National Economic Indicators

May 7, 2018

Rick Kaglic, Senior Regional Economist
The Federal Reserve Bank of Richmond

These views are solely my own and do not represent those of the Federal Reserve Bank of Richmond or the Federal Reserve System.
Summary

• Economy moving along nicely, but there are some clouds
  • Labor market strong historically, but softer employment growth
  • Softer Q1 numbers after several robust quarters
  • However, strong growth forecasts throughout 2018
• Inflation starting to rear its head
  • Weak early 2017 inflation readings dissipate
  • Pick-up in nominal wage growth
  • Policy still expansionary
• Large cloud on the horizon: tariffs and trade disputes
Real Gross Domestic Product and Final Sales
Quarterly percent change, SAAR

Source: Bureau of Economic Analysis via Haver Analytics
Contributions to Real GDP Growth

Percent contribution to quarterly GDP change

Source: Bureau of Economic Analysis via Haver Analytics
Contributions to Real GDP Growth

Percent contribution to quarterly GDP change

GDP PCE Resi Nonresi Equip Gov Ex Im Bus Inv
Q4-2017
Q1-2018

Domestic sales +1.6

Source: Bureau of Economic Analysis via Haver Analytics
Contributions to Real GDP Growth

Percent contribution to qtrly GDP change

Source: Bureau of Economic Analysis via Haver Analytics
Consumer Spending and Income

12 Month % Change

Real Disposable Personal Income
Real Personal Consumption Expenditure

March

Month over Month % Change

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
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</thead>
<tbody>
<tr>
<td>Income</td>
<td>0.5</td>
<td>0.1</td>
<td>0.2</td>
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<tr>
<td>Expenditures</td>
<td>-0.1</td>
<td>-0.2</td>
<td>0.4</td>
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</tbody>
</table>

Note: Income has been adjusted to account for temporary fiscal actions in 2008 and 2012-2013.

Source: Bureau of Economic Analysis via Haver Analytics
Personal Saving Rate

Note: Income has been adjusted to account for temporary events

Source: Bureau of Economic Analysis via Haver Analytics
Existing Single-Family Home Sales

Source: National Association of Realtors via Haver Analytics
New Single-Family Home Sales

Source: Census Bureau via Haver Analytics
Private Single-Family Housing Starts & Permits

Source: Census Bureau via Haver Analytics
Private Multi-Family Housing Starts & Permits

3-Month Moving Average, Millions of Starts & Permits, Annual Rate

1990 – 1999 Average Multi-Family Starts

Source: Census Bureau via Haver Analytics
Real Private Construction Put In Place

Notes: Private nonresidential construction deflated using the price index for private fixed investment in nonresidential structures and private residential construction deflated using the private residential investment chain price index.

Source: Census Bureau via Haver Analytics
Core Capital Goods

Notes: Core capital goods are nondefense capital goods excluding aircraft.

Source: Census Bureau via Haver Analytics
Progress on “the Dual Mandate”

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Nonfarm Payroll Employment

Quarterly average of monthly changes, thousands of persons


Notes: White bar on the right is based on an incomplete quarter

Monthly Change
Mar  103
Feb  326
Jan  176
Dec  175
Nov  216

Source: Bureau of Labor Statistics via Haver Analytics
# ISM: Business Survey Indexes

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<tr>
<td>Purchasing Managers Index</td>
<td>59.3</td>
<td>57.3</td>
<td>Non-Manufacturing Index</td>
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<td>Production</td>
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<td>57.2</td>
<td>Business Activity</td>
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<td>60.6</td>
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<tr>
<td>New Orders</td>
<td>61.9</td>
<td>61.2</td>
<td>New Orders</td>
<td>64.8</td>
<td>59.5</td>
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<tr>
<td>Employment</td>
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<td>55.0</td>
<td>56.6</td>
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<td>Supplier Deliveries</td>
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<td>61.1</td>
<td>Supplier Deliveries</td>
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<td>Inventories</td>
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<td>52.9</td>
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<td>Prices</td>
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<td>Backlog of Orders</td>
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<td>Backlog of Orders</td>
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<td>56.5</td>
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<td>New Export Orders</td>
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<tr>
<td>Imports</td>
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<td>57.8</td>
<td>Imports</td>
<td>50.0</td>
<td>55.0</td>
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**DIFFUSION INDEXES:** Numbers above 50 percent indicate more favorable responses towards economic activity.

Source: Institute for Supply Management via Haver Analytics
Initial Unemployment Claims
(000s) 4 week moving average

Source: Bureau of Labor Statistics via Haver Analytics
Measures of Labor Utilization

Source: Bureau of Labor Statistics via Haver Analytics
Average Hourly Earnings

12 Month % Change of 3-Month Moving Average

Monthly % Change
- Mar 0.3%
- Feb 0.1%
- Jan 0.3%
- Dec 0.4%
- Nov 0.3%

Mar 2.7%
Labor Productivity, Nonfarm Business

Year over Year % Change

Quarterly Change at Annual Rate
Q4 17 0.0%
Q3 17 2.6%
Q2 17 1.7%
Q1 17 0.2%

Post-War Average (Labor Productivity)

Source: Bureau of Labor Statistics via Haver Analytics
Consumer Price Indexes

12 Month % Change

All Items

Core CPI

CPI: All Items
November 0.4%  December 0.1%
Core CPI
November 0.1%  December 0.3%

Source: Bureau of Labor Statistics via Haver Analytics
Core Personal Consumption Expenditure Price Indexes

Source: Bureau of Economic Analysis via Haver Analytics
Exchange Value of the USD

Notes: Measured as the real broad trade-weighted exchange value of the United States Dollar.

Source: Board of Governors via Haver Analytics
TIPS Inflation Compensation

5-Year

5 Years Ahead

April 20

5-Year

Source: Federal Reserve Board /Haver Analytics
FOMC Meeting Participants’ Forecasts

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Real Gross Domestic Product

Note: Projection is the median, central tendency, and range from the March 2018 Summary of Economic Projections. Red dots indicate median projections. Projections of change in real gross domestic product (GDP) are from the fourth quarter of the previous year to the fourth quarter of the year indicated.

Source: Bureau of Economic Analysis via Haver Analytics & Federal Reserve Board
Unemployment Rate

Notes: FOMC projection is the median, range, and central tendency for the Q4 levels, from the March 2018 meeting. Red dots indicate median projections.

Source: Bureau of Labor Statistics & Board of Governors via Haver Analytics
Personal Consumption Expenditure Price Index

Notes: FOMC projection is the median, range, and central tendency for Q4/Q4 percent changes, from the March 2018 meeting. Red dots indicate median projections.

Source: Bureau of Economic Analysis & Board of Governors via Haver Analytics
Summary of Economic Projections: Federal Funds Rate

Note: Each dot in the chart represents the value of an FOMC participant’s judgment of the midpoint of the appropriate target range (or the appropriate target level) for the federal funds rate at the end of the calendar year.

Projections made for the December 2017 meeting.

Source: Board of Governors
Summary of Economic Projections: Federal Funds Rate

Note: Each dot in the chart represents the value of an FOMC participant’s judgment of the midpoint of the appropriate target range (or the appropriate target level) for the federal funds rate at the end of the calendar year.

Projections made for the March 2018 meeting.
Capital Market Rates

Source: BofA Merrill Lynch & Board of Governors via Haver Analytics
S&P 500
Index (1941-43=10)

Source: S&P via Haver Analytics
CBOE Volatility Index (VIX)
Imputed volatility over the next 30 days

Source: S&P via Haver Analytics
Crude Oil Prices

Notes: Spot and Futures Prices are for Brent Crude Oil.

Trade and Tariffs

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Balance of International Trade

Note: Customs Value of Trade Balance

Source: Census Bureau via Haver Analytics
Tariffs: The “War of Words” so far

• January 23, 2018
  • Tariffs on solar panels (50%) and washing machines (20%)

• March 23, 2018
  • Tariffs on steel (25%) and aluminum (20%)
  • National security justification (“Section 232”)
  • NAFTA and main trading partners exempted until May 1

• April 3, 2018
  • Tariffs on 1300 goods imported from China (25%)
  • Unfair trade and intellectual property rights (“Section 301”)

• April 4, 2018
  • China responds with tariffs on 250 US goods (10-25%)
Tariffs: Some Perspective

Proportion of Trade Exposed to New US Tariffs:
- China Section 301 Round 2 ($100bn)
- China Section 301 Round 1 ($46bn)
- Steel and Aluminium without Exemptions
- Steel and Aluminium with Exemptions
- Solar Panels and Washing Machines

US Effective Tariff Rate (Gross Customs Duties, as Share of Total Imports)

Source: COMTRADE, USITC, Goldman Sachs Global Investment Research
Trade, Tariffs and the Economy

- Size of the trade balance depends on domestic saving and investment
- Pattern of trade depends on a country’s endowments which change slowly
- Much of political discussion about trade and its effects is beside the point
  - Tariffs are unambiguously harmful to the economy, even harm protected industry in the longer run
  - Focus should be on technological change, adjustment, and social policy responses
Determinants of Trade: *Size*

- *Size* of the trade balance depends on domestic savings and investment
  - High saver countries have trade balance surpluses (GY, CH, JP), low saver countries have deficits (US, AU)
- Importantly, a trade deficit in and of itself is not a bad thing, a function of a capital account surplus.
  - Trade deficit can be said differently as “vital capital-creating, job-generating foreign investment surplus for a better America.”
  - But it may be a symptom of macroeconomic ill that should be addressed with macroeconomic policy tools
Determinants of Trade: *Pattern*

- **Composition** of trade determined by:
  - Endowments: capital, labor, natural resources
  - Productivity
  - Policy: tax regime, tariffs, regulation

- Endowments can be affected by policy, but change slowly
  - Technological change
  - Immigration
  - Free capital movement, FDI
  - Human capital investment
The Economics of Tariffs

- Tariffs/trade restrictions distort efficient allocation of resources and prevent structural change
  - Raise prices and reduce demand possibly up to the point where even the protected industries are hurt
  - For instance, steel-using companies employ many more people than steel-producing ones

- Tariffs are usually the result of rent-seeking behavior in declining industries
  - Can be addressed by productivity- and process improvement to move up the value chain; social policy
Questions/comments