<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30am-10:35am</td>
<td>Welcome</td>
<td>Tony Davis, Officer &amp; Director</td>
</tr>
<tr>
<td>10:35am-11:05am</td>
<td>The National Economy</td>
<td>Richard Peach, Senior Vice President</td>
</tr>
<tr>
<td>11:05am-11:35am</td>
<td>International Update</td>
<td>Matthew Higgins, Vice President</td>
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<tr>
<td>11:35am-12:00pm</td>
<td>Regional Update</td>
<td>Jaison Abel, Assistant Vice President</td>
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<tr>
<td>12:00pm</td>
<td>Adjourn to NWC Room-10F</td>
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<tr>
<td>12:15pm</td>
<td>Lunch</td>
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<tr>
<td>12:15pm-1:55pm</td>
<td>Round Table Discussion</td>
<td>John Williams, President and Michael Strine, First Vice President</td>
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*Introductory Remarks and Welcome from President Williams*

Your experiences provide insight into current economic conditions. **In considering each question, please reflect on the experiences of your firm, firms of similar size, and firms in your industry. Please provide a rationale for each answer.**

**Business Activity**
Have sales volumes increased, decreased, or stayed the same since the first half of 2018?
What are your expectations for the first quarter of 2019?

**Prices**
Have prices of products/services sold increased, decreased, or stayed the same in 2018?
What are your expectations for 2019?

**Employment and Wages**
What are your employment expectations moving into 2019?
How have you partnered with other organizations (ex. educational institutions) to address labor demands? Has your organization created workforce development programs?
How would you characterize wage growth in your company in 2018? What are your expectations for 2019?

Current Issues
Please briefly discuss the impact of the following recent and prospective policy changes on your business:

- Changes to tariffs & trade policy
- Changes to federal tax law
- Increases to minimum wage

Outlook for 2019
What is the most significant business opportunity you see in 2019?
In what area of your company do you expect to see the most significant growth?
What is the chief growth barrier or concern facing your firm in 2019?

Concluding Remarks from President Williams

2:00 pm Adjourn
Upstate New York Regional Advisory Board Meeting
Federal Reserve Bank of New York
33 Liberty Street
Thursday, November 15, 2018

ATTENDEE LIST

Board Members

Aminy Audi          Kenneth M. Franasiak
President & CEO     Chairman
L. & J.G. Stickley  Calamar

Scott Bieler
President
West Herr Automotive Group

Lynne Marie Finn    Linda MacFarlane
President & CEO     President & CEO
Broadleaf Results, Inc.
Community Loan Fund of the Capital Region

Carlos Unanue
President
Goya de Puerto Rico, Inc.

Federal Reserve Bank of New York

John Williams        President
Michael Strine       First Vice President
Jack Gutt           EVP, Communications & Outreach
Gerard Dages        SVP & Senior Advisor, Executive Office
Richard Peach       SVP, Research & Statistics
Matthew Higgins     VP, Research & Statistics
Anand Marri         VP & Head of Outreach & Education
Shawei Wang         AVP, Legal
Jaison Abel         AVP & Head of Regional Analysis, Research & Statistics
Jason Bram          Officer, Research & Statistics
Julia Gouny         Officer & Deputy Chief of Staff, Executive Office
Tony Davis          Officer & Director, Outreach & Education
Chelsea Cruz        Associate, Outreach & Education
US Macro Overview
November 15, 2018
Overview

- Growth in the US has firmed since 2016 with real GDP up 3% over the four-quarters ending in 2018Q3.
  - Fiscal stimulus is contributing to this pick up in growth.
- Several indicators suggest that the economy is at or near full employment, with clearer evidence that the rate of increase of wages/compensation has moved higher.
- Underlying inflation has moved up to the FOMC’s objective of 2%. But at this time we do not see evidence of building inflation pressures.
Growth of Real GDP

Four Quarter Percent Change

Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.
Industrial Production: Total and Manufacturing

% Change, Year to Year

Industrial Production: Total

Industrial Production: Manufacturing

Source: Federal Reserve Board

Note: Shading shows NBER recessions.
Real PCE and the Personal Saving Rate

12 Month % Change

Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics
Note: Shading shows NBER recessions.
Personal Saving Rate and Household Net Worth

Personal Saving Rate (Percent)  Personal Saving Rate (Percent)

Source: Bureau of Economic Analysis and Federal Reserve Board

Note: Fitted line is from 1983Q1 to 2005Q4.
Household Liabilities over Disposable Income

Source: Federal Reserve Board and Bureau of Economic Analysis via Haver Analytics.

Note: Shading shows NBER recessions.
Housing Starts

Thousands, 3 MMA

Source: Census Bureau via Haver Analytics
Note: Shading shows NBER recessions.
Business Fixed Investment Firming

Four Quarter Percent Change

Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.
Real Government Consumption and Gross Investment

<table>
<thead>
<tr>
<th>Year</th>
<th>Federal</th>
<th>State and Local</th>
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<tbody>
<tr>
<td>2000</td>
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<td>2014</td>
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<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
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</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.
Source: Congressional Budget Office, FRBNY staff calculations
Gross Federal Debt as a Percentage of GDP

Source: CBO; Haver.

Note: Shading shows NBER recessions.
Real Net Exports as a % of GDP

Source: BEA; Haver Analytics.

Note: Shading shows NBER recessions.
Growth of Average Hourly Earnings and ECI

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.
Employment Cost Index and the Unemployment Rate

% Change, Year to Year

ECI: Wages & Salaries for Private Industry Workers (SA)

Note: Data reported quarterly from Q1-2009 to Q3-2018

Source: Bureau of Labor Statistics

Civilian Unemployment Rate: 16 yr + (SA, %)
Unemployment Rate and Labor Share of National Income

SA, %

Labor Share Ratio

17

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.
Measure of Underlying PCE Price Inflation

12 Month % Change

Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.
Core PCE

6-Mo % Change, Annualized

Source: BEA; Haver Analytics.

Note: Shading shows NBER recessions.
Global Economic Outlook

Upstate New York Regional Advisory Board
Matthew Higgins, 15 November 2018

The views expressed here are those of the author, and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System

Roadmap

- Update on the global economic and industrial cycle
- China’s economic slowdown
- Advanced economy health spending and outcomes
- Italy’s fiscal and economic struggles
Global GDP Growth

Percent SAAR

Sources: national sources, staff calculations. Q3 growth rates for some foreign economies reflect staff estimates.

Global GDP Growth and Composite PMI

Sources: national sources, Markit Economics
Citigroup Economic Surprise Indexes

Percent positive or negative*

*Weighted by series' historical FX impact

Evolution of Global Market Growth Forecasts

Sources: Blue Chip Economics, Consensus Economics. Figures are GDP-weighted averages for five AEIs (counting the euro area as one economy) and 24 EMEIs. The latest vintage surveys are from early to mid October.
U.S. and EME equity performance

Indexes, January 2016 = 100

Note: Index values are in dollar terms

Source: Markit Economics, JPMorgan.

Manufacturing New Orders

Diffusion Index

Source: Markit Economics, JPMorgan.
G-3: Core Consumer Price Inflation

Percent change from year ago

Sources: BEA, Eurostat, BoJ. U.S. inflation measured using the PCE index.

G-3 Unemployment Rates

Percent change from year ago

Sources: BLS, CBO, Eurostat, BoJ.
Credit to Private Nonfinancial Sector

Sources: OECD, BLS.

China: Credit growth

Sources: CEIC, PBoC, Moody's.
China: Fixed Asset Investment

Percent change from a year earlier

Source: Monthly index computed from official year-year year-to-date changes. Real series deflated by linearly interpolated quarterly FAI price series.
Health expenditure as a share of GDP

Source: OECD Health Database.

Life expectancy at birth

Source: OECD Health Database.
Hip replacement: total costs
Thousands of U.S. dollars


Euro area: major economy real GDP
Indexes, 2008:Q1 = 100

Source: Eurostat
**Italy: Fiscal performance**

- **Gross Debt**
- **Primary Balance**

Source: IMF World Economic Outlook, October 2018 edition. Figures refer to general government.

**Italy: Government debt projections**

- Higher interest rate (+1.4% ppt.)
- Higher GDP growth (+0.5 ppt.)

Source: OECD, Economic Survey 2017. Baseline scenario assumes 1% real GDP growth, 1.5% of GDP primary surplus, effective interest rate of 3.2%, and inflation in GDP deflator of 1.5%.
Regional Economic Conditions

Jaison R. Abel

Upstate New York Regional Advisory Board Meeting – November 15, 2018

The views expressed here are those of the presenter and do not necessarily represent those of the Federal Reserve Bank of New York or the Federal Reserve System.
Overview of Regional Conditions

• Growth in the region’s manufacturing sector has remained fairly brisk, while growth has slowed to a modest pace in the broader services sector.

• Labor markets have tightened throughout the region, even in parts of upstate New York with little or no job growth through the expansion.

• Businesses report increasingly widespread escalation in input prices and, to a lesser extent, selling prices, in part due to recent changes in U.S. trade policy.
Current Economic Conditions

FRBNY Regional Business Surveys

Source: Federal Reserve Bank of New York.
Regional Consumer Confidence

Overall Consumer Confidence

Index Value

Shading indicates NBER recession

Source: Sienna Research Institute, University of Michigan.
Regional Employment Trends
Indexes of Total Employment, Seasonally Adjusted

Source: U.S. Bureau of Labor Statistics and Moody’s Economy.com; regional data are early benchmarked by FRBNY staff.
Job Growth in Upstate NY Metros

Indexes of Total Employment, Seasonally Adjusted

Source: U.S. Bureau of Labor Statistics and Moody’s Economy.com; data are early benchmarked by FRBNY staff.
Unemployment in the Region
Long-Run and Current Rates, Seasonally Adjusted

Regional Labor Force Trends
Indexes of Total Labor Force, Seasonally Adjusted

Index (Dec2007 = 100)

**U.S. Trade Policy and Prices in the Region**

FRBNY Supplemental Survey Report, August 2018

**Expected Effect of Changes in U.S. Trade Policy on Prices**

### Input Prices

<table>
<thead>
<tr>
<th>Survey</th>
<th>Downward Effect</th>
<th>No Effect</th>
<th>Upward Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empire State Manufacturing Survey</td>
<td>5%</td>
<td>20%</td>
<td>75%</td>
</tr>
<tr>
<td>Business Leaders Survey</td>
<td>7%</td>
<td>44%</td>
<td>49%</td>
</tr>
</tbody>
</table>

### Selling Prices

<table>
<thead>
<tr>
<th>Survey</th>
<th>Downward Effect</th>
<th>No Effect</th>
<th>Upward Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empire State Manufacturing Survey</td>
<td>6%</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>Business Leaders Survey</td>
<td>5%</td>
<td>63%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank of New York.