Global Economic Outlook

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Federal Reserve Bank of Dallas

Vistas from Texas: An Economic Outlook
August 7, 2015

The views expressed are those of the author and do not necessarily reflect the views of the Federal Reserve Bank of Dallas or the Federal Reserve System
Outline

• Recent developments and changes in the outlook for real economic activity
• Recent developments and changes in the outlook for inflation
• Monetary policy developments around the world
• Risks to the outlook
  – Greece
  – China
  – Monetary policy divergence
The world has changed!

GDP based on PPP, share of world total

Percent

Advanced
Emerging
The world has really changed!

GDP based on PPP, share of world total

Percent


U.S.
China
What happens overseas matters for Texas

• Texas exports are equivalent to about half (45-55 percent) of the output of tangible goods in Texas

• Historically, Texas’ exports have been more concentrated geographically than other states, but have become more diversified over time

• Likewise, the product composition of Texas’ exports is a bit less diverse than the U.S. as a whole

• Importance of the energy sector to the state economy
  – Oil prices determined in global markets
Purchasing Manager Indices provide the timeliest read on global economic activity.
July 2015 Q2 FRB Dallas “Nowcasts”

Percent, year/year

- Statistical output-PMI model based forecast
- Consensus Forecast
- Historical average (1980-2012)

<table>
<thead>
<tr>
<th>Region</th>
<th>Statistical Output-PMI</th>
<th>Consensus Forecast</th>
<th>Historical Average</th>
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</thead>
<tbody>
<tr>
<td>World (ex. U.S.)</td>
<td>2.8</td>
<td>2.8</td>
<td>3.4</td>
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<tr>
<td>Advanced (ex. U.S.)</td>
<td>2.4</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Emerging</td>
<td>4.6</td>
<td>3.9</td>
<td></td>
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</tbody>
</table>
Evolution of Consensus Forecasts for 2015 GDP growth

Percent, year/year

Emerging
World (ex. U.S.)
U.S.
Advanced (ex. U.S.)

Downward revisions of 2015 growth expectations from mid 2014
Real GDP growth expected to pick up
CPI inflation dominated by swings in energy prices

Percent, year/year

Consensus Forecasts (as of June 2015)
But even core CPI inflation is down over the past year in the AEs.
Deflation at the producer price level

Emerging World (ex. U.S.)
Advanced (ex. U.S.)
U.S.

Percent, year/year

U.S. import price inflation in negative territory due to lower energy prices & strong dollar
But the strong dollar weighs on U.S. exports
Central bank policy rates stuck at zero

On April 4, 2013, the main operating target for Japan changed to the monetary base, which has increased 97.1 percent between April 2013 and March 2015.
Central bank balance sheets: Still growing in euro area & Japan

Percent of GDP

Bank of Japan
Federal Reserve
ECB
Bank of England
10-year government bond yields reversed course in 2015, and then reversed course again.
Headwinds, tailwinds and CAT

• Tailwinds
  – Lower oil prices
    • Fall in oil prices to boost global growth by about ½ percentage point in 2015 & 2016 (IMF)

• Headwinds
  – Greece
    • How disruptive would GREXIT be?
  – Slowdown in China
    • Economy seems to be slowing faster than expected, prompting policy action; bursting of stock market bubble

• Clear air turbulence?
  – Monetary policy normalization in the United States
    • Liftoff from zero will occur when data indicate that conditions are right
    • How well prepared is the rest of the world for the end of the ZIRP era?
Private deposits in Greek banking sector: From a bank jog to a bank run

Bank run the weekend of June 27-28, 2015
Banks subsequently closed
Great Depressions

Unemployment Rate

Percent

1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940

(U.S.)
Great Depressions

Unemployment Rate

Percent

Greece

U.S.

(U.S.) 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940

Euro area GDP has still not attained its pre-crisis level.

Double dip recessions associated with Global Financial Crisis and euro zone Sovereign Debt Crisis.
China contributes a lot to global GDP growth.
Chinese price inflation: low and getting lower

Percent, year/year

2010 2011 2012 2013 2014 2015

CPI
CPI ex. food and energy
Average house price in 100 cities
PPI
A short history of Chinese growth

Nominal GDP
Real GDP

GDP price deflation in the first quarter of 2015

Percent, year/year

Chinese industrial output growth has slowed dramatically

Goldman Sachs: “A 1pp hit to Chinese [GDP] growth would result in a roughly 0.06pp decline in US growth”
U.S. dollar credit growth

Credit to non-residents: bank loans
Credit to non-residents: debt securities
Credit to residents

Percent, year/year
The growth of offshore credit

<table>
<thead>
<tr>
<th></th>
<th>Currency of denomination (Trillions of US dollars)</th>
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<tbody>
<tr>
<td></td>
<td>Dollar</td>
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<tr>
<td>Credit outstanding</td>
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<tr>
<td>Total</td>
<td>49.6</td>
</tr>
<tr>
<td>Of which:</td>
<td></td>
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<tr>
<td>Credit to residents</td>
<td>40.5</td>
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<tr>
<td>Credit to nonresidents</td>
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Note to Table: Data as of September 2014.
## IMF growth outlook
### July 2015

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2014</th>
<th>2015(f)</th>
<th>2016(f)</th>
<th>Change from April forecast 2015</th>
<th>Change from April forecast 2016</th>
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<tr>
<td><strong>World output</strong></td>
<td>3.4</td>
<td>3.4</td>
<td>3.3</td>
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<td>2.1</td>
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<td>2.5</td>
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<td>-0.6</td>
<td>-0.1</td>
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<tr>
<td><strong>Euro area</strong></td>
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<td>1.5</td>
<td>1.7</td>
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<td><strong>Japan</strong></td>
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<td><strong>Emerging Market &amp; Developing Economies</strong></td>
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<td>4.6</td>
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<td>4.7</td>
<td>-0.1</td>
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<td><strong>China</strong></td>
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• “...the Committee today reaffirmed its view that the current 0 to 1/4 percent target range for the federal funds rate remains appropriate. In determining how long to maintain this target range, the Committee will assess progress--both realized and expected--toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.” (emphasis added)
Median FOMC participants’ fund-rate projections

Target federal funds rate at year-end

- Actual
- December 2014

Percent

- 0
- 0.5
- 1
- 1.5
- 2
- 2.5
- 3
- 3.5
- 4

2014 2015 2016 2017 Longer Run
 Median FOMC participants’ fund-rate projections

Target federal funds rate at year-end

- Actual
- December 2014
- March 2015

Percent

2014 2015 2016 2017 Longer Run
Median FOMC participants’ fund-rate projections

Target federal funds rate at year-end

- Actual
- December 2014
- March 2015
- June 2015

Percent
Conclusions

• Modal outlook is for continued growth through 2015 & 2016, with a modest acceleration in 2016
  – U.S. likely to be one of the stronger performers
  – Signs of improvement in Europe, Japan

• Monetary policies of major central banks likely to diverge
  – Fed: normalization
  – ECB, BoJ, PBOC: easing

• Risks:
  – Absence of any substantive resolution of the Greek crisis
  – China slowdown