1, which also happens to be close to when Treasury will run out of room to play accounting tricks to get around the debt ceiling. Because the spending cuts are spread across defense and non-defense spending alike, both Republicans and Democrats have sought to avoid sequestration. Even so, no resolution to this impasse has surfaced. Handicapping the outcome of this aspect of the fiscal cliff is especially tricky. Although both parties want to avoid sequestration, the legislation was written so that it is difficult to avoid such an outcome. Our best guess is that at least some of the spending cuts associated with the BCA are realized, but that Congress will find a way to "kick the can" down the road and avoid all of the spending cuts. Even realizing some of the spending cuts, however, could pose a short-term headwind to the economy. We also expect that any short-term resolution of the BCA will contain an agreement to increase the debt ceiling, though failure to do so—and the accompanying risk of a technical default—is the very low-probability, high-cost risk in the current budget debate.

Taking the three above-mentioned elements of the fiscal cliff together, along with some of the smaller items, we believe that cliff-related fiscal drag will amount to about 1% of GDP, thus adding significant restraint to the economy's growth outlook for 2013.

II. Housing takes the lead

There is little question that the fiscal picture is the biggest headwind to growth next year. The biggest tailwind appears to be coming from the housing market. The US is now enjoying a recovery in new home sales, housing starts, and house prices. New home sales in 3Q12 were running 23.7%oya and housing starts were up 26.0%oya. House prices initially lagged the recovery in activity, but most measures of house prices are up about 8% saar over the past six months and finally running noticeably above year-ago levels.

Perhaps surprisingly, the strong upturn in housing activity is occurring without increases in the homeownership rate. To the contrary, the latest 3Q12 figures indicate that declines in homeownership are still intensifying. This unusual backdrop for the housing upturn does not mean that the strong gains cannot be sustained. Household formation has begun to accelerate in response to gradually improving labor markets.

And more rapid household growth means increased demand for housing, even if dominantly for rental units.

Importantly, the pace of new household formation is running well above still anemic increases in supply. So a majority of the increased demand for housing units over the past year has been met by reduced vacancies in the existing housing stock rather than by new construction. As vacancy rates continue to slide, a shift that puts upward pressure on house prices, builders have strong incentives to boost supply. So home-building can be expected to increase substantially further over the next year as a larger share of the increase in demand for housing units is met by new construction. The forecast looks for housing starts to increase another 31.4% in 2013 (4Q/4Q) and for real residential investment in the GDP accounts (which includes renovations and brokerage commissions as well as new home construction) to accelerate from 15.4% growth last year to 22.2% in 2013.

Homeownership still coming off hard

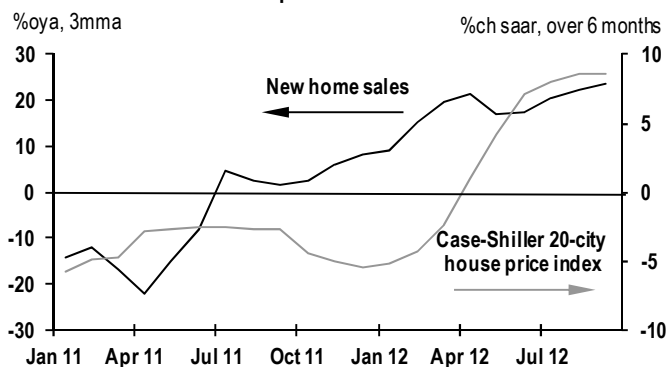
It is easy to tell a story that the housing recovery reflects the effects of gradually improving labor markets, falling mortgage rates, rising rents, and more positive house price expectations in convincing households to shift back from renting to owning. But, as it turns out, this story is sharply at odds with results of the latest Census 3Q12 report on homeownership.

This report indicates that the homeownership rate is continuing to decline, from 66.1% sa in 3Q11 to 65.6% in 2Q12 and 65.3% in 3Q12. And not only is homeownership continuing to decline, but the rate of decline over both the past quarter and the past year has intensified from the average rate of decline over the course of the housing bust. The drop in homeownership since the previous peak in the housing market has been particularly severe for younger heads of households. Percentage-point declines in homeownership rates for those under 35 and for those 35-44 years old have been about twice as large as for the overall population. And the decline in homeownership has also recently intensified for these groups.

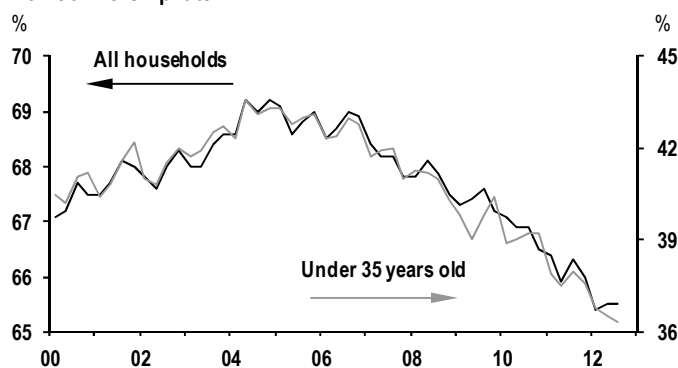
Household formation starting to pick up

There is no contradiction between increased demand for housing and reduced homeownership rates. Demand for housing is mainly dependent on the increase in the number of households, not whether these households choose to own or to rent the housing units they live in. Growth of household formation had been stifled during the expansion to date by high unemployment and subdued job growth. Young people have had an especially tough time in the labor market, and many who could not find jobs or could not find good jobs are living with their parents or are doubling or tripling up in

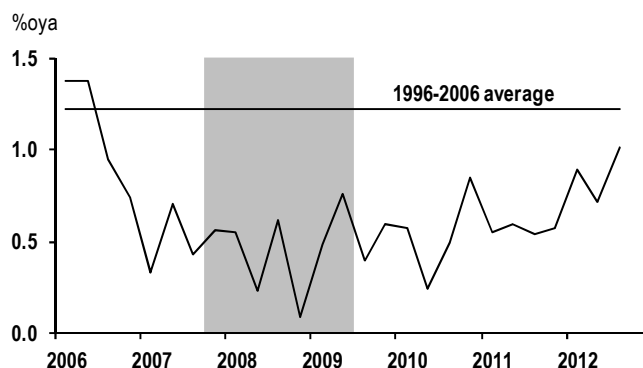
New home sales and house prices



Homeownership rate



Growth in number of US households



apartments with friends. In addition, tough labor market conditions have discouraged immigration.

But labor markets are gradually improving, and the period of maximum weakness in household formation is behind us. The increase in the number of households has accelerated over the past year, to growth of 1.01% or 1.15 million, the largest annual increase since 2Q06 if still somewhat below the norms prior to the recession. The decline in homeownership rates implies that the entire increase in demand for housing units associated with increased household formation consists of increased demand for rental units. Indeed current estimates indicate that over the past year the number of occupied rental units increased

1.32 million and the number of owner-occupied housing units actually declined 175,000 (although the number of reported owner-occupied units was up in the latest quarter).

Importantly, lack of increase in homeownership is perfectly consistent with rising sales of new single-family homes. A larger number of current homeowners may very well, for example, be moving up to new homes while selling their existing single-family homes to investors as rental properties.

Trends are very positive for homebuilding

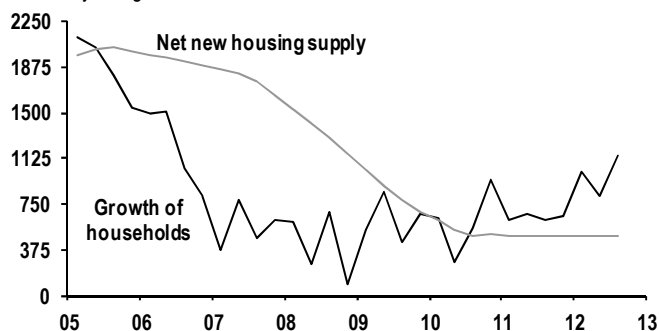
The acceleration in household formation over the past year has been associated with a welcome increase in residential investment. This raises the obvious issue of whether recent trends have any implications for the forecast. A useful framework for addressing this issue looks at how much of the increase in demand for housing units associated with household formation was met by net new supply of housing (new construction less scrapping of old units) and how much was met by a decline in vacancies for the existing housing stock. Census data show that the increase of 1.15 million in numbers of households over the past year was met by a 487,000 increase in the number of housing units and by a 659,000 decline in the number of vacant housing units. That is, a significant majority of the new demand was met by filling vacant housing units rather than by new construction.

This pattern could conceivably continue for some time. But vacancy rates have already declined toward prior norms and the changed supply/demand balance reflected in lower vacancy rates is pushing up house prices. The Census measure of quality-adjusted prices of new single-family homes, for example, is up 5.7%oya and up at an even more rapid pace over the past two quarters. With vacancy rates coming down and house prices rising, the most likely outcome is that home construction accelerates over the next year, as in the J.P. Morgan forecast, so that more of the increase in demand is met by new supply and less by reductions in vacancy rates.

The forecast for stronger growth of housing starts is not a sure thing. Most important, any shock to the economy that holds back job growth could also hold back household formation. In addition, there is the issue of whether the increased demand for housing, which is still predominantly demand for rental units, will be met by multifamily rather than single-family construction. This matters because the value per unit of single-family homes is several times that of multifamily units. However, market conditions influencing new single-family home construction look very positive, as reflected in the increasing trends in both new home sales and the monthly Homebuilders survey and by the declining trend

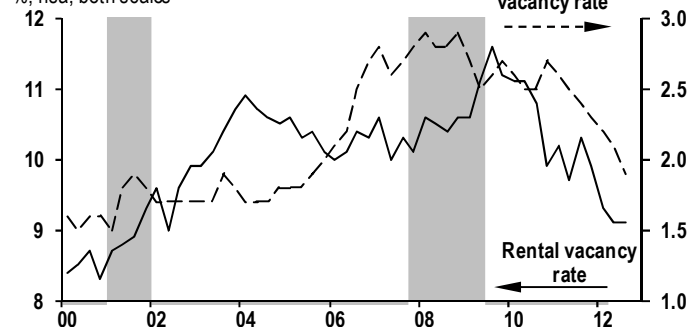
Growth in number of households and net new housing supply

Ch from year ago, '000s



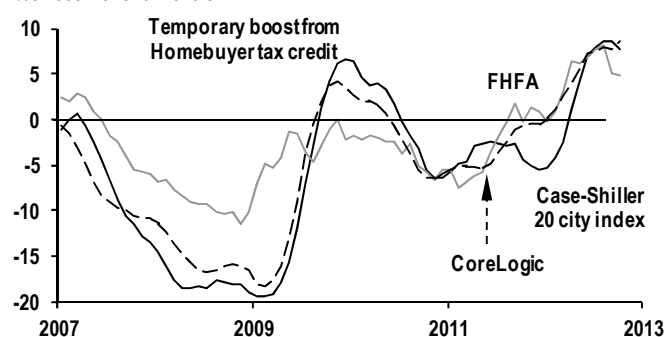
Housing vacancy rates

% nsa, both scales



Three measures of house prices

%ch saar over 6 months



in the inventory of unsold new single-family homes, especially when measured in relation to sales.

III. Capex recovery is underway

After three years of growing well below an early-recovery norm, housing now appears to be gaining momentum. Capital spending, in contrast, actually grew someone faster than average for the first three years of an expansion, but decelerated sharply through the spring and summer of last year. Real capital spending slowed abruptly from growth of 12.5% in the year ended 1Q12 to only 3.6% saar growth in 2Q12 and a decline of 1.8% in 3Q12 with real business investment in equipment and software down 2.6% and spending on structures flat.

However, the worst of the weakness for capital spending seems to be past. Core capital goods orders posted a surprising and very solid rebound in October and November, up 6.0% (not annualized) over the two months, and there was a more gradual recovery in core capital goods shipments as well. Currently available data suggest that a capital spending growth will reach 7.6% saar growth in 4Q12, leaving average spending growth in 2H12 up about 3% saar.

The current forecast looks for capital spending in 1Q12 to respond to the tax-related slowdown in consumer spending and overall growth that is apt to make for more cautious business spending as well. But the forecast for this year as a whole looks for a gradual acceleration in real capital spending to growth that is expected to average 5.9% in 2013 (4Q/4Q) despite the weaker first quarter.

Business sees two big areas of uncertainty

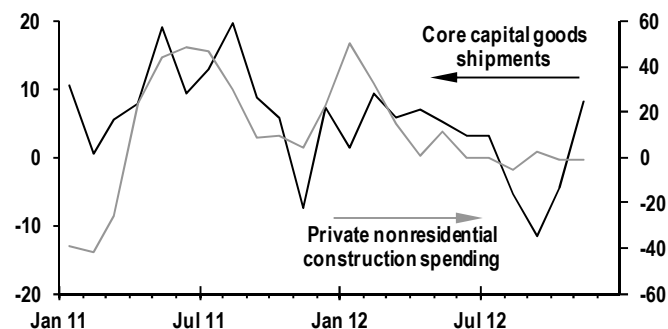
While it is no huge surprise that business spending slowed from the prior double-digit growth pace, the extent of the slowdown was surprising. Figures available through 3Q12 show elevated domestic profit margins, a negative financing gap (meaning internal funds are more than adequate to finance capital spending), strong corporate balance sheets, and relatively low borrowing costs. And while consensus forecasts of US growth edged lower over the summer, the pullback in capital spending looks hugely out of proportion to the size of the revision to the growth outlook.

The pullback in capital spending has been widely attributed to increased uncertainty, and there is doubtless some truth to this explanation. But for forecasting purposes, it matters just what these uncertainties are. One source of uncertainty that intensified through the summer came from downside risks to the global economy, perceived increased risks of an unraveling of the Euro area financial system, and concerns about a possible hard landing in China. Business leaders may have rightly been concerned that the US would not be immune to severe global economic problems and decided to suspend or delay spending accordingly. Concerns about both Europe and China have eased lately. And market measures of perceived economic risk, such as the spread of high-yield corporate bonds over high-grade bonds (or over Treasuries), have narrowed noticeably since mid-summer. This suggests that the worst of the uncertainty and maximum weakness in capital spending may be behind us.

The other major source of uncertainty is political and focuses on a deadlocked government and the prospect of tortuous negotiations regarding the fiscal cliff, the debt ceiling, tax rates, and regulatory policy. These uncertainties eased con-

Two indicators of capital spending

%ch saar over 3 months, both scales



siderably since the early January fiscal policy agreement. But core capital goods activity rebounded before the resolution. It appears that the uncertainties holding back business investment may have been mainly worries about foreign threats to sustained expansion.

Rebound limited to equipment so far

The slowdown in capital spending from about a 20% saar growth pace in 3Q11 to an outright decline by 3Q12 was shared reasonably evenly by the two major categories of business investment, spending on equipment and software and spending on structures. This trend seems to reflect broad-based decisions to put further spending increases on hold.

As noted, core capital goods orders and shipments have returned to growth in both October and November. Details of the durable reports show a modest recovery in orders for computers and electronics so far, and a much more forceful rebound in orders for and shipments of other machinery. New orders for machinery are up a cumulative 15.1% (not annualized) over the past three months; shipments of machinery, which typically lag trends in new orders, have rebounded 4.5% over the past two months.

Demand for equipment seems to be recovering, if unevenly, but business investment in structures still looks stuck in the mud. The latest monthly construction figures show nominal spending for nonresidential construction continuing to trend gradually lower in October and November. Cyclical swings in spending on structures tend to lag swings in spending on equipment, so it is no great surprise that spending on structures is lagging on the way up. The forecast looks for both equipment and structures to average about 6% growth in 2013, with a stronger second half for both.

IV. Crosscurrents for the consumer

Through much of 2012, lackluster income growth has constrained consumer spending. Disposable income is averaging only 3.5% oya over the past three months and real disposable income is up only 1.9% oya. Against this background, the \$125 billion hike in payroll taxes at the beginning of 2013 will present a severe challenge to consumer spending since it will reduce average growth of disposable income in 1H13 by 2%-pts saar or by more than half.

The forecast looks for real consumer spending to slow to less than 1% growth in 1H13 before recovering around midyear. But the hit to spending in the first half could be worse. It appears that the drag from higher payroll taxes will be at least partly offset by some positives for spending. Most important, recent declines in the price of gasoline and gasoline futures and in nonfuel import prices are bringing a sharp slowdown in inflation. Consumer price inflation is expected to average close to zero in 1Q12. Low inflation will give a noticeable boost to real income just when consumers need it most.

And, in the background, there have also been other positives for consumer spending lately including gains in house prices and stock prices and gradually improving labor markets as well as declining fuel prices. Consumer confidence did fade around year-end by most (but not all) measures, presumably reflecting the publicity given fiscal cliff concerns. It will be interesting to see whether confidence rebounds

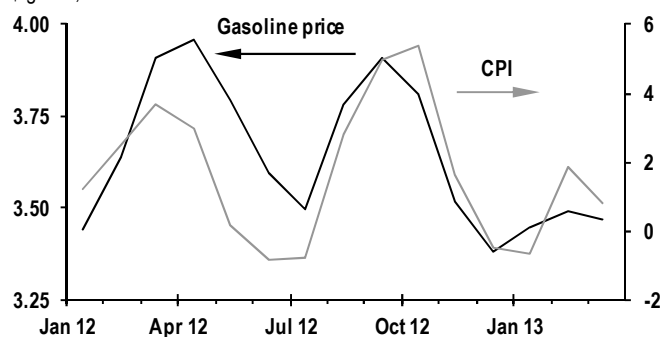
Some help for the consumer

Energy prices bring much lower inflation in early 2013.

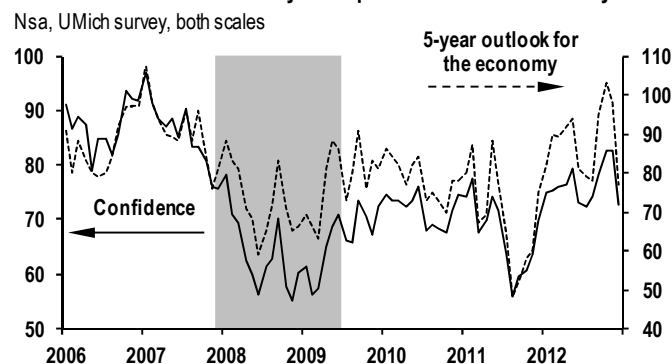
One big change in the landscape facing consumers is the sharp decline in the price of gasoline so far and expected further declines over the next few months. The retail price of gasoline had soared through the fall and had reached a monthly national average peak of about \$3.90 per gallon in September. Largely because of rising fuel prices, the CPI increased 5.4% saar in the three months through October of this year. Consumer spending held up through these increases, but only with sharp declines in the saving rate.

Part of the increase in the price of gasoline last fall was due to higher oil prices and part was due to technical factors including outages at major refineries. As future markets had anticipated, the national average price of gasoline has already fallen substantially from its September average and is down to about \$3.40 per gallon. Based on current futures prices, the CPI for gasoline can be expected to continue to decline through April on a seasonally adjusted basis. Lower fuel prices are forecast to hold the CPI measure of inflation below 1.0% saar in both 1Q13 and 2Q13. This forecast incorporates

Retail gasoline price and CPI, with forecast based on forward prices
\$/gallon, nsa %ch saar over 3 months



Consumer confidence and 5-year expectations for the economy



expected increases in food prices, (delayed effects of the summer drought) and a continuation of the lower core inflation readings in recent months.

Wealth effects should help, too. Consumer spending in 1H13 will mainly depend on growth of income, the bite from higher taxes, and the help from lower inflation. But wealth effects of higher equity prices and higher house prices should also tend to support spending. The S&P 500 increased 14.4% in 2012 (Dec/Dec), with slightly larger gains in the second half of the year than the first half. And the CoreLogic measure of house prices, (the measure used by the Fed in estimating the value of household wealth), is up 6.3%oya in the latest November reading.

Wealth effects are phased in gradually and this year's spending will also be influenced, for example, by changes in equity prices and house prices in 2011 as well as in 2012. Mainstream models of consumer spending suggest that wealth increases over the past two years should boost consumer spending growth in 2013 by about 0.6% relative to spending levels based on income growth alone. Of course, the actual size of the wealth effects will also depend on changes in equity prices and house prices during 2013. Support for spending from increased stock prices and house prices is one rea-

son that the forecast looks for the household saving rate to decline about a percentage point during 2013.

Labor demand is the real key to spending

Some things are breaking the right way for consumers. But the outlook for consumer spending though 2013 will depend importantly on growth of labor income, and that will depend mainly on business hiring decisions. Over the last several months job growth has turned a bit stronger but wage growth has turned a bit weaker and growth of labor income has been little changed.

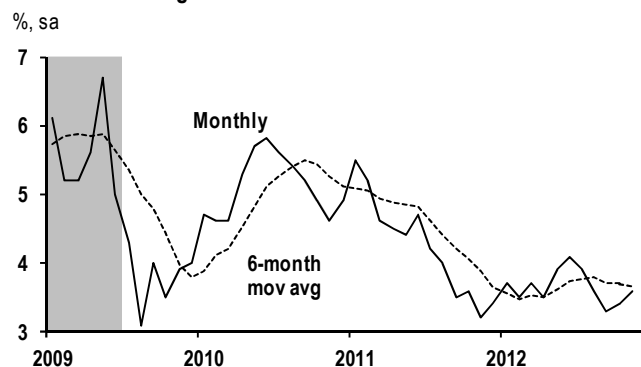
The forecast for 2013 looks for a continued, gradual acceleration of job growth and a gradual acceleration of labor income as well. But this is mainly a story for the second half of the year. The increase in payroll taxes and income taxes will tend to hold back consumer spending and overall growth early in the year and likely lead to a temporary slowdown in hiring as well. But once this hit to growth from higher taxes is absorbed, overall growth and hiring should reaccelerate. The key downside risk to that forecast is a more lasting turn to business caution as tighter fiscal policy slows growth early in the year.

V. Inflation remains dormant

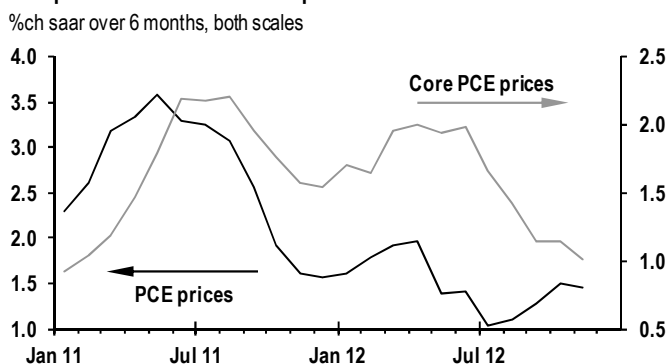
The forecast has called for inflation to slow this year in an environment of excess slack and tepid US and global growth. And over the past several months this forecast has played out. The PCE price index has moderated to 1.4%oya in the latest November reading and the core PCE price index has also slowed to 1.5%oya, from average readings of 2.4% and 1.9% for these two measures in 1Q12. And the 6-month run rates have dropped even lower. The trend toward lower inflation can be expected to continue over at least the next six months, with overall prices likely to be unchanged between now and March and risks to the forecast of 1.5% core inflation, a continuation of the recent trend, tilted to the downside. The forecast calls for inflation as measured by the PCE price index to slow from 1.7% in 2012 to 1.2% in 2013 (4Q/4Q), and for the core PCE price index to slow from 1.5% to 1.4%. (The discussion below switches to CPI measures of core inflation since there is no official PCE price measure for core goods or core services.)

Headline inflation is heavily influenced by volatile energy and food prices. Gasoline prices rose substantially in August and September of last year, but those prices were elevated relative to the price of crude oil because of refinery outages and other short-term problems. Accordingly, the price of gasoline has already dropped substantially and futures markets are pricing in further declines in the seasonally adjusted

Household saving rate



PCE price index and core PCE price index



price of gasoline from here. The retail price of gasoline has declined from an average \$3.91 per gallon in September to about \$3.40 per gallon recently, and futures markets look for little change over the next few months. On a seasonally adjusted basis, the futures markets point to another 7.6% decline in the price of gasoline between January and May.

As a partial offset, the higher prices of grains and soybeans that resulted from last summer's drought should finally translate into higher prices for meat and the overall CPI for food in early 2013. Based on past relationships, higher food prices will be a noticeable, but less powerful influence on inflation than declines in the price of gasoline. The net effect of swings in energy and food prices will take an average of slightly less than 0.1% per month (samr) off of consumer price inflation over the next three months, holding overall inflation close to zero over this period.

Core goods prices should continue to slow

Sharp swings in core goods prices are common, and these usually account for the swings in overall core inflation. The most recent shift has been to reduced price pressures, and core goods prices have recently slowed to 0.5%oya and a run rate of -1.4% saar over the past three months. Leading indicators of core consumer goods prices such as the PPI for core

intermediate goods (parts and materials), a domestic price measure that usually leads the CPI for core goods, and import prices have moderated recently as well.

To be sure, a major upturn in US or foreign growth or a sharp drop in the dollar could change these trends in core goods prices. But the outlook calls for at least slightly below-trend growth in the US and global economy over the next few quarters, without major moves in exchange rates. And this looks consistent with generally weak pricing for consumer goods.

Rise in core services inflation is over

The inflation rate for core services prices tends to be more inertial. But core services prices had been accelerating gradually until recently and putting upward pressure on core inflation. The rise in core services inflation appears to have ended in recent months, however, and the forecast calls for stabilization from here. Two large components of core services prices, housing (owners' equivalent rent and tenant rent) and medical services, have been sources of upward pressure on inflation in the past and deserve special attention.

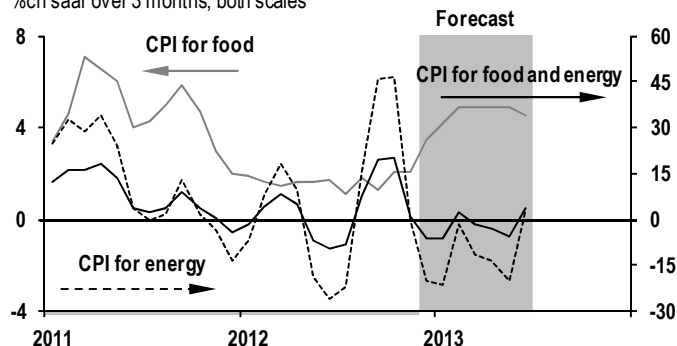
The upward drift in core services inflation in the past few years had been partly associated with a shift in the housing market from owning to renting, an associated decline in rental vacancy rates, and resulting upward pressure on rents. While there had been some speculation that accelerating rents would be a continuing source of upward pressure on inflation, this does not seem to be the case. While tenants' rental inflation remains firm, inflation for owners' equivalent rent, which is about four times as important as tenants' rent, appears to have stabilized recently around 2.0%-2.5% growth.

Two influences may help to keep a lid on rents despite a strong rental market. One is the supply response to increased demand. Multifamily construction is increasing rapidly and, quantitatively much more important, there has been a large-scale conversion of the existing housing stock from owner-occupied to rental properties. Rent increases are probably also being limited by fairly anemic income growth. Nominal disposable income per household has increased less than 2.5% over the past year. And by most accounts, that growth is skewed toward upper-income households (which tend to be owners rather than renters). So the income growth for renters is probably even less.

Medical costs have also been an upward source of pressure on inflation in the past, especially for the core PCE price index. Medical services comprise about 25% of the PCE price index for core services but less than 10% of the CPI measure

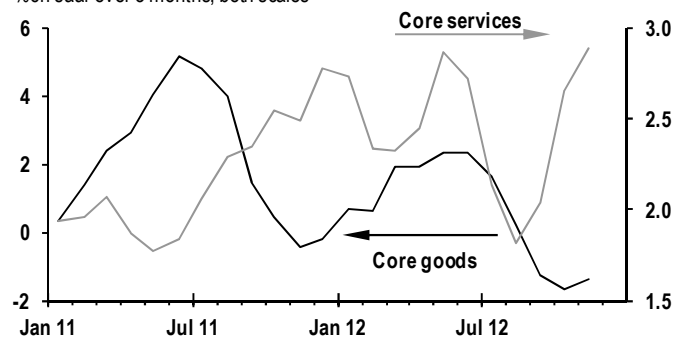
CPI for food and energy, food, energy

%ch saar over 3 months, both scales



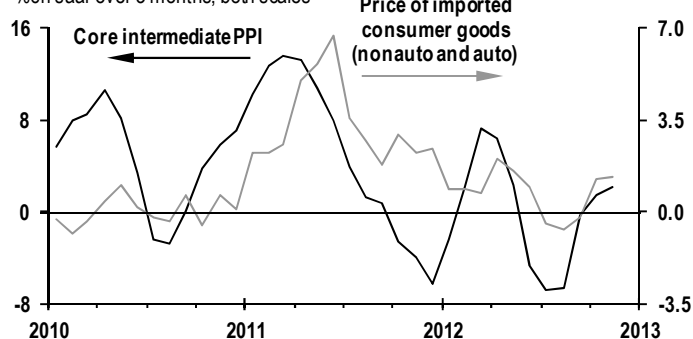
CPI for core goods and services

%ch saar over 3 months, both scales



Two influences on core consumer prices

%ch saar over 3 months, both scales



because of conceptual differences in the two measures. The PCE price measure includes all medical services including those paid for by government programs; the CPI measure only includes out-of-pocket payments by households. While the PCE for medical services had been accelerating through the first half of the last decade, it has been slowing noticeably over the past several years from an annual increase of 3.7% in 2007 to 1.8% last year, and it is likely to hold near this pace over the coming year in an environment of weaker demand growth and continued government efforts to control costs.

While it is very difficult to forecast short-term wiggles in core services prices, over long periods of time labor cost is an important influence on core services prices. And the prospect for continued high unemployment should ensure that labor costs remain contained, a brake on inflation if a headwind for consumer spending. Over the past year the trends in both the Employment Cost Index and average hourly earnings have been slowing. The October labor market report shows that average hourly earnings for all private-sector workers slowed to 1.6%oya and a 3-month run rate of only 1.0% saar. Both represent the smallest rates of increase in the history of this series dating back to 2006.

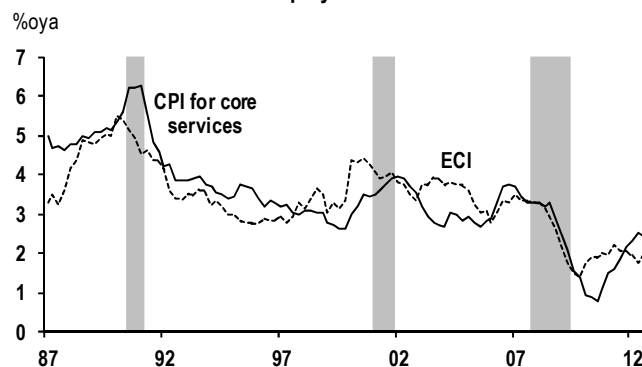
VI. Fed to keep pushing the boulder up the hill

The Fed remained active in 2012. At the January meeting it undertook another jump forward in transparency by publishing the Committee participants' interest rate forecasts. In midyear it extended Operation Twist through the end of 2012. The most aggressive action was taken in September, when it committed to open-ended QE, vowing to purchase \$40 billion in MBS each month until there was a "substantial" improvement in the labor market. At that meeting it also pushed back its forward guidance in the earliest date of lift-off to mid-2015 and mentioned it was prepared to undertake additional asset purchases. Finally, and quite importantly, it communicated that accommodation would be maintained for a "considerable time after the economic recovery strengthens."

The move toward aggressive and innovative policy continued at the December meeting, when they initiated \$45 billion per month open-ended purchases of Treasuries, and modified their overnight rate guidance to frame it in terms of economic conditions that will need to be fulfilled before the first rate hike. This latter innovation -- pledging to keep rates near zero until the unemployment rate is below 6.5% or the inflation outlook is above 2.5% -- can be seen as an extension of the September pledge to maintain accommodation even after the recovery strengthens.

From a forecasting perspective, the two questions Fed policy poses for the outlook in 2013 are (i) for asset purchases, what constitutes substantial improvement in the labor market?, and (ii) for overnight rates, when will the unemployment rate fall below 6.5%? (or else when will the inflation outlook rise above 2.5%?). Thinking around the first question received a jolt when the minutes to the December meeting portrayed a Committee that was perhaps anticipating the conclusion of open-ended asset purchases in late 2013. This would seem to be earlier than conjectured conditions laid out by Chicago

CPI for core services and Employment Cost Index



Fed President Evans (greater than 200,000 jobs per month for six months) or Boston Fed President Rosengren (an unemployment rate below 7.25%). Note however, that the FOMC has a rosier outlook for 2013 than most private-sector forecasters, as the central point of the Committee's outlook for this year is GDP growth of 2.7%. Seen in this light, the reaction function underpinning the discussion pointing to late 2013 for the end of QE may not be all that different from what is perceived by private forecasters, who with a more downbeat economic forecast were looking for an end of QE in 1Q2014. We continue to expect open-ended asset purchases to conclude in the first half of 2014.

The Fed's guidance on the direction of overnight rates is less unclear, thanks to the adoption of the modified Evans rule. The Fed left themselves some "wobble room" in noting that other labor market indicators will be monitored, and that financial and other developments will also be incorporated. From a forecasting perspective, however, the greater challenge comes in gauging the future of the unemployment rate. Arguably, the future of inflation could play an equal role in the timing of the first rate hike, though we feel relatively confident that the inflation outlook will remain tame over the next few years. Since 2010 the unemployment rate has fallen more than would be expected given the anemic pace of economic growth. Some of that can be explained by the participation rate continuing to fall even as the expansion took hold. It is our expectation that as the economy strengthens later this year the participation rate will stop declining, as there is already a large pool of potential workers on the sidelines who are likely to re-enter the labor force if conditions improve. Given this, we do not expect the Fed will see its unemployment threshold breached until after late 2015.

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Economic Research
The US economic outlook for 2013
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