Themes in the Outlook

1st Theme: Substantial “Slack” in the U.S. economy

Source: FRED and author’s calculations

Accumulated loss of Real GDP relative to potential 2008 to 2015 = $5.6 trillion
Output Gap

$100 \times (\text{real GDP/potential real GDP} - 1)$

Source: FRED and author's calculations
Corresponding slackness in the labor market...
Employment over working age population (percent)

Shaded areas indicate US recessions.
2012 research.stlouisfed.org
Working part time for economic reasons as percent of labor force

Shaded areas indicate US recessions.
2012 research.stlouisfed.org

100*LNS12032194/CLF160V

(100*Thousands of Persons/Thousands of Persons)
2nd Theme Inflation on “target” -- labor market slack implies slow growth in unit labor costs...

Nonfarm Business Sector: Unit Labor Cost (ULCNFB)

Shaded areas indicate US recessions.
2012 research.stlouisfed.org
Slow growth in unit labor costs Results in low inflation...
Low inflation environment implies low expected inflation

10 year T bond minus 10 year Inflation Indexed T bond

Shaded areas indicate US recessions.
2012 research.stlouisfed.org
3rd Theme: Slow recovery from the “Great Recession”

Why the slow recovery?

Past recoveries helped by cuts in the Fed Funds rate...
Cuts in the Fed funds rate increases interest sensitive spending...

Post WWII recoveries associated with growth in spending on housing and autos:
Autos recovering more than housing...

$ for clunkers!
Historically recoveries are slow after financial crises or “balance sheet recessions”
### What other components of spending account for the current recovery?

<table>
<thead>
<tr>
<th></th>
<th>Post WWII average (%)</th>
<th>1982:4 – 1986:1 Average (%)</th>
<th>2009:2-2012:3 Average (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real GDP growth</strong></td>
<td>3.24</td>
<td>5.30</td>
<td>2.04</td>
</tr>
<tr>
<td><strong>Contribution to percent change in Real GDP</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>2.14</td>
<td>3.36</td>
<td>1.26</td>
</tr>
<tr>
<td>Nonresidential investment</td>
<td>0.44</td>
<td>0.78</td>
<td>0.31</td>
</tr>
<tr>
<td>Residential Investment</td>
<td>0.10</td>
<td>0.69</td>
<td>0.03</td>
</tr>
<tr>
<td>Change in inventories</td>
<td>0.09</td>
<td>0.26</td>
<td>0.52</td>
</tr>
<tr>
<td>Net exports</td>
<td>-0.10</td>
<td>-0.81</td>
<td>-0.02</td>
</tr>
<tr>
<td>Government purchases</td>
<td>0.57</td>
<td>1.03</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

Source: U.S. BEA and author’s calculations
### Summary of forecasts

<table>
<thead>
<tr>
<th>Real GDP growth (%)</th>
<th>2011</th>
<th>2012f</th>
<th>2013f</th>
<th>2014f</th>
<th>2015f</th>
</tr>
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<tbody>
<tr>
<td>Northern Trust (Q4/Q4)</td>
<td>2.0</td>
<td>1.6</td>
<td>1.9</td>
<td></td>
<td></td>
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<tr>
<td>Blue Chip</td>
<td>2.0</td>
<td>1.7</td>
<td>2.3</td>
<td></td>
<td></td>
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<tr>
<td>FOMC (9/12)</td>
<td>1.7-2.0</td>
<td>2.5-3.0</td>
<td>3.0-3.8</td>
<td>3.0-3.8</td>
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<tr>
<th>Inflation (%)</th>
<th>2011</th>
<th>2012f</th>
<th>2013f</th>
<th>2014f</th>
<th>2015f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Trust (CPI Q4/Q4)</td>
<td>3.3</td>
<td>2.2</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Chip (CPI)</td>
<td>3.3</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOMC (PCE 9/12)</td>
<td>1.7-1.8</td>
<td>1.6-2.0</td>
<td>1.6-2.0</td>
<td>1.8-2.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Unemployment rate (%)</th>
<th>2011</th>
<th>2012f</th>
<th>2013f</th>
<th>2014f</th>
<th>2015f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Trust (EOP)</td>
<td>8.7</td>
<td>7.8</td>
<td>7.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOMC (9/12)</td>
<td>8-8.2</td>
<td>7.6-7.9</td>
<td>6.7-7.3</td>
<td>6.0-6.8</td>
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Note: FOMC central tendencies imply:
- Implicit target inflation = 2%
- Natural rate of unemployment = 5.2 to 6%
- Growth rate of potential GDP = 2.3 to 2.5%
This market will settle $10.00 if the US into recession during 2013 and $0 if the US DOES NOT go into recession during 2013.

Risks to the forecast

Intrade Contract:
The US Economy will go into Recession during 2013

Election day

11/30/2012

CBO report
Source of recession risk:

**1st source:** “The Fiscal cliff”

CBO Aug 22, 2012 report

Baseline projection (economy goes over “the cliff”):
- 2013 ↓ Federal Government Budget deficit by - $641B
- 2013 real GDP growth = -0.5% and unemployment rate = 9%

Alternative projection no tax increase (except expiration of payroll tax holiday) or major cuts in spending:
- 2013 Real GDP growth = 1.7% and unemployment rate = 8%.
Most of increase in the primary budget deficit is due to projected increase in Medicare spending.
Federal Government Debt held by the Public
(CBO Alternative Baseline)

Suggests another decade of sustainable government debt to GDP ratio before it explodes...
Bond market doesn’t seem to be worried...yet
Source of recession risk:

2nd source: Recession in Europe

weaker economic growth in Europe has decreased US exports

potential collapse of Euro would cause a European financial crisis ...contagion effect on U.S.?

3rd source: Fragility of the U.S. economy

Little (political) room for fiscal policy to stimulate the U.S. economy

Little room for monetary policy to stimulate the U.S. economy. Or is there?
Milton Friedman (1969) *The Optimum Quantity of Money*