Summary

- Consumer balance sheet repair is ongoing
  - The need to increase saving may limit spending growth
- Employment is improving, but lags past expansions
- Housing: off the bottom, encountering constraints
- Banks: Healthy in the US, challenged elsewhere
**Consumer Balance Sheet Repair**

- Debt levels have been declining, but may have further to go
- Stock values have recovered, home equity has not

![Graph showing Debt to Disposable Income and Household Net Worth over time](source: Federal Reserve)

**Net Worth Stratification**

- The recovery of net worth has been very uneven
- There are a substantial number of families unprepared for retirement

![Graph showing Median Saving by Income Percentile and Percent of Families Owning Stocks or Pooled Investments](source: Federal Reserve Survey of Consumer Finances)
Renewed Frugality?

- Spending will have to be more in line with income
- Saving rates will rise to replenish lost wealth

**Year over Year Change**
- Real Personal Consumption Expenditures
- Real Disposable Income

**Saving Rate**
- 12-Month Moving Average

Source: Bureau of Economic Analysis

US Consumer Lending Standards

- Terms have improved
- Auto lending unencumbered by lost asset values

**Tighter Standards for Consumer Loans**
- Credit Cards

**Increased Demand for Consumer Loans**
- Credit Cards
- Auto Loans

Source: Federal Reserve

26th Annual Economic Outlook Symposium – November 30, 2012
Carl Tannenbaum, Chief Economist
Northern Trust

Payroll Employment

- New hiring lags well behind past precedents
- Picking up momentum?

Nonfarm Payrolls

Monthly Change  3-Month Moving Average

Source: Bureau of Labor Statistics, Haver Analytics

Unemployment and Labor Force Participation

- Broad measures of joblessness remain very high
- How many workers are discouraged?

Source: Bureau of Labor Statistics, Haver Analytics
The Composition of New Hiring

- New positions carry lower wages than the ones lost
- Part-time employment seems more like an end state than a transitional state

Trends in Payroll Employment For Selected Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>% Job Change, 2009-2010</th>
<th>% Job Change, 2010-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>-10%</td>
<td>-5%</td>
</tr>
<tr>
<td>Construction</td>
<td>-5%</td>
<td>-10%</td>
</tr>
<tr>
<td>Business Services</td>
<td>0%</td>
<td>-5%</td>
</tr>
<tr>
<td>Financial</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Leisure/Hospitality</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Government</td>
<td>0%</td>
<td>-10%</td>
</tr>
</tbody>
</table>

Working Part-Time for Economic Reasons

Source: Bureau of Labor Statistics, Haver Analytics

Structural Unemployment?

- A large “shadow inventory” of workers
- Are they mismatched with job openings?

Mean Duration of Unemployment

Source: Bureau of Labor Statistics, Haver Analytics
Is Housing Turning?

- The degree of improvement is a matter of perspective

![Graph showing Existing Home Sales and Housing Starts]

Source: National Association of Realtors, US Census Bureau, Bloomberg

The Balance Sheet for Housing

**Assets**
- Very, very low mortgage rates
- Declining foreclosure backlog
- Attractive prices
- Pent up demand: family formation

**Liabilities**
- Hesitant underwriters
- Pending re-regulation
  - Originators
  - GSEs
- Tax uncertainty
- Student debt

Source: Northern Trust Global Economic Research

26th Annual Economic Outlook Symposium – November 30, 2012
Good Conditions for Home Purchasers

- Price correction hurts owners, helps buyers

Housing Affordability Index

<table>
<thead>
<tr>
<th>Year</th>
<th>Housing Affordability Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>130</td>
</tr>
<tr>
<td>2003</td>
<td>200</td>
</tr>
<tr>
<td>2006</td>
<td>150</td>
</tr>
<tr>
<td>2009</td>
<td>200</td>
</tr>
<tr>
<td>2012</td>
<td>250</td>
</tr>
</tbody>
</table>

% of Consumers Planning to Buy A Home in the Next 6 Months

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Consumers Planning to Buy A Home in the Next 6 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.0</td>
</tr>
<tr>
<td>2003</td>
<td>2.0</td>
</tr>
<tr>
<td>2006</td>
<td>3.0</td>
</tr>
<tr>
<td>2009</td>
<td>4.0</td>
</tr>
<tr>
<td>2012</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Household Formation

- Major impediments to housing purchases among young people
- Many parents are not in a position to assist

Unemployment Rates by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>13.0%</td>
</tr>
<tr>
<td>25-34</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

Total Student Loans Outstanding

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Student Loans Outstanding (Trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>0.2</td>
</tr>
<tr>
<td>2006</td>
<td>0.6</td>
</tr>
<tr>
<td>2009</td>
<td>0.8</td>
</tr>
<tr>
<td>2012</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics, Haver Analytics

Source: National Association of Realtors

Source: Conference Board
Mortgage Lending Standards

- Mortgage standards have yet to ease
- Higher FICO scores and down payments required

FRB Survey of Lending Conditions

<table>
<thead>
<tr>
<th>Prime Mortgages</th>
<th>Credit Cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2012</td>
</tr>
<tr>
<td>80</td>
<td>-20</td>
</tr>
<tr>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>20</td>
<td>40</td>
</tr>
</tbody>
</table>

Willingness to Underwrite Relative to 2006

- Much More Likely
- Somewhat More Likely
- About the Same
- Somewhat Less Likely
- Much Less Likely

Source: Federal Reserve

Return to Rental

- Absent policy intervention, nature will take its course

Home Ownership Rate

Housing Starts (Thousands)

Source: US Census Bureau, Bloomberg
### The Fiscal "Cliff"

- Approaches early next year
- Uncertainty over tax rates hinders consumption and investment

![CBO Projections](chart)

<table>
<thead>
<tr>
<th>Item</th>
<th>Impact ($5bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expiration of income tax cuts, AMT growth</td>
<td>221</td>
</tr>
<tr>
<td>Expiration of payroll tax relief</td>
<td>95</td>
</tr>
<tr>
<td>Other expiring tax provisions</td>
<td>65</td>
</tr>
<tr>
<td>Spending cuts</td>
<td>65</td>
</tr>
<tr>
<td>Expiring unemployment benefits</td>
<td>26</td>
</tr>
<tr>
<td>Other (including projected impact of lower growth)</td>
<td>134</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office

### Background on Our Tax System

- Tax receipts as a % of GDP are at a generation low
- The complexity of our tax code has grown dramatically

![IRS Receipts](chart)

<table>
<thead>
<tr>
<th>Year</th>
<th>IRS Receipts (Left)</th>
<th>% of Nominal GDP (Right)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>10%</td>
<td>100%</td>
</tr>
<tr>
<td>1984</td>
<td>12%</td>
<td>122%</td>
</tr>
<tr>
<td>1996</td>
<td>14%</td>
<td>144%</td>
</tr>
<tr>
<td>2008</td>
<td>16%</td>
<td>166%</td>
</tr>
<tr>
<td>2013</td>
<td>18%</td>
<td>188%</td>
</tr>
</tbody>
</table>

Length of the US Tax Code (Pages)

<table>
<thead>
<tr>
<th>Year</th>
<th>Length (Pages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1913</td>
<td>400</td>
</tr>
<tr>
<td>1939</td>
<td>504</td>
</tr>
<tr>
<td>1945</td>
<td>8,200</td>
</tr>
<tr>
<td>1969</td>
<td>14,000</td>
</tr>
<tr>
<td>1961</td>
<td>16,500</td>
</tr>
<tr>
<td>1974</td>
<td>19,500</td>
</tr>
<tr>
<td>1984</td>
<td>26,300</td>
</tr>
<tr>
<td>2004</td>
<td>60,044</td>
</tr>
<tr>
<td>2007</td>
<td>67,204</td>
</tr>
<tr>
<td>2008</td>
<td>67,506</td>
</tr>
<tr>
<td>2009</td>
<td>70,320</td>
</tr>
<tr>
<td>2010</td>
<td>71,684</td>
</tr>
</tbody>
</table>

Source: BEA, IRS, Haver Analytics

Source: CCH
### US Banking Conditions

- Capital levels are very strong
- Asset quality and capital have recovered nicely

![Bank Capital Ratios](chart.png)

Source: FDIC, Federal Reserve

### US Bank Profitability

- Earnings have not recovered to pre-crisis levels
- Banks are not fans of the Fed’s “low for long” policy

![Return on Equity](chart.png)
![Net Interest Margin](chart.png)

Source: FDIC
Banks Remain Reserved

- Plenty of liquidity and capital
- Uncertainty prompts conservatism

YOY Change in Lending Volume

Source: Federal Reserve, Bloomberg

A Host of Financial Policy Issues

- New capital rules
  - Have we adequately addressed “too big to fail?”
- Mortgage underwriting standards
  - Risk retention
- The future of the GSEs
- Sound secondary markets
  - How much credit should we reintermediate?
US Financial Market Conditions

- Corporate spreads continue to fall
- Volatility is at a low ebb

Corporate Bond Spreads

Bloomberg Financial Conditions Index

VIX Index

Source: Bloomberg

Europe: Troubling Credit Conditions

- Significant impairment of liquidity and capital
- Credit constriction accentuates economic duress

Year over Year Change in EU Lending

Month over Month Change in Spanish Deposits

Source: European Central Bank, Haver Analytics

Source: Haver Analytics
Summary

- Our outlook calls for slow, but steady progress
  - Gradual drop in unemployment
  - An orderly resolution of fiscal issues
  - An orderly resolution of European issues
  - No change in Fed policy for a long time

- Risks seem aligned on the downside
  - Dissolution of current euro compact
  - Brinksmanship over the U.S. budget
  - Arab spring turns into Arab fall