US Market Economics

Treading water, with risks on the horizon

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For Required Conflicts Disclosures, please see back of document
Fiscal Cliff remains the most significant risk

### The Fiscal Cliff ($billions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Bush income tax provisions including AMT patch</td>
<td>-221</td>
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<tr>
<td>Social Security tax back to 6.2% from 4.2%</td>
<td>-95</td>
</tr>
<tr>
<td>Partial expensing of investment property and similar programs</td>
<td>-65</td>
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<tr>
<td>Sequestration agreed upon in 2011 debt ceiling deal</td>
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<tr>
<td>Extended unemployment insurance</td>
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<td>Health care act (increased taxes on higher income earners)</td>
<td>-18</td>
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<tr>
<td>Medicare payment rate reduction</td>
<td>-11</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>-501</strong></td>
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**Share of 2012 nominal GDP**

-3.2%

Source: RBCCM US Market Economics, CBO

### Taxpayers subject to the AMT

<table>
<thead>
<tr>
<th>Year</th>
<th>AMT revenue ($ billions)</th>
<th>Taxpayers subject to the AMT (millions)</th>
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<td>2012</td>
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### Which of the following comes closest to your attitude toward the US fiscal cliff?

- Not following: 55% (Jun-12), 47% (Sep-12), 29% (Oct-12)
- Not impacted outlook: 17% (Jun-12), 14% (Sep-12), 12% (Oct-12)
- Worsened confidence: 29% (Jun-12), 25% (Sep-12), 25% (Oct-12)
- Reduced spending/investments: 23% (Jun-12), 14% (Sep-12), 11% (Oct-12)

Source: RBCCM US Market Economics, CBO
Global manufacturing mired in a sea of red

With all of the key global PMI’s in our heat map out for August, there is no improvement to report. Most countries have continued to contract and this month one additional country slipped into neutral territory. It goes without saying, but the global backdrop is soft.

Global Manufacturing PMIs

<table>
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<tr>
<th>Region</th>
<th>Current</th>
<th>Previous</th>
<th>3 Months Ago</th>
<th>6 Months Ago</th>
<th>12 Months Ago</th>
<th>18 Months Ago</th>
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</table>

% Expanding: 15%  12%  18%  30%  18%  18%  76%  55%
% Contracting: 59%  73%  87%  33%  50%  9%  37%
% Neutral: 15%  15%  15%  36%  24%  9%  18%
Sharp slowing in exports is worrisome II

The chart below courtesy of our EM team is another way of thinking about this. In the face of softening global growth, the impact on Emerging Markets has been rather acute. Indeed, EM export volumes – a critical driver of growth generally speaking in the developing world – has slowed considerably, standing now just north of the zero-line. The global economic slowdown presently underway is not some embellished string of words. It’s actually quite tangible.
Sharp slowing in exports is worrisome

More important than one monthly trade print is what the forward-looking data are telling us about the direction of export growth. ISM export orders have rolled over hard in recent months and this metric tends to lead export growth by about 3 months with a robust correlation. Keep in mind that exports have accounted for 45% of top-line GDP growth since the recession ended and a sharp slowing here will put even more pressure on the beleaguered US consumer to move growth along.
Production pipeline slowdown bodes ill for broad economic activity

The front-end of the US production pipeline is seemingly drying up in non-trivial fashion. ISM new orders deteriorated further in August to just 47.1 and the weakest print since April 2009 (when the S&P was still plumbing the depths near 850). More significantly, though, is that this metric is now at 48 or lower for the third consecutive month. Back to 1953, this pattern was observed 11 times and we were able to skirt a recession in only two of these instances: 1967 and the 1995/96 mid-cycle slowdown. It is not surprising that new orders tends to be such a prescient indicator – given orders leads production and the trend in production subsequently tends to beget more/less hiring activity. What these results tell us is that production activity is poised to ratchet back in the months ahead. Given the US economy’s overreliance on capex and exports during this recovery thus far, this could prove quite detrimental to top-line growth.
This is the short-term European solution that got the markets excited

“It is against this background that the Governing Council today decided on the modalities for **undertaking Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the euro area.** As we said a month ago, we need to be in the position to safeguard the monetary policy transmission mechanism in all countries of the euro area.”

“At the same time, governments must stand ready to activate the EFSF/ESM in the bond market when exceptional financial market circumstances and risks to financial stability exist – with strict and effective conditionality in line with the established guidelines. The adherence of governments to their commitments and the fulfilment by the EFSF/ESM of their role are necessary conditions for our outright transactions to be conducted and to be effective.”

Mario Draghi, President of the ECB
ECB press conference
09/06/12
Spain data looks eerily similar to Greece

Home Prices (% change year/year)

-15% -10% -5% 0% 5% 10% 15%

05 06 07 08 09 10 11

Spain
Greece

Industrial Production Index

95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

Spain
Greece

Unemployment Rate

25 23 21 19 17 15 13 11 9 7 5

00 01 02 03 04 05 06 07 08 09 10 11 12

Spain
Greece

Central Bank Assets as % of GDP

350.0% 300.0% 250.0% 200.0% 150.0% 100.0% 50.0%

00 02 04 06 08 10 12

Greece
Spain
Structural unemployment problem starts with housing bust

Of the more than 4 million jobs that have yet to be “recovered” since the downturn, 80% are in real-estate related industries.

Skills mismatch is part of the structural unemployment problem…

Finding qualified applicants remains a challenge for the small business sector. The share of small firms reporting difficulty finding competent help remained near the cycle highs at 37%. Keep in mind we currently have 2x the supply of labor than we did in the last cycle. A corollary to this is that those folks without a college degree have experienced tepid job gains at best since hitting bottom back in the middle of 2009. And for that cohort, which has clawed back a fraction of their job losses, the challenges remain significant. Without a significant re-education of the workforce, headway on the unemployment rate will be glacial.
… but it is not just the high-skilled jobs that are difficult to fill

At a recent dinner in Washington, D.C., with representatives from major American manufacturing companies, I listened as the talk turned to how hard it is to find qualified applicants for jobs.

Applicants were often so underqualified, they said, that simply finding someone who could properly answer the telephone was sometimes a challenge.

Hard Unemployment Truths About 'Soft' Skills, Nick Schulz, WSJ, 9/20/12
Job openings data also point to structural issues in the job market

More evidence of this structural imbalance comes from the latest JOLTS (job openings and labor turnover) survey. Despite the relatively uninterrupted trend higher in private job openings (they are still up +233K year/year despite the sequential decline in July), hiring has stalled over the course of the last year. The inability of hiring to keep up with openings is another metric indicative of structural problems in the job market. More ominous, however, is that the current trend exhibited in this metric is typically a late-cycle development. The chart on the left (known as the Beveridge Curve) is a critical part of this discussion. If most of what ailed the labor backdrop was cyclical this curve would not have shifted so significantly out and to the right. Think of it this way, the most recent data point shows openings as a percent of the labor force running around 2.5%. From 2000-09 this was consistent with an unemployment rate closer to 6% or less.
Unemployment rate decline flattered by the sharp decline in participation

The decline in the advertised unemployment rate is encouraging to some. But this remains far from the best barometer of the true state of the employment backdrop. The entire decline in the unemployment rate over the course of the last few years can be attributed to the precipitous drop in labor force participation. Indeed, if the labor participation rate had remained steady at the pre-recession level of 66%, the unemployment rate would be closer to about 11% today. Even more concerning is who is dropping out of the labor force. The younger generation continued to drive the broad stagnation/contraction in the labor force.
Employment growth looks to have peaked

The rebound in productivity in recent quarters is a mixed blessing. It now looks as though the bottom in productivity growth is indeed in (at 0.4% in 3Q of last year). The problem is that historically, the bottoming process in productivity growth coincides with the topping out in employment growth. Job growth is already crawling along at an anemic pace, and can ill-afford a slowdown. We already suspect the recent string of weak ISM new orders numbers will not be kind to production over the next few months/quarters and that this will beget a subsequent slowing in employment growth. The reversal in productivity is yet another sign that the top is in for the pace of job growth.
Income pie growth still decelerating and points to softer consumption

One of the consistent themes over recent months is that real weekly wages continue to plumb the cycle low. But aggregate wages are not doing much better. On a y/y basis, real aggregate income (in other words, the income pie) has averaged just 1.4% over the last six months. This is the slowest growth rate since 1Q 2010 and keep in mind we were trending up back then. Not surprisingly, this metric tends to track real consumption well and suggests the US economy will be hard-pressed to gain much momentum in the near term.
The importance of income and savings

In an environment where credit to the consumer is not flowing freely (and with no home equity extraction), the driver of consumption necessarily has to be income. Unfortunately disposable personal income is rather weak in both nominal and real terms. Consider that in the years leading up to the downturn, DPI was averaging around 5.5% y/y. Today its averaging just about 3%. In a backdrop of soft income gains, the consumer has shown extreme willingness to fund current consumption at the expense of savings.
Private sector debt de-levering is ongoing

Consumer credit broke a 10-month winning streak, contracting -$3.3 billion in July. The drop-off was more a function of the slowing in non-revolving credit (mainly student loans) to just +$1.6b on the month – the weakest in a year. In terms of what the report is telling us about the ammunition for consumption, the story is little changed. That is, the consumer remains decidedly in a de-leveraging phase. Revolving credit contracted by -$4.8b and is now down in 3 of the last 4 months. In other words, the consumer will continue to rely on income (and savings?) to drive consumption in 2H. With real incomes languishing on a y/y basis (and likely to fall further), don’t expect consumption to break out any time soon.
Secular trend away from homeownership to continue

- Homeownership rate path if current rental and ownership trends are maintained
- Pre-bubble average

Homeownership Rate

% chg y/y

- Owner-occupied housing units
- Renter-occupied housing units
Housing market: perception vs reality

Here is more perception vs reality in the housing space. Housing starts continued to languish even in the face of NAHB homebuilder confidence that has exploded higher – up to 40 from 15 one year ago. This confidence metric has been a decent leading indicator of starts historically, but the problem is it also has a tendency of getting ahead of itself. The surge in builder confidence in both the early and late 90s was met with flat/sideways housing starts activity. Given the dynamics in the market today (especially the massive supply/demand imbalance), we think another headfake is afoot. With roughly six mortgages in arrears for every household being formed, it makes very little sense for builders to ramp up activity in any meaningful way.
Housing market: perception vs reality II

NAHB rose to 40, the best print since mid 2006. It is interesting that homebuilder confidence (hope) continues to print fresh cycle highs even as mortgage purchase applications (actual activity) have shown no signs of life.
Housing supply problem in one chart

There remains a gargantuan amount of inventory lurking in the shadows of the housing market. Per the Mortgage Bankers Association (MBA), total mortgages in arrears fell only modestly in 2Q and still total more than 5 million – keep in mind the MBA covers about 75% of the market, so the real number is probably just under 7 million. But just taking the MBA number at face value, **WE NOW HAVE 6 MORTGAGES IN ARREARS FOR EVERY NEW HOUSEHOLD BEING FORMED.** In other words, the demographics are not nearly enough to absorb this amount of supply. This means it will continue to take lower and lower prices to clear the market.

![Mortgages delinquent and in foreclosure chart](chart.png)

Source: Haver Analytics

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Pending home sales (signed contracts for home purchases) dropped a sharp -2.6% in August, fully reversing the gain in July. The index has now stalled around the 100 level for the better part of the last six months, suggesting any upside in existing home sales is likely to be capped near-term. Moreover, though, the recent break in the typically tight relationship between pending and existing sales continues to highlight the onerous mortgage underwriting process. Indeed, the pending sales index has overestimated actual existing sales by an average of 500K per month (annualized) since the beginning of the year. If this holds, the recent drop in contract signings suggests existing sales should revert back towards the 4.5m unit level in September – a far cry from anything resembling a robust housing recovery.
Housing stocks bid up by hope, not fundamentals

Recently there seems to be an endless supply of optimism toward housing. As homeowners we are sympathetic to this view. As economists we are appalled. This is particularly true when we see homebuilding stocks rise even in the face of still challenged fundamentals. Consider that the last time homebuilders were sitting at this level, sales were 3x greater than where we are today. Now, while homebuilder stocks have become divorced from fundamentals…

…this relationship remains firmly intact. Until purchase applications (and by extension sales of homes) move decidedly higher, homebuilder sales results ($/share) should continue to languish. If fundamentals replace the hope bid in housing, the correction has potential to end in tears.
Homebuilders are tracking the post Tech bubble reflexive rebound

Putting aside the fundamentals, homebuilding stocks are exhibiting similar post-bubble behavior to that of the technology bubble that popped back in 2000. Both followed very similar patterns during the bubble cycle and homebuilders now seem to be tracking the post-bubble reflexive rebound that was also witnessed in tech stocks. The thing about reflexive rebounds is that they are, well, reflexive. Food for thought.
A bright spot within the housing sector: Rentals

Rental prices have accelerated over the course of this recovery and currently sit at 2.6% – after having fallen below 0% in early 2010. Demand for rentals remains high and is likely to remain on an upward trajectory as the homeownership rate – which swelled to unsustainable levels during the boom – continues its secular decline back to normalcy. Thus when you look at where builders have broken new ground, it is not surprising to see the multi-family sector vastly outperform the single-family space – with about 90% of these starts being devoted to rentals, to boot. Expect this trend to continue.
Fed’s QE3 absorb more than 50% of gross MBS issuance

Fed MBS purchases of $40b per month could impact the mortgage market in a non-trivial way. Note that net MBS production this year has averaged $4bn per month. So, the Fed purchases will take net supply deep into negative territory. The scarcity of new supply could create delivery issues for the TBA market, particularly if rates move abruptly. Ensuing pricing challenges would likely increase banks’ hedging costs and thus impede (the extent of which could vary) the follow-through to mortgage rates to the end consumer (banks would pass increases in hedging costs to the end user).
Fed QE not feeding through to MAIN street

With the Fed on the cusp of engaging in more QE, we decided to once again ask about the impact of quantitative easing on our survey respondents' financial situation. While respondents overwhelmingly saw no impact from Fed operations, those noting that QE helped them because it increased stock prices jumped to 11% from just 2% back in July. This is still overwhelmed by the 17% of respondents who said that QE hurts them because lower rates diminish their return on savings. But with the market up significantly since the last time we asked this question, it is not surprising to see a notable surge in the share of participants that view QE as good because of its impact on equity prices.
Taylor Rule says the Fed is TOO EASY

Given the Fed’s obsession with the employment backdrop, a notion has spread through the market that the committee’s focus on inflation has been diminished. As we discuss in Fed: The Mandate in focus, this is a misconception in our view. Should inflation drift above the Fed’s explicit comfort level for the wrong reasons, this is likely to cause the committee to ease back accommodation. If the gap becomes large enough, they would engage in outright tightening. A simple Taylor rule would suggest current policy is overly accommodative. As a result, in order for the Fed to come close to the +2% Funds rate that a 3% inflation/8% unemployment backdrop would warrant without selling assets, they would have to raise the funds rate to roughly 5%.

![Graph showing Fed funds, San Fran Fed Taylor Rule, and Fed Funds adjusted for QEs.](image)

*FFR = 2.07 + 1.28 x Inflation - 1.95 x (Unem. - NAIRU). We assume 5% NAIRU pre Jul-09 and 6% thereafter.*
Bank excess reserves are in the stratosphere

Reserve Balances With Federal Reserve Banks

EOP, Mil.$

Source: Federal Reserve Board / Haver Analytics
Inflation already running at 2% despite extremely low money “churn”
Consumer cost of carrying debt near all-time lows

Household Financial Obligation Ratio

Source: Federal Reserve Board /Haver Analytics
Autos space highlights how fast credit channels could open up

While broadly speaking the deleveraging process is ongoing, there is one category of credit witnessing leveraging. One of the key reasons auto sales have picked up momentum is a renewed focus on subprime, of all things. In fact, the increase in sales is one of the reason it appears that consumer lending activity has advanced.

Financing for new vehicles (% chg year/year)

<table>
<thead>
<tr>
<th>Category</th>
<th>1Q 2012</th>
<th>2Q 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superprime</td>
<td>-4.5%</td>
<td>-5.7%</td>
</tr>
<tr>
<td>Prime</td>
<td>4.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Nonprime</td>
<td>11.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Subprime</td>
<td>11.5%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Deep subprime</td>
<td>10.2%</td>
<td>19.3%</td>
</tr>
</tbody>
</table>
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