Quantitative Easing, Global Inflation, and Commodity Standards

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Any views expressed here are my own and do not necessarily reflect the views of others on the Federal Open Market Committee.
Three hot topics!

- Quantitative easing as classic monetary policy.
  - It is an effective tool when the policy rate is near zero.

- Global inflation: Should the U.S. consider global output gaps?
  - This is one way to frame recent criticism of the Fed.

- Commodity standards as a substitute for central bank credibility.
  - A better idea: inflation targeting.
QE: classic monetary policy
The FOMC decision

- The FOMC voted to pursue “QE2” in November 2010.
- Even before this action, monetary policy was ultra-easy:
  - The policy rate has been near zero for an “extended period.”
  - The Fed’s balance sheet is much larger than it was pre-crisis.
- After the November meeting, the Committee stated that:
  - The Fed will purchase Treasury securities at a pace of about $75 billion per month through the first half of 2011.
  - The Committee will regularly review the program.
- Minimal changes at the December and January meetings.
Motivation for QE2

- There has been a disinflationary trend over the last year.
- Japanese experience with mild deflation and a near-zero nominal interest rate has been poor.
- Asset purchases can substitute for ordinary (interest rate targeting) monetary policy.
Disinflation trend in 2010, PCE

Disinflation trend in 2010, CPI

Source: BLS and FRB Cleveland. Last observation: January 2011.
The effects of asset purchases in financial markets

- The policy change was largely priced into markets ahead of the November FOMC meeting.
- The financial market effects were entirely conventional.
- In particular, real interest rates declined, inflation expectations rose, the dollar depreciated, and equity prices rose.
- These are the “classic” financial market effects one might observe when the Fed eases monetary policy in ordinary times (that is, in an interest rate targeting environment).
Expected inflation increased

Equity prices increased

The dollar depreciated

Real interest rates declined

Source: Federal Reserve Board. Last observation: February 17, 2011.
What’s next?

- Quantitative easing has been an effective tool, even while the policy rate is near zero.

- The economic outlook has improved since the program was announced.

- The natural debate now is whether to complete the program, or to taper off to a somewhat lower level of asset purchases.
Should the U.S. consider global output gaps?
A criticism of FOMC policy

- Critics suggest the Fed is encouraging inflation globally.
  - This despite the fact that U.S. inflation is relatively low.

- This may imply the Fed is not weighing global conditions appropriately.

- The Fed is charged with controlling U.S. inflation, but perhaps global inflation will drive U.S. prices higher or cause other problems.
Global inflation

### Consumer Prices

(year-over-year percentage change)

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Source: IMF, World Economic Outlook (October 2010) and World Economic Outlook Update (January 2011).
More on global inflation

- A two-speed global recovery:
  - Advanced economies: moderate growth / deflationary trend,
  - Emerging economies: strong growth / inflationary trend.

- Inflation is a threat especially for countries with quasi-fixed exchange rates with the dollar.
  - Many countries prefer to manage their dollar exchange rate.

- Those countries are choosing to import U.S. monetary policy to some extent.
Should the U.S. consider global output gaps?

- Much monetary policy analysis focuses on the U.S. output gap.
- The U.S. is often analyzed as a closed economy.
  - Example: standard Taylor rules.
- But given the criticism, perhaps the U.S. should focus on a “global output gap”?
- That might give a better indication of global conditions …
- … and possibly a better indication of U.S. inflation prospects.
  - See, for example, Borio and Filardo (2007, BIS) and Martinez-Garcia and Wynne (2010, FRB-Dallas).
More on global output gaps

- U.S. policymakers often say the U.S. output gap is large.
  - One manifestation is high unemployment in the U.S.

- This is interpreted as putting downward pressure on U.S. inflation.

- What if it is the global output gap that really matters?

- The global output gap is probably much narrower or even positive.
  - This would then be interpreted as putting upward pressure on inflation.
A global “output gap”

A tale of two gaps

- This is just one rough measure of a global output gap.

- The advanced economy gap is negative, but the emerging markets gap is positive.

- The weighted average of the two is positive.

- This may suggest upward, not downward pressure on inflation from this source.
Does it work?

- One study for Europe found that the global output gap did not appreciably impact Euro-area inflation from 1979-2003.

- See Alessandro Calza (2009, *International Finance*).
  - However, globalization might be more important going forward than it was in the past.
Gap criticisms

I have been critical of gap-based analyses of inflation dynamics in the past.

Those criticisms still apply:

- Theoretical issues are unresolved.
- Gap measurement issues are acute.
- Empirical relationships between gaps and inflation are shaky.

Still, the idea of “global output gaps” is one way to frame the recent criticism of the Fed and promote fruitful debate.
Commodity standards
Commodity standards

- Commodity standards were last discussed in the 1970s, when U.S. inflation was high and variable.

- Ironically inflation is quite low today.

- Tying the currency to commodities when commodity prices are highly variable is questionable.
Indexes of commodity prices

Source: International Monetary Fund. Last observation: January, 2011.
Inflation targeting substitutes for a commodity standard

- A commodity standard forces accountability on the central bank.
  - It did not always work, because governments sometimes changed the rate between the commodity and the currency.

- Inflation targeting is another way to force more accountability to the central bank and anchor longer-term expectations.
  - Make the central bank say what it intends to do, and hold the central bank accountable for achieving the goal.

- In this sense, inflation targeting is the modern successor to a commodity standard.

- Inflation targeting is a better choice in the current environment.
Conclusions
Conclusion

- QE2 was a classic easing of monetary policy.

- The global output gap hypothesis is one way to frame recent criticism of U.S. monetary policy.
  - This hypothesis is fascinating, but unproven.

- Inflation targeting is the appropriate modern alternative to historical commodity standards.