Presentation Outline

• 2015 Scorecard

• Recap of 2015

• How Quickly Things Change

• 2016 Forecast
## 2015 Scorecard (Macroeconomic Fundamentals)

<table>
<thead>
<tr>
<th></th>
<th>2015 Q1 Forecast</th>
<th>2015 Q1 Actual</th>
<th>2015 Q2 Forecast</th>
<th>2015 Q2 Actual</th>
<th>2015 Q3 Forecast</th>
<th>2015 Q3 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Gross Domestic Product (GDP)</td>
<td>3.04%</td>
<td>0.64%</td>
<td>3.52%</td>
<td>3.92%</td>
<td>2.7%</td>
<td>1.98%</td>
</tr>
<tr>
<td>CPI Inflation</td>
<td>0.8%</td>
<td>0.0%</td>
<td>1.3%</td>
<td>0.03%</td>
<td>1.5%</td>
<td>0.13%</td>
</tr>
<tr>
<td>CPI - Core</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.6%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Employment Growth (thousands)</td>
<td>926</td>
<td>778</td>
<td>683</td>
<td>610</td>
<td>604</td>
<td>623</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>5.6%</td>
<td>5.6%</td>
<td>5.6%</td>
<td>5.4%</td>
<td>5.5%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>
# 2015 Scorecard (Interest Rates)

<table>
<thead>
<tr>
<th></th>
<th>2015 Q1 Forecast</th>
<th>2015 Q1 Actual</th>
<th>2015 Q2 Forecast</th>
<th>2015 Q2 Actual</th>
<th>2015 Q3 Forecast</th>
<th>2015 Q3 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Month Treasury Bill Rate</td>
<td>0.02%</td>
<td>0.03%</td>
<td>0.02%</td>
<td>0.02%</td>
<td>0.03%</td>
<td>0.04%</td>
</tr>
<tr>
<td>10-Year Treasury Bond Rate</td>
<td>2.27%</td>
<td>1.97%</td>
<td>2.32%</td>
<td>2.16%</td>
<td>2.45%</td>
<td>2.22%</td>
</tr>
<tr>
<td>AAA Corporate Bond Yield</td>
<td>3.83%</td>
<td>3.57%</td>
<td>3.74%</td>
<td>3.90%</td>
<td>3.71%</td>
<td>4.09%</td>
</tr>
</tbody>
</table>
Growth in Real GDP (2000-present)

Source: Bureau of Economic Analysis.
Contributions to GDP Growth
(Last 5 Quarters)

Annualized Percent Change

Source: Bureau of Economic Analysis.
The Labor Market Had a Really Good 2015
Nonfarm Employment Continued Its Strong Growth

Measures of Unemployment Continued to Decline
(Headline=Black, U6=Red)

Private Wage Growth
(Percent Growth from Same Month in Previous Year)

Median usual weekly earnings (second quartile): Wage and salary workers full time, (USD, NSA) for United States

Private wage growth in 2015 Q4
Jumped 3.25% over 2014 Q4

Labor Market Conditions Index

Source: Board of Governors of the Federal Reserve System
Actual vs Projected Labor Force Participation Rates

Still Outpacing the Projections!

Labor Force Flows from Prior Month

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</tr>
</thead>
<tbody>
<tr>
<td>Unem. To NLF</td>
<td>2243</td>
<td>2019</td>
<td>2006</td>
<td>1916</td>
<td>1805</td>
<td>1834</td>
</tr>
<tr>
<td>Emp. To NLF</td>
<td>4464</td>
<td>4717</td>
<td>4440</td>
<td>4377</td>
<td>4463</td>
<td>4304</td>
</tr>
</tbody>
</table>

Down 18% from Dec. 2014

Down 4% from Dec. 2014

Source: Bureau of Labor Statistics
A Bad 2015 Q4 is Looming
### 2015 Q4 Forecasts Deteriorated as 2015 Evolved

<table>
<thead>
<tr>
<th></th>
<th>In January</th>
<th>In April</th>
<th>In July</th>
<th>In October</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP (Annualized Growth)</td>
<td>2.73%</td>
<td>1.75%</td>
<td>2.06%</td>
<td>2.58%</td>
<td>0.64%</td>
</tr>
</tbody>
</table>

As data for October-December came in, projections of 2015 Q4 worsened substantially.
Industrial Activity Slowed From October-December
(Percentage Change in Industrial Production from Year Ago)

Source: Board of Governors of the Federal Reserve System
Small Business Optimism Index: Net percent of firms expecting the economy to improve over the next 6 months, (%, SA) for United States

Firms Expecting “Better” or “Worse” Conditions in 6 Months (Net Percent Responding “Better” In 6 Months)

Positive values mean respondents expect conditions to be “better” in 6 months.

Positive values mean respondents expect conditions to be “worse” in 6 months.

Source: National Federation of Independent Business.
Construction in Q4 Was Also Very Slow
(Percentage Change from Year Ago)

Very rare for commercial construction to experience no growth without a recession following!

Source: Bureau of Economic Analysis
Impact of Cheap Oil
(Slide from Last January)

- **Positive**
  - $1000 per household
  - Equivalent to a $100 billion tax cut

- **Negative**
  - Global contraction?
  - Perhaps a .2 to .5 % decrease in fixed investment
  - Certain regions may feel the squeeze

- **Timing matters**
  - 2015 impact undoubtedly positive
  - Positive impacts deteriorate in future years
Oil Spot Prices

Source: United States Energy Information Administration.
The Tipping Point on Oil Prices
(Percentage Change from Year Ago)

Industrial Production: Crude petroleum and natural gas extraction [211111], (Index 2012=100, SA) for United States

Industrial Production: Drilling oil and gas wells [213111], (Index 2012=100, SA) for United States

Source: Board of Governors of the Federal Reserve System
China’s Economic Slowdown

Source: China National Bureau of Statistics
Europe Continues to Grow Erratically
(Real GDP Growth in EU 19)


Source: Eurostat, European Commission
... And Markets Become Volatile

Source: S&P Dow Jones Indices, LLC
2015 Recap

- 2015 started off with a poor Q1
  - This was consistent with previous years

- Most economic indicators were strong through the summer

- There has been a significant weakening of the economy in Q4.

- I expect a little chaos when the GDP figures for 2015 Q4 are given on Friday, but most are expecting a weak Q4.
A Look Ahead to 2016
2015 Q4 illustrates why the Fed did not “commit” to any path for normalization.

The Fed has flexibility

The Fed is unlikely to raise rates at every meeting during 2016.

We are forecasting 4 increases during 2016 putting the Fed Funds Rate in the 1.25% - 1.50% range by the end of 2016.
The Fed Funds Futures Market is “Bearish”

Source: CME Group
The Federal Reserve Governors are More Hawkish
(Projected Median Federal Funds Rate for 2016)

Source: Board of Governors of the Federal Reserve System
Overview of 2016

• Expect oil prices to remain low
  – Should end the year in the $50-$55
  – This could put additional pressure on banks that have financed the massive growth in energy related cap ex. over the last 10 years.

• We just had a major snowstorm, so expect some weakness in 2016 Q1 again.
  – That could lead to some pessimism for the near term

• Given the dynamics of the economy, 2%-2.5% real GDP growth should be our expectation.
# National Economic Outlook for 2016

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<thead>
<tr>
<th></th>
<th>Historical</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Gross Domestic Product</td>
<td>1.49%</td>
<td>2.42%</td>
</tr>
<tr>
<td>Employment Growth</td>
<td>1.70%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>7.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>1.22%</td>
<td>0.70%</td>
</tr>
<tr>
<td>CPI - Core</td>
<td>1.71%</td>
<td>1.60%</td>
</tr>
<tr>
<td>3-Month Treasury Bill (end of year)</td>
<td>0.06%</td>
<td>0.03%</td>
</tr>
<tr>
<td>10-Year Treasury Bond</td>
<td>2.35%</td>
<td>2.55%</td>
</tr>
<tr>
<td>30-Year Conventional Mortgage Rate</td>
<td>3.98%</td>
<td>4.17%</td>
</tr>
</tbody>
</table>