AGENDA

10:30am-10:40am Introductory Remarks
Tony Davis, Officer & Director

10:40am-10:45am UNYRAB Charter and Antitrust Guidelines
Tony Davis, Officer & Director

10:45am-11:10am The National Economy
Richard Peach, Senior Vice President

11:10am-11:35am International Update
Matthew Higgins, Vice President

11:35am-12:00pm Regional Update
Jaison Abel, Assistant Vice President

12:00pm Adjourn to NWCR-10F

12:15pm Lunch

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

Your experiences can give us insight into current economic conditions.

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 2018?
3. Has demand for your product or service increased sufficiently that
   you plan to increase investment in plant and equipment in 2018?
4. Do you anticipate any change in your ability to access credit
   for the remainder of this year?
5. How is the labor market in meeting your needs?

2:00 pm Adjourn
Upstate New York Regional Advisory Council Meeting  
Federal Reserve Bank of New York  
33 Liberty Street  
Tuesday, April 17, 2018

ATTENDEE LIST

**Board Members**

<table>
<thead>
<tr>
<th>Scott Bieler</th>
<th>Linda MacFarlane</th>
</tr>
</thead>
<tbody>
<tr>
<td>President &amp; CEO</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>West Herr Automotive Group</td>
<td>Community Loan Fund of the Capital Region</td>
</tr>
<tr>
<td>Kenneth M. Franasiak</td>
<td>Carlos Unanue</td>
</tr>
<tr>
<td>Chairman</td>
<td>President</td>
</tr>
<tr>
<td>Calamar</td>
<td>Goya de Puerto Rico, Inc.</td>
</tr>
<tr>
<td>Melanie Littlejohn</td>
<td></td>
</tr>
<tr>
<td>Vice President and Regional Director-NY</td>
<td></td>
</tr>
<tr>
<td>National Grid</td>
<td></td>
</tr>
</tbody>
</table>

**Federal Reserve Bank of New York**

<table>
<thead>
<tr>
<th>William Dudley</th>
<th>President</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Strine</td>
<td>First Vice President</td>
</tr>
<tr>
<td>Jack Gutt</td>
<td>EVP, Communications &amp; Outreach</td>
</tr>
<tr>
<td>Richard Peach</td>
<td>SVP, Research &amp; Statistics</td>
</tr>
<tr>
<td>Matthew Higgins</td>
<td>VP, Research &amp; Statistics</td>
</tr>
<tr>
<td>Sarah Bell</td>
<td>VP and Executive Chief of Staff, Executive Office</td>
</tr>
<tr>
<td>Anand Marri</td>
<td>VP and Head of Outreach &amp; Education</td>
</tr>
<tr>
<td>Jaison Abel</td>
<td>AVP, Research &amp; Statistics</td>
</tr>
<tr>
<td>Tony Davis</td>
<td>Officer &amp; Director, Outreach &amp; Education</td>
</tr>
<tr>
<td>Chelsea Cruz</td>
<td>Associate, Outreach &amp; Education</td>
</tr>
<tr>
<td>Angela Sun</td>
<td>Associate, Legal</td>
</tr>
</tbody>
</table>
Overview

• Growth in the US has firmed in recent quarters as the shocks that hit the economy in mid 2014—dollar appreciation and falling commodity prices—have largely run their course.
  • Fiscal stimulus will boost growth in 2018 and 2019.

• 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 slowed in 2017 and remains below the FOMC’s objective of 2%, but recent indicators suggest that an upturn in inflation is underway.
Growth of Real GDP

Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.
Nominal Trade-Weighted Value of US$ and Rig Count

Active Oil Rigs

Rig Count (left axis)

Broad Trade-Weighted Exchange Value of US $ (right axis)

Source: Federal Reserve Board and Baker Hughes

Note: Shading shows NBER recessions.
Manufacturing Indicators for Major Economies

Source: IHS Markit and Institute for Supply Management via Haver Analytics

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.
Consumer Sentiment and Confidence

Index, Q1-66 = 100

Source: University of Michigan, Conference Board.

Note: Shading shows NBER recessions.
Household Net Worth at Record High

(Net Worth over Disposable Income)

Source: Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.
Personal Saving Rate and Household Net Worth

Households’ Net Worth as a Percent of Disposable Income

Source: Bureau of Economic Analysis and Federal Reserve Board

Note: Fitted line is from 1983Q1 to 2005Q4.
Household Financial Obligation Ratio

Ratio

Source: Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.
Transition into Delinquency (90+) by Loan Type

Percent of Balance

Source: New York Fed Consumer Credit Panel/Equifax

Note: 4 Quarter Moving Sum

Student Loan
Credit Card
Mortgage
Auto Loan
HE Revolving

Student loan data are not reported prior to 2004 due to uneven reporting.
Single Family Housing Market

Index Level

Source: CoreLogic, National Association of Realtors, via Haver Analytics

Note: Shading shows NBER recessions.
Housing Starts and Existing Homes Sales Per Capita

Source: BLS, Census Bureau, NAR

Note: Shading shows NBER recessions.
Credit Score at Mortgage Origination

Credit Score

Median
25th Percentile
10th Percentile

Source: FRBNY / Consumer Credit Panel

Note: Shading shows NBER recessions.
Business Fixed Investment Firming

Four Quarter Percent Change

Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.
Real Exports and Imports

4 Quarter % Change

Exports

Imports

Note: Shading shows NBER recessions.

Source: Bureau of Economic Analysis via Haver Analytics

14
Labor Market Indicators

Source: Bureau of Labor Statistics via Haver Analytics

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

Annual % change

Source: Bureau of Labor Statistics via Haver Analytics

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

12 Month % Change

FOMC Objective for Headline PCE Inflation

Core PCE Deflator

Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.
Personal Consumption Expenditures Price Indices

Percent Change Year-to-Year

PCE: Services Excl. Energy

Core PCE

PCE: Goods less Food & Energy

FOMC Objective For Headline PCE Inflation

Source: BEA/Haver.

Note: Shading shows NBER recessions.
TIPS Based Inflation Expectations

Source: Federal Reserve Board

Note: Carry-adjusted
Reference Charts
Citi Economic Surprise Index

Index

Source: Bloomberg.
Goldman Financial Conditions Index

Source: Bloomberg.
Nondefense Capital Goods excl. Aircraft

Source: Census Bureau/Haver.

Note: Shading shows NBER recessions.
## Estimated Revenue Effects of The Tax Cuts and Jobs Act

### Fiscal Years 2018-2022 (Percent of GDP)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax Reform for Individuals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House</td>
<td>-0.2</td>
<td>-0.6</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Senate</td>
<td>-0.3</td>
<td>-0.8</td>
<td>-0.7</td>
<td>-0.6</td>
<td>-0.6</td>
</tr>
<tr>
<td>Conference Agreement</td>
<td>-0.4</td>
<td>-0.8</td>
<td>-0.8</td>
<td>-0.7</td>
<td>-0.7</td>
</tr>
<tr>
<td><strong>Business Tax Reform</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House</td>
<td>-0.6</td>
<td>-0.6</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>Senate</td>
<td>-0.1</td>
<td>-0.4</td>
<td>-0.5</td>
<td>-0.4</td>
<td>-0.4</td>
</tr>
<tr>
<td>Conference Agreement</td>
<td>-0.6</td>
<td>-0.6</td>
<td>-0.5</td>
<td>-0.4</td>
<td>-0.2</td>
</tr>
<tr>
<td><strong>Taxation of Foreign Income and Foreign Persons</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Senate</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Conference Agreement</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total (static)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House</td>
<td>-0.6</td>
<td>-1.1</td>
<td>-1.0</td>
<td>-0.8</td>
<td>-0.7</td>
</tr>
<tr>
<td>Senate</td>
<td>-0.2</td>
<td>-1.1</td>
<td>-1.2</td>
<td>-1.0</td>
<td>-0.9</td>
</tr>
<tr>
<td>Conference Agreement</td>
<td>-0.7</td>
<td>-1.4</td>
<td>-1.2</td>
<td>-1.0</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

Source: Joint Committee on Taxation; Congressional Budget Office
### Effect of Bipartisan Budget Act of 2018 on Discretionary Spending
(Billions of Dollars, Fiscal Years)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget Control Act Caps</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>548</td>
<td>551</td>
<td>552</td>
<td>562</td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td>80</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Nondefense</td>
<td>518</td>
<td>519</td>
<td>520</td>
<td>529</td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td>63</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td><strong>Adjustments to Caps</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>59</td>
<td>83</td>
<td>85</td>
<td>86</td>
</tr>
<tr>
<td>Nondefense</td>
<td>26</td>
<td>36</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>607</td>
<td>634</td>
<td>717</td>
<td>733</td>
</tr>
<tr>
<td>Percent Change</td>
<td>4.4</td>
<td>13.0</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Nondefense</td>
<td>544</td>
<td>555</td>
<td>619</td>
<td>632</td>
</tr>
<tr>
<td>Percent Change</td>
<td>2.0</td>
<td>11.5</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td><strong>Nominal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>555</td>
<td>570</td>
<td>636</td>
<td>642</td>
</tr>
<tr>
<td>Percent Change</td>
<td>2.6</td>
<td>11.7</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Nondefense</td>
<td>484</td>
<td>481</td>
<td>525</td>
<td>525</td>
</tr>
<tr>
<td>Percent Change</td>
<td>-0.6</td>
<td>9.2</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td><strong>Real</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>555</td>
<td>570</td>
<td>636</td>
<td>642</td>
</tr>
<tr>
<td>Percent Change</td>
<td>2.6</td>
<td>11.7</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Nondefense</td>
<td>484</td>
<td>481</td>
<td>525</td>
<td>525</td>
</tr>
<tr>
<td>Percent Change</td>
<td>-0.6</td>
<td>9.2</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>
Import Price Index and the PCE Deflator for Core Goods

% Change – Year to Year

PCE Deflator: Core Goods (Left Axis)

Import Price Index: Nonpetroleum Imports, 16 Month Lead (Right Axis)

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.
Michigan Inflation Expectations 5 to 10 Years

Source: University of Michigan

Note: Shading shows NBER recessions.
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
- Continuing “lowflation” in the advanced economies
- The TCJA and U.S. international competitiveness
- Impact of recent U.S. tariffs on steel products, aluminum and various Chinese goods
Global GDP Growth and Composite PMI

Correlation = 0.83

Sources: national sources, Markit Economics
Global Manufacturing and Services PMIs

Diffusion Index

Source: 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 AEs (counting the euro area as one economy) and 25 EMEs.
Global Consumption and Capex Growth (ex. China)

Four-quarter percent change

Source: national sources, IMF, staff calculations. 2017:Q4 values based on available GDP reports and country monthly indicators.
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.
Advanced Economy Unemployment Rates

Percent

Current

2008:Q1

Sources: OECD, national sources.
<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Bank</td>
<td>1.5</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Consensus</td>
<td>1.5</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Euro Area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Bank</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Consensus</td>
<td>1.5</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Bank</td>
<td>0.8</td>
<td>1.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Consensus</td>
<td>0.5</td>
<td>1.0</td>
<td>1.1</td>
</tr>
</tbody>
</table>

1/ Central bank figures reflect FOMC members' median projection for core PCE inflation on a Q4/Q4 basis, from March. Consensus forecast is from Survey of Professional Forecasters, on a similar basis from February. 2/ Central bank figures reflect mean staff forecast for calendar year CPI inflation, from March. Consensus forecast is from Bloomberg survey, on a similar basis from March. 3/ Central bank figures reflect median policy board members' projection for CPI inflation ex. fresh food, on a fiscal year basis from January. Consensus forecast is from Bloomberg, on a calendar-year basis from March.
Top Statutory Corporate Tax Rates

Tax Rates in 2017

New U.S. Tax Rate

Sources: OECD, KPMG. Tax rates include taxes at both national and subnational levels, including any national tax allowances for subnational taxation.
Measuring Marginal Tax Rates on Capital Income

- *Effective marginal tax rates* are a measure of the corporate tax burden on a break-even investment.

- The break-even investment earns just enough to pay investors’ required return, depreciation costs and taxes.
  - A function of borrowing costs, physical depreciation rates, tax rates, tax depreciation schedules, and required payouts to equity investors.

- EMTRs are very sensitive to the tax treatment of depreciation.
  - Full expensing is equivalent to a zero tax rate on the marginal investment.

- Example: If tax provisions raise breakeven real returns from 7 percent to 10 percent, the $EMTR = \frac{3}{10} = 30\%$. 
Effective Marginal Corporate Tax Rates

Sources: OECD, KPMG, CBO, Centre for Business Taxation, author’s calculations. Calculations assume a common set of economic parameters: Only tax rates and tax depreciation schedules vary.
Sources: OECD, KPMG, Penn Wharton Budget Model TCJA estimates, author’s calculations. Data refer to income taxes as a share of profits. Nonfinancial profits are calculated from NIPA primary income accounts.
Recent U.S. Tariff Measures

- The Trump Administration has announced a 25% tariff on steel product imports and an 10% tariff on aluminum imports, citing national security concerns
  - Steel tariffs could affect roughly $29 bn in U.S. purchases (1.2% of total U.S. imports), but most major sellers to the U.S. have been granted temporary waivers
  - Exempted countries include Canada, Mexico, the EU, Australia, Korea, Argentina and Brazil
  - Aluminum tariffs could affect roughly $23 bn in U.S. purchases (1.0% of total U.S. imports), but the same sellers have been exempted

- The Administration has also announced 25% tariffs on $50 bn in Chinese goods, citing violations of U.S. IP rights
  - China has responded with tariffs on $50 bn in U.S. sales to China
  - Given the trade imbalance, tariffs announced to date would affect 38% of U.S. sales to China, but only 10% of Chinese sales to the U.S.
Main Sources of U.S. Steel Imports

Percent of total, 2017

Iron & steel product imports = $29.1 bn, ≈ 1.2% of total U.S. imports

Source: Census Bureau. Data refer to imports by value in 2017. Cross-hatched bars denoted provisionally exempted countries.
Main Sources of U.S. Aluminum Imports

Percent of total

Aluminum imports = $22.7 bn, ≈ 1.0% of total U.S. imports

Source: Census Bureau. Data refer to imports by value in 2017. Cross-hatched bars denoted provisionally exempted countries.
Regional Economic Conditions
Jaison R. Abel

Upstate New York Regional Advisory Board Meeting – April 17, 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

• Business activity picked up noticeably in recent months, particularly in the manufacturing sector.

• Job growth has remained strongest in and around New York City, more moderate in Albany and Buffalo, and slower in most other parts of the region.

• Puerto Rico has continued to lose jobs, though the island appears to be on a slow road to recovery from the recent storms.

• Businesses in the region report that both input and selling price increases have become more widespread.
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

Indexes of Total Employment, Seasonally Adjusted


Shading indicates NBER recession.
Post-Hurricane Employment Paths
Indexes of Total Employment, Seasonally Adjusted

Nighttime Lights in Puerto Rico

August 2017

October 2017

December 2017

March 2018

Source: Earth Observation Group; NOAA National Geophysical Data Center, and FRBNY staff calculations.
Recent Job Growth in the Region
Percent Change from 2017 to 2018, Year-to-Date (Jan-Feb)

Job Growth in Upstate NY

Percent Change from 2017 to 2018, Year-to-Date (Jan-Feb)

Job Growth by Industry in Upstate NY

Levels Change from 2017 to 2018, Year-to-Date (Jan-Feb)

Input and Selling Prices

FRBNY Regional Business Surveys

Source: Federal Reserve Bank of New York.
Future Economic Conditions
FRBNY Regional Business Surveys, Conditions Six Months Ahead

Source: Federal Reserve Bank of New York.