Economic Uncertainty – The Implications for Monetary Policy

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Figure 1: Core PCE Inflation Projections for 2015 of Federal Reserve Governors and Federal Reserve Bank Presidents

September 2012 - June 2015

Note: The central tendency excludes the three highest and three lowest projections in each period. The inflation projections for 2015 are the percent changes from the fourth quarter of 2014 to the fourth quarter of 2015 reported in each SEP.

Source: FOMC, Summary of Economic Projections (SEP)
Figure 2: Employment-to-Population Ratio
January 1985 - June 2015

Source: BLS, NBER, Haver Analytics
Figure 3: Age Distribution of the Civilian Noninstitutional Population, Age 16 Years and Older 1994, 2004, and 2014

Source: BLS, Haver Analytics
Demographic Shift and Full Employment

- Young workers tend to have higher unemployment rates
- Older workers tend to have lower unemployment rates
- Estimates of full employment need to consider the impact of demographic changes
- While my estimate of full employment is now 5 percent, it may be lower if we continue to undershoot our inflation forecast
Figure 4: Employment-to-Population Ratio for Prime-Age Workers
January 1985 - June 2015

Source: BLS, NBER, Haver Analytics
Figure 5: Unemployment Rate for Greece
January 2005 - March 2015

Source: Eurostat, Haver Analytics
Figure 6: Gross Domestic Product and Population of Greece Relative to that of the Euro Area, the European Union, and the United States 2014

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Billions of U.S. Dollars</td>
<td>Greece Relative to Country/Region</td>
<td>Millions of People</td>
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<tr>
<td>Greece</td>
<td>238.0</td>
<td>--</td>
<td>10.9</td>
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<tr>
<td>Euro Area</td>
<td>13,435.5</td>
<td>1.8%</td>
<td>334.5</td>
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<tr>
<td>European Union</td>
<td>18,505.9</td>
<td>1.3%</td>
<td>506.8</td>
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<tr>
<td>United States</td>
<td>17,419.0</td>
<td>1.4%</td>
<td>318.9</td>
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Source: BEA, Census Bureau, Eurostat, Haver Analytics
Calibrating Financial Stability Risks

- What is the concentration of exposures?
- Are the exposures held by highly leveraged investors?
- Do these investors play a critical role in financial markets functioning smoothly?
- In 2011, a key risk was commercial bank exposures to Greece
- With the earlier restructuring of Greek debt, much of this risk has been transferred, so losses would be borne diffusely by European taxpayers
Figure 7: Spread: Ten-Year European Government Bond Yields Minus Ten-Year German Government Bond Yield

January 2010 - June 2015

Source: Banca d'Italia, Banco de España, Central Bank of Ireland, Deutsche Bundesbank, Financial Times, Haver Analytics
### Figure 8: Stock Market Index Fluctuations
June 26, 2015 - June 29, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Stock Price Index</th>
<th>Stock Price Index Close</th>
<th>Percent Change</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>June 26, 2015</td>
<td>June 29, 2015</td>
</tr>
<tr>
<td>Portugal</td>
<td>PSI-20</td>
<td>5,834.91</td>
<td>5,530.50 -5.2</td>
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<td>Italy</td>
<td>FTSE MIB</td>
<td>23,800.47</td>
<td>22,569.95 -5.2</td>
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<td>Spain</td>
<td>Ibex 35</td>
<td>11,372.30</td>
<td>10,853.90 -4.6</td>
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<td>Germany</td>
<td>Frankfurt Xetra Dax</td>
<td>11,492.43</td>
<td>11,083.20 -3.6</td>
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<td>Ireland</td>
<td>ISEQ Overall</td>
<td>6,367.67</td>
<td>6,209.14 -2.5</td>
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<tr>
<td>U.S.</td>
<td>S&amp;P 500</td>
<td>2,101.49</td>
<td>2,057.64 -2.1</td>
</tr>
</tbody>
</table>

Source: Bolsa de Madrid, Borsa Italiana, Financial Times, S&P, Haver Analytics