Disclaimer: These are my personal remarks and do not reflect the views of the Federal Reserve System.
Key observations

• Spillovers are evident and EM have handled past episodes of Fed tightening generally well, with important differences across countries and episodes

• The global backdrop adds to challenges facing EM
  • Divergent cyclical positions and policy stances in AE
  • Widespread slowdown in EM growth and uncertainty about potential

• EM are generally better placed than in past cycles, reflecting widespread fundamental improvements of the past 15 years

• A complex backdrop adds to the importance of effective Fed communications
  • We must strive to be clear about how we are evaluating the shifting economic and financial landscape, and what this means for policy
Spillovers: some evidence

• CMP tightening in the US reduces capital flows to EM, and the effect is greater if there is a monetary policy surprise (WEO 2011a, IMF)

• US monetary conditions seem to drive EM policy rates beyond what domestic factors would suggest, and while the impact of US monetary policy has weakened, the co-movement of long-term rates became stronger after the GFC (Takas and Vela 2014, BIS)
  • UMP affects capital flows, term and risk-premia globally, and in different ways than CMP

• UMP announcement effects on EM asset prices were strong but not different from the typical impact that changes in U.S. interest rates have had historically (Bowman et al 2014, FRB)

• Monetary shocks and real shocks to US 10yy have different, and mostly opposite effects, on EM performance and asset prices (Matheson et al 2014, IMF)
Spillovers: bad or good

Effects of shocks to US 10 year yields on EM

<table>
<thead>
<tr>
<th></th>
<th>Monetary shock</th>
<th>Real shock</th>
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</thead>
<tbody>
<tr>
<td>Yields</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>NEER</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Industrial production</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Capital flows</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Equity prices</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Source: IMF WEO Oct 2014
Spillovers: performance differs across episodes

**EME Industrial Production**

- Production-weighted. Source: Haver

**EME Export Volumes**

- Source: Haver
Spillovers: the 1994 policy surprise lesson

**EME Equities**

Index

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12

**EME Currencies**

Index

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12

**Note:** MSCI EM USD terms. Source: Haver

**Note:** Trade-weighted, real. Source: Haver
Spillovers: factors in the global backdrop beyond the Fed

- EM growth has been slowing since 2010, raising questions about potential
- Expected policy stances in the advanced economies have diverged

**Advanced and EM Economies: GDP Growth**

Percent change from year ago quarter

**Market-implied OIS rates two years forward**

Percent

Source: National authorities, FRBNY estimates
Source: Bloomberg, FRBNY staff calculations.
Spillovers: more on the backdrop

Fed tightening cycles in 2004 and 1994 present a clear contrast in initial EM conditions
- Conditions heading into last year’s Taper Tantrum were more mixed
- Considerable uncertainty about EM conditions as the Fed begins normalizing

<table>
<thead>
<tr>
<th>Year</th>
<th>Global GDP growth</th>
<th>Global Commodity Prices Trends</th>
<th>Emerging Markets GDP growth</th>
<th>Emerging Markets Current Account</th>
<th>Emerging Markets Credit Penetration</th>
<th>Emerging Markets Capital Inflows</th>
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</thead>
<tbody>
<tr>
<td>1994</td>
<td>moderate</td>
<td>moderate</td>
<td>moderate</td>
<td>weak</td>
<td>strong</td>
<td>weak</td>
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<tr>
<td>2004</td>
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<td>moderate</td>
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</tr>
<tr>
<td>2013</td>
<td>moderate</td>
<td>moderate</td>
<td>moderate</td>
<td>moderate</td>
<td>strong</td>
<td>moderate</td>
</tr>
</tbody>
</table>

Note: Data series are calculated over the past 35 years (except for credit which extends back 23 years), with the lowest 10 years denoted as 'weak', middle 15 years as 'moderate', and highest 10 years as 'strong'. GDP data is annual GDP data in constant prices at market exchange rates from the IMF’s WEO, commodity price trends reflect the change in the current year’s real commodity prices relative to the 3 previous years and is from the World Bank, current account and capital inflow data are as a share of GDP and are from the IIF, credit penetration reflects the aggregate 2-year change in credit-gdp and is from the BIS.
EM resilience

• The Taper Tantrum was an important although transitory stress-test, and EM managed well through it in the public and corporate sectors

• EM are generally better equipped than in past cycles to navigate through potential renewed market stress
  • Fewer fixed-but-adjustable exchange rates
  • Clearer and more coherent monetary policy frameworks
  • Thicker foreign exchange liquidity cushions
  • Improved debt service ratios and generally moderate external debt levels
  • Generally improved fiscal discipline
  • Better capitalized banking systems, supported by stronger supervisory and regulatory frameworks

• Progress is uneven, and important vulnerabilities remain:
  • Rapid recent growth in bank credit and in corporate debt (domestic and external) are particular concerns
Domestic mandate

• The Fed’s statutory mandate, like that of other central banks, is domestic
  • “to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates”

• Within this mandate, there are good reasons to consider international effects of monetary policy
  • The US economy and the economies of the rest of the world have important feedback effects on each other, and adverse international spillovers can harm US prosperity
  • The role of the dollar as a reserve currency means the Fed has special responsibility to manage monetary policy in a way that promotes global financial stability

• First and foremost, the Fed can contribute to global growth and stability by promoting growth and stability at home, and the same goes for all central banks
  • Monetary policy designed for everyone is unlikely to help anyone
Working for a smooth exit

• The Fed’s recent efforts in this direction have focused on improving the communications framework

• Caution is warranted
  • There is less experience with UMP and this creates some uncertainties
  • Liftoff could be materially different for markets than prior CMP rate increases
  • The structure of markets has continued to change since the GFC
  • Requires attentive listening to, and communications with, other central banks and markets

• To promote domestic and global financial stability, the Fed has also made considerable efforts to strengthen the safety and soundness of the financial system

• Within the domestic mandate, the Fed seeks to minimize adverse spillovers and maximize the beneficial effects of US economic and financial performance on the global economy