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
                  Jim Orr, Vice President

11:30am-12:00pm  International Update
                  Matthew Higgins, 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. Did your firm’s sales volume increase, decrease or stay the same in the first quarter of the year?
2. Do you expect your firm’s sales to increase, decrease, or stay the same during the second quarter?
3. Do you plan to increase investment in your firm (plant & equipment) this year?
4. Has your firm faced any recent shortage of labor that has limited your ability to meet demand?
5. Do you plan to increase employment this year?
6. Do you expect input prices to increase this year? Do you expect prices of products/services sold to increase?
7. Over the past two quarters, how have the terms and conditions for obtaining financing changed (tightened, eased, not changed)?

2:00 pm  Adjourn
Small Business & Agricultural Advisory Council  
Federal Reserve Bank of New York  
33 Liberty Street  
New York, NY  
Tuesday, April 14, 2015

ATTENDEE LIST

Council Members

Michael Arnoff  
President  
Arnoff Moving & Storage

Charles Feit  
President and Founder  
OnForce Solar

Alejandro Ballester  
President  
Ballester Hermanos, Inc.

Deborah Leo  
President  
Retail Solutions, Inc.

Adenah Bayoh  
Co-Founder  
Kapwood, LLC

Peter Maglathlin  
Chief Executive Officer  
MBI, Inc.

Stewart Brunhouse  
President  
A&A Company, Inc.

Patrick Marotta  
President/CEO  
Marotta Controls

William Byrne  
Chairman of the Board  
Byrne Dairy, Inc.

Ranjini Poddar  
Founder and CEO  
Artech Information Systems, LLC

Federal Reserve Bank of New York

William Dudley  
President

Christine Cumming  
First Vice President

Jack Gutt  
EVP, Head of Communications Group

Richard Peach  
SVP, Research & Statistics

Kausar Hamdani  
SVP, Communications & Outreach

Matthew Higgins  
VP, Global Economic Analysis

Anand Marri  
VP, Head of Outreach & Education

James Orr  
VP, Research & Statistics

Claire Kramer  
AVP, Community Development, Outreach & Education

Luis Uranga  
Sr. Associate, Chief of Staff’s Office

David Parkinson  
Counsel, Legal
Overview

• Real GDP increased at a 2 3/4% annual rate over 2013 and 2014, somewhat faster than the economy’s potential growth rate, narrowing the output gap and reducing, though not eliminating, slack in labor markets.

• While the consensus forecast is for growth of around 3% in 2015, recent expenditure data have been choppy and generally inconsistent with that projection.

• Inflation running lower than expected, due in part to the appreciation of the dollar and a continued slowing in the rate of increase of medical care prices.
GDP

2000Q1 to 2007Q4: 2.5% Growth Rate

2009Q2 to 2014Q4: 2.3% Growth Rate

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Potential GDP Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 - 2005</td>
<td>3.2%</td>
</tr>
<tr>
<td>2005 – 2010</td>
<td>2.0%</td>
</tr>
<tr>
<td>2010 – 2015</td>
<td>1.4%</td>
</tr>
<tr>
<td>2015 – 2020</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis, Congressional Budget Office

Note: Grey shading shows NBER recessions
Private Nonfarm Payroll Employment and Hours

% Change – Year to Year

Source: Bureau of Labor Statistics

* Note: Production and Non-Supervisory, Employees Only
Job-Finding Rate and Employment-to-Population Ratio

Rate


0.1 0.15 0.2 0.25 0.3 0.35

0.57 0.58 0.59 0.6 0.61 0.62 0.63 0.64

Job-Finding Rate (Left Axis)

Employment-to-Population Ratio (Right Axis)

Source: CPS

Note: Gray shading represents NBER recessions
Nonfarm Business Sector: Compensation Per Hour

Source: BLS/Haver Analytics
Civilian Employment and Part Time Employment for Economic Reasons

Thousands, SA

Source: BLS/Haver Analytics

Note: Data are quarterly
Citigroup US Economic Surprise Index

(Rolling three month window with time decay)

Note: The index is a weighted historical standard deviation of data surprises (actual releases vs Bloomberg survey median). Indices are assigned weights based upon the spot FX impacts of 1 standard deviation surprises.

Source: Citigroup
NESIS – Percentage Deviation from 5-yr MA

Source: Author’s Calculations of data generated by NOAA
Personal Saving Rate and Household Net Worth

Source: Bureau of Economic Analysis and Federal Reserve Board

Note: Fitted line is from 1983Q1 to 2005Q4.
Total Light-Weight Vehicle Retail Sales

Source: Autodata/Haver Analytics
Consumer Debt by Credit Score

% Change – Year to Year

Source: FRBNY Consumer Credit Panel

Note: Includes Student Loans
Change in Debt 2013Q4-2014Q4
By Credit Score Quintile

Equifax Risk Score Quintiles*

Mortgage/HELOC
Auto
Credit Card
Inquiries

Note: * 2013Q4 Quintiles
Transition of Mortgage Accounts from 30-60 Days Late

Percent

Source: FRBNY Consumer Credit Panel

To Current

To 90+ Days Late

Credit Score at Mortgage Origination: All First Mortgages

![Graph showing credit scores from 1999 to 2014](image)

- **Median**: A red line indicating the median credit score over time.
- **10th Percentile**: A blue line indicating the 10th percentile credit score.
- **25th Percentile**: A green line indicating the 25th percentile credit score.
- **About 35 to 40 Million People**: A note indicating the number of people with credit scores at or above the 10th percentile.

**Source**: FRBNY Consumer Credit Panel.
Equipment Investment and Capacity Utilization

% Change – Year to Year

% of Capacity

Manufacturing Capacity Utilization Rate (Right Axis)

Real Business Investment in New Equipment (Left Axis)

Note: Grey shading shows NBER recessions

Source: Federal Reserve Board, Bureau of Economic Analysis

Note: Grey shading shows NBER recessions
Baker Hughes US Oil Rig Count

Source: Baker Hughes
PCE Deflator

% Change – Year to Year

Source: Bureau of Economic Analysis

Note: Grey shading shows NBER recessions
CPI Inflation: Core Goods and Core Services

% Change – Year to Year

Source: Bureau of Labor Statistics

Note: Grey shading shows NBER recessions
Trade-Weighted Exchange Value of US$ & Nonpetroleum Imports

Year-over-year percent


Trade-Weighted Exchange Value of US$
(left axis)

Nonpetroleum Imports
(right axis)

Source: Federal Reserve Board, BLS/Haver Analytics
Rental Vacancy Rate and Rent of Primary Residence

Source: Census Bureau, BLS/Haver Analytics
Personal Consumption Expenditures: Health Care Price Index

% Change – Year to Year

17% of total PCE deflator
19% of core PCE deflator

Source: Bureau of Economic Analysis / Haver Analytics
Producer Price Index: General Medical and Surgical Hospitals by Patient Type

Source: Bureau of Labor Statistics PPI

Note: Jan-2005 set to 1
Producer Price Index: General Medical and Surgical Hospitals by Patient Type

12 Month % Change

Source: Bureau of Labor Statistics PPI

Medicare Patients (26.1%)

Medicaid Patients (18.1%)

Private Insurance and all other Patients (55.8%)
TIPS Based Inflation Expectations

Note: Dashed lines represent 2 Standard Deviations from the mean.
Reference Charts
HDD – Percentage Deviation from 5-yr MA

Source: Author’s Calculations of data generated by NOAA
TIPS Based Inflation Expectations

Note: Dashed lines represent 2 Standard Deviations from the mean.

2011 – Present Average: 2.34

Apr 9: 2.02

2.92 (+2 SD)

1.77 (-2 SD)
Regional Economic Activity

Index of Coincident Economic Indicators (CEI)

Index (December 2007 = 100)

Note: The Puerto Rico composite index is based on a different methodology than the indexes produced by the FRBNY.
Current Economic Conditions
FRBNY Business Surveys, Current Conditions

Past Year

Diffusion Index

Empire State Manufacturing Survey
Business Leaders Survey

Source: Federal Reserve Bank of New York.
Total Employment

Seasonally Adjusted Index

Index (December 2007 = 100)

Dashed Line Indicates U.S. Employment Trough (February 2010)

Shading indicates NBER recession

Total Employment
Seasonally Adjusted Index

Dashed Line Indicates
U.S. Employment Trough
(February 2010)

Shading indicates NBER recession

Index (December 2007 = 100)

Total Employment
Seasonally Adjusted Index

Dashed Line Indicates U.S. Employment Trough (February 2010)

Shading indicates NBER recession

Index (December 2007 = 100)

Status of Jobs Recovery

Share of Lost Jobs Gained Back During Local Recovery

**US = 132 percent**

Note: Orange*, Bergen*, and Middlesex* are the Orange-Rockland-Westchester, Bergen-Hudson-Passaic, and Middlesex-Monmouth-Ocean Special BLS Areas.
## Job Growth by Sector

Year-Over-Year Percent Change, February 2015

<table>
<thead>
<tr>
<th>Sector</th>
<th>United States</th>
<th>New York State</th>
<th>New York City</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>5.6</td>
<td>2.2</td>
<td>1.1</td>
<td>9.7</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>3.7</td>
<td>2.2</td>
<td>3.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>3.6</td>
<td>2.9</td>
<td>4.0</td>
<td>-1.1</td>
</tr>
<tr>
<td>Transportation &amp; Utilities</td>
<td>3.5</td>
<td>2.3</td>
<td>0.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>2.5</td>
<td>2.7</td>
<td>3.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Information</td>
<td>2.3</td>
<td>0.6</td>
<td>1.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>2.1</td>
<td>1.4</td>
<td>4.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>1.9</td>
<td>1.6</td>
<td>-0.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>1.8</td>
<td>1.3</td>
<td>2.1</td>
<td>-0.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.7</td>
<td>-0.9</td>
<td>-2.2</td>
<td>0.1</td>
</tr>
<tr>
<td>State &amp; Local Government</td>
<td>0.4</td>
<td>0.2</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.4</strong></td>
<td><strong>1.7</strong></td>
<td><strong>2.6</strong></td>
<td><strong>1.3</strong></td>
</tr>
</tbody>
</table>

# Job Growth by Sector

## Year-Over-Year Percent Change, February 2015

<table>
<thead>
<tr>
<th>Sector</th>
<th>Connecticut</th>
<th>Puerto Rico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>1.0</td>
<td>-5.6</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>4.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>2.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Transportation &amp; Utilities</td>
<td>0.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>2.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Information</td>
<td>-0.6</td>
<td>-5.3</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>1.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>-0.5</td>
<td>-3.9</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>0.9</td>
<td>-2.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-1.1</td>
<td>-1.3</td>
</tr>
<tr>
<td>State &amp; Local Government</td>
<td>0.8</td>
<td>-3.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.6</strong></td>
<td><strong>-0.7</strong></td>
</tr>
</tbody>
</table>

State and Local Government

Seasonally Adjusted Index

Index (December 2007 = 100)

Note: Dotted line smoothes fluctuations due to summer jobs programs.

Shading indicates NBER recession

New York City Securities Employment
Seasonally Adjusted Levels

Technology Employment

Percent Change, 2009Q3 to 2014Q3

NYC Technology Employment
2009Q3 to 2014Q3

Total Job Growth
Over This Period = +438,000 Jobs or +12%

- Computer Systems Design: 5,100 (32%)
- Internet Pub & Web Search Portals: 14,900 (300%)
- Advertising, PR & Related Services: 16,200 (31%)
- Motion Picture & Video Production: 25,500 (60%)

Technology Specialization
Employment and Wage Location Quotients, 2014Q2

Home Prices

CoreLogic Home Price Index, Seasonally Adjusted

Index (U.S. Peak of March 2006 = 100)

Source: CoreLogic Home Price Index (including distressed sales); Seasonally adjusted by FRBNY staff.
Note: 'NYC Metro’ refers to the ‘New York-White Plains-Wayne NY-NJ Metro Division.'
Home Prices
CoreLogic Home Price Index, Seasonally Adjusted

Index (U.S. Peak of March 2006 = 100)

Source: CoreLogic Home Price Index (including distressed sales); Seasonally adjusted by FRBNY staff.
Note: 'NYC Metro' refers to the 'New York-White Plains-Wayne NY-NJ Metro Division.'
Backlog of Foreclosures

Share of Mortgages in Foreclosure

Source: CoreLogic LoanPerformance (LP) and Lender Processing Services Mortgage Performance data (LPS).

Shading indicates NBER recession.
Household Debt
Total Debt Balance Per Capita

Source: FRBNY Consumer Credit Panel/Equifax.

Shading indicates NBER recession

United States
New York State
New Jersey
Texas
California
Nevada

$0 $20 $40 $60 $80 $100
Thousands

Q4
Appendix
Occupations by Skill Categories
Based on 2010 Median Occupational Wage, United States

Source: U.S. Bureau of the Census and FRBNY Calculations.
Job Growth by Skill Category
Change in Jobs: 1980-2010, Our Region


Note: Downstate NY includes all counties in New York State to the south of and including Dutchess and Orange counties.
Unemployment Rates in the Region
Seasonally Adjusted, February 2015

Office Vacancy Rates

Overall Vacancy Rates

Source: Cushman & Wakefield.

Shading indicates NBER recessions.
Office Vacancy Rates

Overall Vacancy Rates

Source: Cushman & Wakefield.
NYC Technology Average Wages

2013


Computer Systems Design: $120,502
Internet Pub & Web Search Portals: $165,107
Motion Picture & Video Production: $106,227
Advertising, PR & Related Services: $121,514

Total Private-Sector (ex Finance) Average Wages = $65,000

Technology Employment
Percent Change, 2009Q3 to 2014Q3

Technology employment here includes the following industries: Electronic computer manufacturing, Computer storage device manufacturing, Computer terminal and peripheral equip. mfg., Bare printed circuit board manufacturing, Semiconductors and related device mfg., Printed circuit assembly manufacturing, Magnetic and optical recording media mfg., Software and other prerecorded reproducing, Computer and software merchant wholesalers, Business to business electronic markets, Electronics stores, Electronic shopping, Electronic auctions, Software publishers, Data processing, hosting and related services, Internet publishing and web search portals, All other information services, Custom computer programming services, Computer systems design services, Computer facilities management services, and Other computer related services.
New York City Industrial Specialization

2012 Employment and Earnings Location Quotients

Source: U.S. Census Bureau, County Business Patterns.
Global Economic Outlook

Small Business and Agricultural Advisory Council
Matthew Higgins, April 2015
Figure 1 Euro Area: GDP Growth and Composite PMIs

Percent, saar

Correlation: .88

Source: Haver, Markit. Data as of April 9.
Figure 2 Japan: GDP Growth
Percent Q/Q SAAR and Q/(Q-4)

Sources: Cabinet Office, Bloomberg. Data as of Apr 9.
Figure 3 Euro area: Headline and Core CPI Inflation

Percent, year on year

Source: Haver. Data as of Apr 4.
Figure 4 Japan: Headline and Core CPI Inflation

Note: Data after April 2014 excludes effect of latest VAT hike, which adds around 2 ppts to headline inflation and 1.7 ppts to core inflation. 1/ Core CPI excludes food and energy.

Source: Haver, data as of April 6th.
Figure 5 G3 Central Bank Balance Sheets
Percent, Share of G3 GDP

Source: National authorities, Haver.
Figure 6 Germany and Italy: Government Bond Yields, by Maturity

Germany: Government Bond Yields, by Maturity

Source: Bloomberg, data as of April 8th.
## Figure 7 Income Effects of the Commodity Price Decline

Terms of trade change, latest values vs 2013*

<table>
<thead>
<tr>
<th>Economy</th>
<th>$U.S. blns.</th>
<th>% GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>90</td>
<td>0.5</td>
</tr>
<tr>
<td>Euro Area</td>
<td>220</td>
<td>1.7</td>
</tr>
<tr>
<td>Japan</td>
<td>140</td>
<td>2.8</td>
</tr>
<tr>
<td>China</td>
<td>215</td>
<td>2.3</td>
</tr>
<tr>
<td>India</td>
<td>55</td>
<td>3.0</td>
</tr>
<tr>
<td>Asia NIE-4</td>
<td>125</td>
<td>5.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>-5</td>
<td>-0.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>-10</td>
<td>-0.9</td>
</tr>
<tr>
<td>Russia</td>
<td>-160</td>
<td>-7.7</td>
</tr>
<tr>
<td>M.E. Oil Exporters</td>
<td>-470</td>
<td>-18.4</td>
</tr>
<tr>
<td>Non-Fuel Primary Exporters</td>
<td>-10</td>
<td>-1.2</td>
</tr>
</tbody>
</table>

Figure 8 Fiscal Thrust, Major Advanced Economies
Percentage point impact on AE GDP (GDP-weighted)

Source: OECD, Euro Stat, national authorities, IPA staff estimates. Data as of Mar 18.
Figure 9 Advanced Economies: 10yr Bond Yields

1/ GDP-weighted average.
Source: Bloomberg, data through Apr 6.
Figure 10 Currency Performance vs the US Dollar

Index, Jan 1, 2014 = 100

1/ Ex-China
Source: Bloomberg, data as of April 6th.
Figure 11 Peripheral Europe: 10-Year Bond Spreads

10-year Bond Yield Spreads Over Bunds

Greece announces accelerated presidential elections

Parliament fails to elect President, general elections called

Source: Bloomberg, data as of Apr 8. 1/9-year spreads for Ireland; all other countries are 10-year.
Figure 12 Greece: GDP Growth and Survey Proxy

Source: EC, staff estimates. 1/ Based on regression estimate using data for 1997 - 2014.
Figure 13: Japan: Job Openings and Unemployment

Sources: National authorities, Haver. Data as of April 6th.
Figure 14: Brent Oil Prices

U.S. dollars per barrel
Figure 16: Recent Middle East Supply Disruptions and U.S. Supply Growth

Change since 4Q10, Mb/d

Sources: Oil Market Intelligence, International Energy Agency. 2014Q1 value is the average of January and February.
Figure 17: Brent futures curve

U.S. dollars per barrel

Source: Bloomberg.
Figure 18: Oil: US Production and Rig Counts

Millions of barrels per day

US Crude Production (LHS)

Baker Hughes rig count (RHS) (oil rigs only)

Active oil rigs

Source: US EIA, Baker Hughes.
Figure 19: Global Oil Supply and Demand

Millions of Barrels per Day

Source: IEA. Data as of Apr 2015. Forecast assumes OPEC Q2-Q4 2015 production assumed to be at Q4 2014 levels.
Appendix Charts
<table>
<thead>
<tr>
<th>Global GDP Growth</th>
<th>2013</th>
<th>2014e</th>
<th>2015f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced 1/</td>
<td>1.3</td>
<td>1.7</td>
<td>2.3</td>
</tr>
<tr>
<td>o/w: United States</td>
<td>2.2</td>
<td>2.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Euro Zone</td>
<td>-0.4</td>
<td>0.9</td>
<td>1.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.7</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Japan</td>
<td>1.6</td>
<td>-0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Emerging Markets 1/</td>
<td>4.7</td>
<td>4.2</td>
<td>3.9</td>
</tr>
<tr>
<td>o/w: China</td>
<td>7.7</td>
<td>7.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.5</td>
<td>0.0</td>
<td>-0.7</td>
</tr>
<tr>
<td>India</td>
<td>6.4</td>
<td>7.2</td>
<td>7.2</td>
</tr>
<tr>
<td>Russia</td>
<td>1.3</td>
<td>0.6</td>
<td>-3.9</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.7</td>
<td>2.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Korea</td>
<td>3.0</td>
<td>3.3</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Data as of Apr 13. Sources: Blue Chip as of April where available, Consensus as of March. 1/ Dollar-GDP
13 Evolution of Consensus EME Forecasts

Projected annual growth, percent

Source: Consensus Economics. 1/ EMEs include: China, Hong Kong, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Malaysia, India, Indonesia, Argentina, Chile, Brazil, Mexico, Venezuela, Colombia, Peru, Turkey, South Africa, Hungary, Poland, Czech Republic, Russia, Ukraine, Kazakhstan.
China: Real GDP Growth
Percent, y/y and q/q saar

Source: CEIC, FRBNY. Data as of April 6th.
China: Credit Growth

Percent, y/y

- Total financing (incl off-balance sheet & trust loans, net corp debt/equity)
- RMB bank credit

Source: CEIC; data as of April 6th.

UPDATED 4/9/15
Source: STN, FRBNY, data as of April 6th.
Brazil: Sovereign Spreads and Currency
EMBIG spread, bps

Source: Bloomberg, data as of April 6th.
Russia: Financial Market Indicators

Index, 1 Jan 2014 = 100

Basis Points

Source: Haver, Bloomberg. Data as of April 6th.
Russia: FX Reserves and External Debt

USD Billion

USD Bn

Total FX reserves

Liquid FX reserves

MLT debt, remaining maturity >1y

MLT debt, remaining maturity <1y

ST debt

Source: Central Bank of Russia. Reserves as of April 6th, debt as of Q3 2014.
Changes in EME Monetary Policy Expectations Since October 2014

Basis points

Revision to expected end-2015 policy rate since end-Aug 2014*

Actual changes to policy rate since end-Aug 2014 (net)

Source: Bloomberg; * based on Bloomberg survey medians
Figure 22 EMEs: Headline and Core Inflation

Percent, rolling 6m/6m SAAR

Source: National authorities, FRBNY. Data as of March 9.