AGENDA

10:30am  Introductory Remarks  
Christine Cumming, First Vice President

10:40am-11:10am  The National Economy  
Richard Peach, Senior Vice President

11:10am-11:30am  Regional Update  
Jaison Abel, Senior Economist

11:30am-12:00pm  International Update  
John Clark, Senior Vice President

12:00pm  Adjourn to NWCR-10F

12:15pm  Lunch

12:15pm-1:55pm  Round Table Discussion with  
William Dudley, President

Questions for discussion with President Dudley:

Your experience and that of your customers and suppliers can give us insight into current economic conditions.

1. Has your firm experienced an increase in demand in recent months?
2. Has demand for your product or service increased sufficiently that you increased or plan to increase employment in 2014?
3. Has demand for your product or service increased sufficiently that you plan to increase investment in plant and equipment in 2014?
4. Has your access to credit changed in 2014?
5. This recovery can be characterized by spurts of growth, followed by a check and then another spurt of growth. Do you see signs that suggest the current growth rate will be sustained without such checking – or are you seeing signs of hesitation and slowing for the fourth quarter?

2:00 pm  Adjourn
Overview

- Growth of real GDP over the first half of 2014 was about 1 percent (annual rate), as growth rebounded robustly in Q2 after the Q1 decline.
  - Recent data suggest that underlying growth rate of real consumer spending may be somewhat lower, and the equilibrium personal saving rate may be somewhat higher.
  - Still, a number of indicators point to stronger growth in the second half of the year.

- At the same time,
  - Labor market conditions are firming, and the unemployment rate has fallen faster than expected.
  - After increasing in the spring, core PCE inflation appears to be stabilizing at under 2 percent.
  - These developments raise the possibility that the economy's potential growth rate may be lower than we had been assuming.

- The spring increase of inflation coincided with slower productivity growth, leading to faster growth of unit labor costs.
  - This has led some analysts to conclude that the Fed could be falling “behind the curve”.
  - However, our research suggests that inflation expectations are the main driver of inflation, and those expectations remain stable.
    - If this research is correct, profit margins may come under downward pressure.
Sources of the Growth of Real GDP

<table>
<thead>
<tr>
<th>Source</th>
<th>2014 Q1</th>
<th>2014 Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-2.1(6.1)</td>
<td>+0.8(1.7)</td>
</tr>
<tr>
<td>PCE</td>
<td>0.2</td>
<td>-0.8</td>
</tr>
<tr>
<td>Res. Inv.</td>
<td>0.0</td>
<td>-1.1</td>
</tr>
<tr>
<td>BFI</td>
<td>1.3</td>
<td>-0.4</td>
</tr>
<tr>
<td>G</td>
<td>-1.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Net Exports</td>
<td>+1.3</td>
<td>+1.3</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis
Consumption of Health Care Services Collapsed in 2014Q1

Hospital Gross Revenues (Accrued)

Source: Quarterly Services Survey, Bureau of the Census
Demand For Labor Firmed in 2014Q2

6 Month % Change, Annual Rate

Source: Bureau of Labor Statistics
Labor Force Participation Rate

Source: Bureau of Labor Statistics

Participation Rate has not increased as expected.

Unemployment

Percent


Percent

63.4%
Inflation Breakdown: Core Goods and Core Services

<table>
<thead>
<tr>
<th>Yr/Yr % Change</th>
<th>Yr/Yr % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Bureau of Labor Statistics</td>
<td></td>
</tr>
</tbody>
</table>

86% of increase in core CPI due to non-energy services, led by airfares, rents, and medical care services.

14% of increase of core CPI due to non-food, non-energy goods, led by apparel and medical care commodities.

Source: Bureau of Labor Statistics
Nonfarm Business Sector

16 Quarter % Change, Annualized

Source: Bureau of Labor Statistics
Actual and Expected Fed Funds Target

Source: Federal Reserve Board
Overview of Regional Conditions

• Regional economic activity rebounded sharply over the summer following an unusually harsh winter.

• Job growth has been strongest in Western New York, weakest in Central New York and the Southern Tier, and more mixed in the Hudson Valley.

• Though a growing number of places have gained back the number of jobs lost during the Great Recession, the types of jobs in the region have changed:
  - Middle-skill jobs lost during the recession have not come back,
  - Higher- and lower-skill jobs have grown during the recovery.
Current Economic Conditions
FRBNY Regional Business Surveys

Source: Federal Reserve Bank of New York.
Current Business Climate

FRBNY Business Leaders Survey

Source: Federal Reserve Bank of New York.
Regional Employment Trends

Total Employment, Seasonally Adjusted

Index (December 2007 = 100)


Shading indicates NBER recession.
Recent Job Growth in Upstate Metros

Year-Over-Year Percent Change (May-July Average)

<table>
<thead>
<tr>
<th>City</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td>0.6%</td>
</tr>
<tr>
<td>Albany</td>
<td>0.4%</td>
</tr>
<tr>
<td>Rochester</td>
<td>0.3%</td>
</tr>
<tr>
<td>Utica</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Glens Falls</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Binghamton</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Ithaca</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Syracuse</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Elmira</td>
<td></td>
</tr>
</tbody>
</table>

Status of Jobs Recovery

Share of Lost Jobs Gained Back During Local Recovery

United States: 107 percent
Upstate NY: 60 percent

Types of Jobs Lost and Gained
Skill Categories, Based on 2013 Median Wage, United States

Higher Skill
- Management
- Computer & Math
- Legal
- Engineering
- Business & Finance
- Healthcare Practitioner
- Sciences

Middle Skill
- Education
- Arts & Entertainment
- Installation & Repair
- Social Services
- Construction
- Protective Services
- Administrative Support
- Production
- Transportation

Lower Skill
- Healthcare Support
- Sales
- Building Maintenance
- Personal Care
- Farming
- Food Preparation

Job Change During the Great Recession
Percent Change, 2007 to 2010

Job Change During the Recovery

Percent Change, 2010 to 2013

United States

Downstate NY

Upstate NY

A Shrinking Middle
Share of Jobs by Skill Group, 2007 and 2013

10

International Update
Presentation to the Upstate New York Regional Advisory Board

John Clark
September 2, 2014

Figure 1 Global Growth and PMIs

1/ Bloomberg consensus and staff estimates. Data as of 8/29.
Sources: Markit Economics, national authorities, Bloomberg.
Figure 2: Advanced and EM Economies: GDP Growth

Percent, quarterly average at an annualized rate

United States | Euro Area | Japan | UK | China | Other EM Majors 1/

2013 (avg) | 2014 H1 | 2014 H2 (forecast)

Sources: National authorities, Bloomberg. Forecasted data as of 8/29.

1/ Brazil, India, Russia, Mexico, and Korea.

Figure 3: Euro Area: GDP Growth and Composite PMIs

Percent, saar

Correlation: .86

Source: Haver, Markit. Data as of July 10, 2014
Figure 4 AE 10yr Bond Yields

Figure 5 Peripheral Europe: 10yr Bond Spread to Bunds
Figure 6 Euro Area: Unemployment Rates

Percent, seasonally adjusted

1/ GDP-weighted: Italy, Spain, Greece, Ireland, Portugal.

Figure 7 Euro Zone Consumer Price Inflation

Percent y/y

Note: GDP-weighted averages. Peripheral 4 includes Portugal, Spain, Ireland and Greece
Source: Eurostat. Data is through July.
Figure 8  ECB Policy Announcements on June 5

- **Main policy rate cut 10 bps to 15 bps, and deposit rate cut to -10bps**
  - Negative rate applies to excess reserves, Target 2 balances, and other deposits

- **Announced Targeted Long-term Refinancing Operations (TLTROs)**
  - Banks can borrow up to 7% of outstanding loans to private nonfinancial borrowers (excluding mortgages); equivalent to €400 billion in September and December
  - Banks can also borrow 3x improvement in lending to private nonfinancial borrowers (ex-mortgages) beginning in 2015
  - 4 year term at 25 basis points, but loan matures in 2 years if target lending declines

- **Suspended sterilization of SMP purchases**

- **Extended Fixed Rate, Full Allotment Procedures through Dec 2016**

- **Preparatory work for potential future purchases of Asset-Backed Securities (ABS)**

Source: ECB Press release

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Figure 9 Japan: Monetary Base

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan Percent of GDP</th>
<th>US Percent of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>2008</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>2009</td>
<td>15%</td>
<td>7%</td>
</tr>
<tr>
<td>2010</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>2011</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>2012</td>
<td>22%</td>
<td>10%</td>
</tr>
<tr>
<td>2013</td>
<td>24%</td>
<td>11%</td>
</tr>
<tr>
<td>2014</td>
<td>26%</td>
<td>12%</td>
</tr>
<tr>
<td>2015</td>
<td>28%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: National authorities, data as of 8/28.
Figure 10 Japan: GDP Growth

Sources: Cabinet Office, Bloomberg. Data as of 8/28.
1/ Bloomberg.

Figure 11 Japan: CPI Inflation

Source: Haver, data as of 8/28.
Figure 12 Japan: Job Openings and Unemployment
Percent SA, smoothed


Figure 13 Japan: Nominal and Real Wages
Percent y/y

Figure 14 EMEs: Real GDP Growth
Percent change from year ago quarter

Source: National authorities

Figure 15 EMEs: Headline and Core Inflation
Percent, rolling 6m/6m SAAR

Source: National authorities, FRBNY. Data through June.
Figure 16 EME Exports and AE GDP
Percent, Q/Q-4


Figure 17 US and EM Asset Returns
Percent change

May 1, 2013 to Feb 3, 2014

Feb 3, 2014 to Present

Sources: Bloomberg, MorganMarkets. Data through 8/28.
Figure 18 EMEs: Leading Structural Challenges

<table>
<thead>
<tr>
<th>Leading Structural Challenges</th>
<th>Argentina</th>
<th>Brazil</th>
<th>China</th>
<th>India</th>
<th>Indonesia</th>
<th>Korea</th>
<th>Mexico</th>
<th>Russia</th>
<th>Saudi Arabia</th>
<th>South Africa</th>
<th>Turkey</th>
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<tbody>
<tr>
<td>Distortionary Tax Code</td>
<td>153</td>
<td>159</td>
<td>120</td>
<td>158</td>
<td>137</td>
<td>25</td>
<td>118</td>
<td>56</td>
<td>3</td>
<td>24</td>
<td>71</td>
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<tr>
<td>Inadequate Power</td>
<td>80</td>
<td>14</td>
<td>119</td>
<td>111</td>
<td>121</td>
<td>2</td>
<td>133</td>
<td>117</td>
<td>15</td>
<td>150</td>
<td>49</td>
</tr>
<tr>
<td>Inadequate Infrastructure</td>
<td>120</td>
<td>71</td>
<td>74</td>
<td>85</td>
<td>61</td>
<td>23</td>
<td>66</td>
<td>93</td>
<td>22</td>
<td>66</td>
<td>49</td>
</tr>
<tr>
<td>Excessive Energy Subsidies</td>
<td>2.9</td>
<td>0.2</td>
<td>3.8</td>
<td>4.5</td>
<td>5.4</td>
<td>1.5</td>
<td>2.4</td>
<td>6.3</td>
<td>16.7</td>
<td>4.3</td>
<td>1.0</td>
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<tr>
<td>Excessive Red Tape</td>
<td>57</td>
<td>121</td>
<td>19</td>
<td>186</td>
<td>147</td>
<td>2</td>
<td>71</td>
<td>10</td>
<td>127</td>
<td>80</td>
<td>38</td>
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<tr>
<td>Labor Market Rigidities</td>
<td>144</td>
<td>92</td>
<td>34</td>
<td>99</td>
<td>103</td>
<td>78</td>
<td>113</td>
<td>72</td>
<td>70</td>
<td>116</td>
<td>130</td>
</tr>
<tr>
<td>Health &amp; Primary Education</td>
<td>61</td>
<td>89</td>
<td>40</td>
<td>102</td>
<td>72</td>
<td>18</td>
<td>73</td>
<td>71</td>
<td>53</td>
<td>135</td>
<td>59</td>
</tr>
</tbody>
</table>

Sources: IMF, World Bank, World Economic Forum

Figure 19 Major EM Elections in 2014

<table>
<thead>
<tr>
<th>Month</th>
<th>Country</th>
<th>Winner 1/</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>Turkey (Municipal)</td>
<td>Inc</td>
</tr>
<tr>
<td>April</td>
<td>South Africa (Legislature and President) 2/</td>
<td>Inc</td>
</tr>
<tr>
<td></td>
<td>Indonesia (Parliament)</td>
<td>0pp</td>
</tr>
<tr>
<td>May</td>
<td>India (Parliament)</td>
<td>0pp</td>
</tr>
<tr>
<td>July</td>
<td>Indonesia (President)</td>
<td>0pp</td>
</tr>
<tr>
<td>August</td>
<td>Turkey (Presidential)</td>
<td>Inc</td>
</tr>
<tr>
<td>October</td>
<td>Brazil (President, Legislature, Governors)</td>
<td>Inc 3/</td>
</tr>
</tbody>
</table>

1/ Incumbent (Inc) or Opposition (Opp) party
2/ The National Assembly elects the President following its election.
3/ Front runner, based on first round intentions.
Figure 20 China: Real GDP Growth

Source: CEIC, FRBNY

Figure 21 China: Bank and Shadow Credit, Total Financing

1/Total financing includes bank loans, off-balance sheet & trust loans, net corp debt/equity
Figure 22 China: Commercial and Residential Real Estate
Percent y/y, 3mma, Floor

Source: CEIC

Figure 23 Exports to Russia as Percent of Total Exports
Percent of total exports

Source: UN Trade (2013; Austria 2012)
Figure 24 AEs: Evolution of Consensus Growth Forecasts

Source: Consensus Forecasts through June, July estimated from Blue Chip.

Figure 25 EMEs: Evolution of Consensus Growth Forecasts

Source: Consensus Forecasts through June, July estimated from Blue Chip.
Figure 26 Percentage Distribution of Global GDP

Projections are shares of USD GDP
Source: IMF WEO. Data as of 8/28.

Figure 27 Consensus Forecasts

Percent y/y

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced 1/</td>
<td>0.0</td>
<td>1.8</td>
<td>2.3</td>
<td>-0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>o/w: United States</td>
<td>2.2</td>
<td>2.1</td>
<td>3.0</td>
<td>-0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Euro Zone</td>
<td>0.0</td>
<td>1.0</td>
<td>1.6</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.7</td>
<td>3.0</td>
<td>2.7</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Japan</td>
<td>1.5</td>
<td>1.4</td>
<td>1.3</td>
<td>-0.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>Emerging Markets 1/</td>
<td>0.0</td>
<td>4.2</td>
<td>4.8</td>
<td>-0.6</td>
<td>-0.4</td>
</tr>
<tr>
<td>o/w: China</td>
<td>7.7</td>
<td>7.2</td>
<td>7.1</td>
<td>-0.3</td>
<td>-0.3</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.5</td>
<td>1.1</td>
<td>1.5</td>
<td>-1.2</td>
<td>-1.0</td>
</tr>
<tr>
<td>India</td>
<td>4.7</td>
<td>5.3</td>
<td>6.0</td>
<td>0.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>Russia</td>
<td>1.3</td>
<td>0.1</td>
<td>1.5</td>
<td>-2.3</td>
<td>-1.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.1</td>
<td>2.6</td>
<td>3.7</td>
<td>-0.8</td>
<td>-0.2</td>
</tr>
<tr>
<td>Korea</td>
<td>3.0</td>
<td>3.5</td>
<td>3.7</td>
<td>-0.1</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

Data as of August 28th. Sources: Blue Chip as of August where available, Consensus Economics as of August. 1/ Dollar-GDP weighted average
Figure R1 Russia: Oil and Gas Exports to Europe

<table>
<thead>
<tr>
<th></th>
<th>Volume (Millions barrels per day) 1/</th>
<th>Value (Annual, billions of dollars) 2/</th>
<th>Share of European consumption</th>
<th>Share of Russian export revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and products</td>
<td>4.4</td>
<td>164</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>2.4</td>
<td>49</td>
<td>28%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Sources: IEA, OECD, National authorities, and staff estimates.

1/ 2012 volumes, mbd equivalent for natural gas.
2/ Estimated, 2012 prices

Figure R2 Russia: External Debt

USD Billions, as of Q2 2014

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sovereign and Central Bank</td>
<td>55</td>
</tr>
<tr>
<td>Banks</td>
<td>207</td>
</tr>
<tr>
<td>Corporates</td>
<td>444</td>
</tr>
</tbody>
</table>

Memorandum items

Offshore bond issues | 135
Claims of BIS-reporting banks* | 209
  of which: US | 27
    Europe | 155
      o/w: France | 47
        Italy | 26
       Germany | 19
Russian share of: MSCI-EM index | 5.3%
EMBIG index | 10.7%

*As of Q1 2014
Source: Russian authorities and BIS