U.S. Monetary Policy and Commodity Prices

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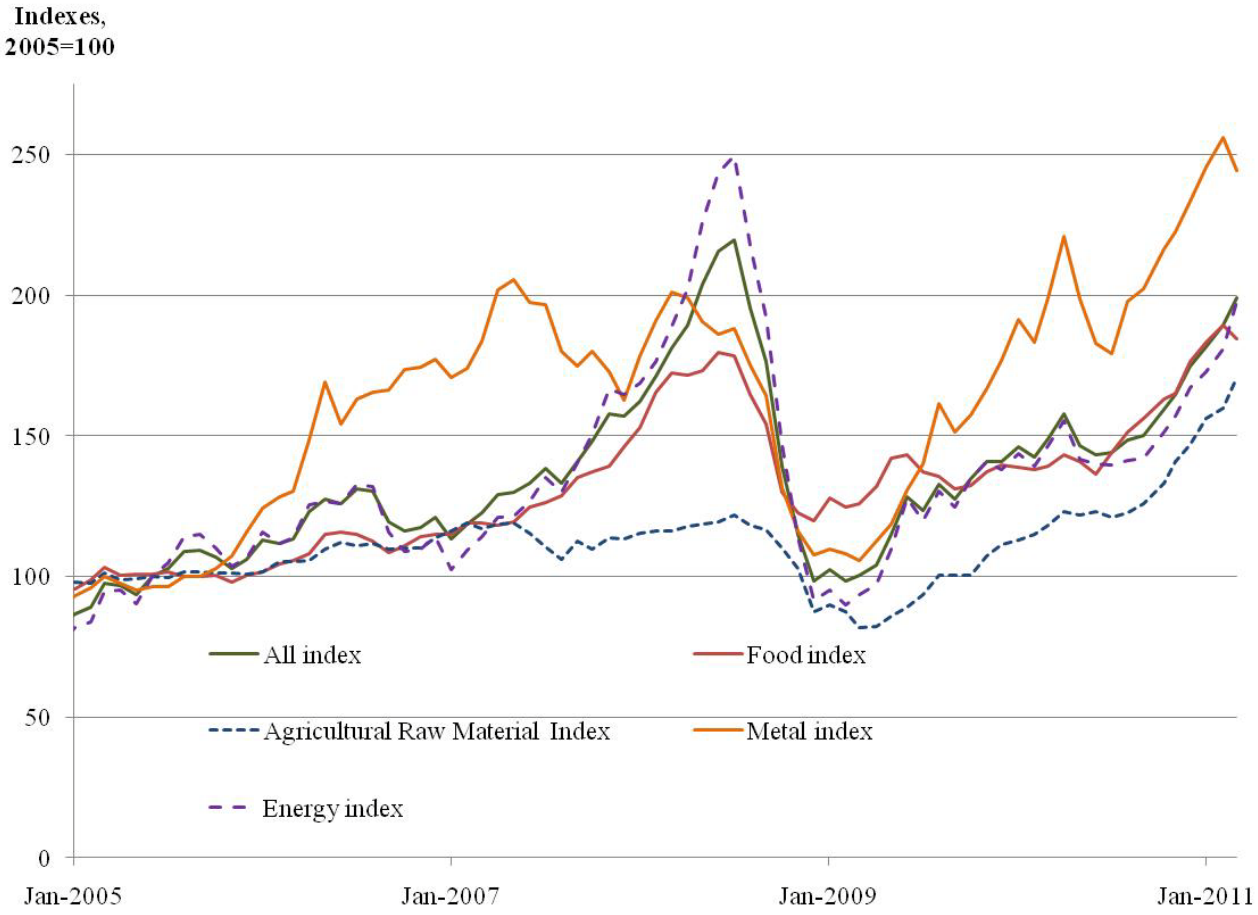
Any opinions expressed here are my own and do not necessarily reflect those of others on the Federal Open Market Committee.

This talk

- Some data on commodity prices.
  - Dramatic increases in recent months.
  - Is it a "Hamilton" oil price shock? Not so far.
- Core versus headline inflation: Which one to watch?
  - Controlling headline inflation is the key policy goal.
- Monetary policy.
  - Financial conditions have eased considerably since last year.
  - Going on hold allows more time to assess the strength of the recovery.
- Inflation targeting = modern commodity standard.

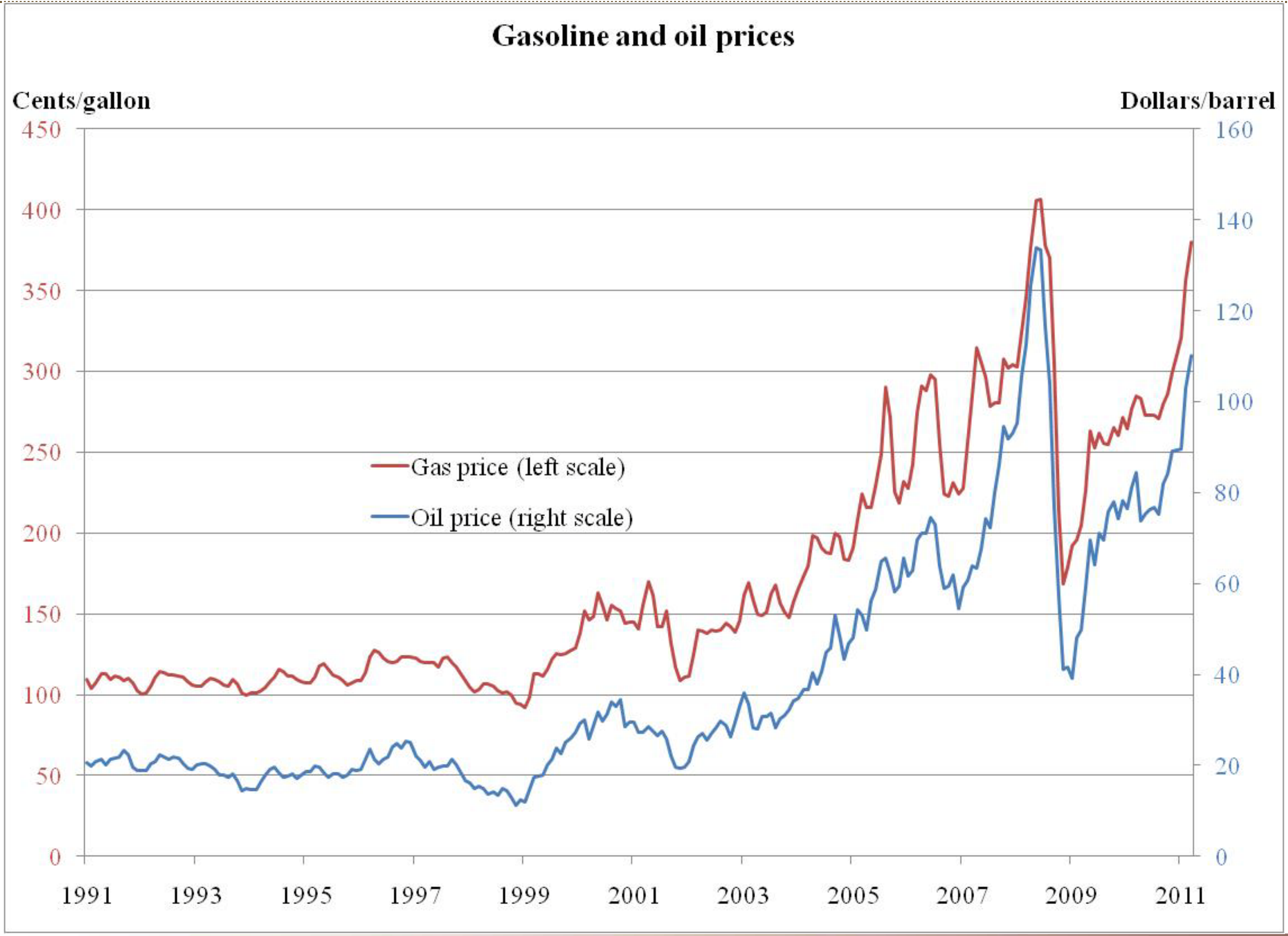
Some Data on Commodity Prices

Indexes of commodity prices



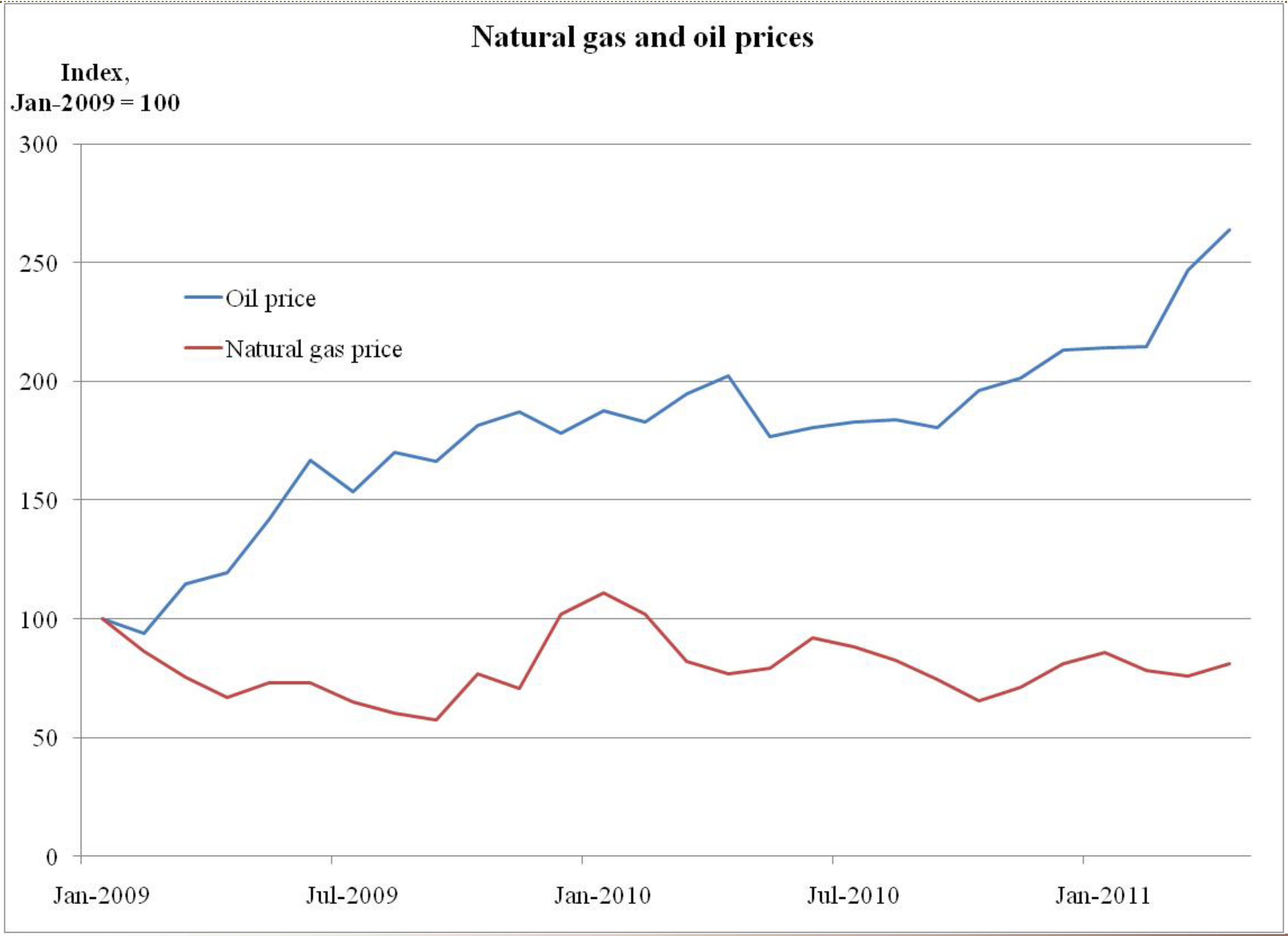
Source: International Monetary Fund. Last observation: March, 2011.

Gasoline and oil prices track closely



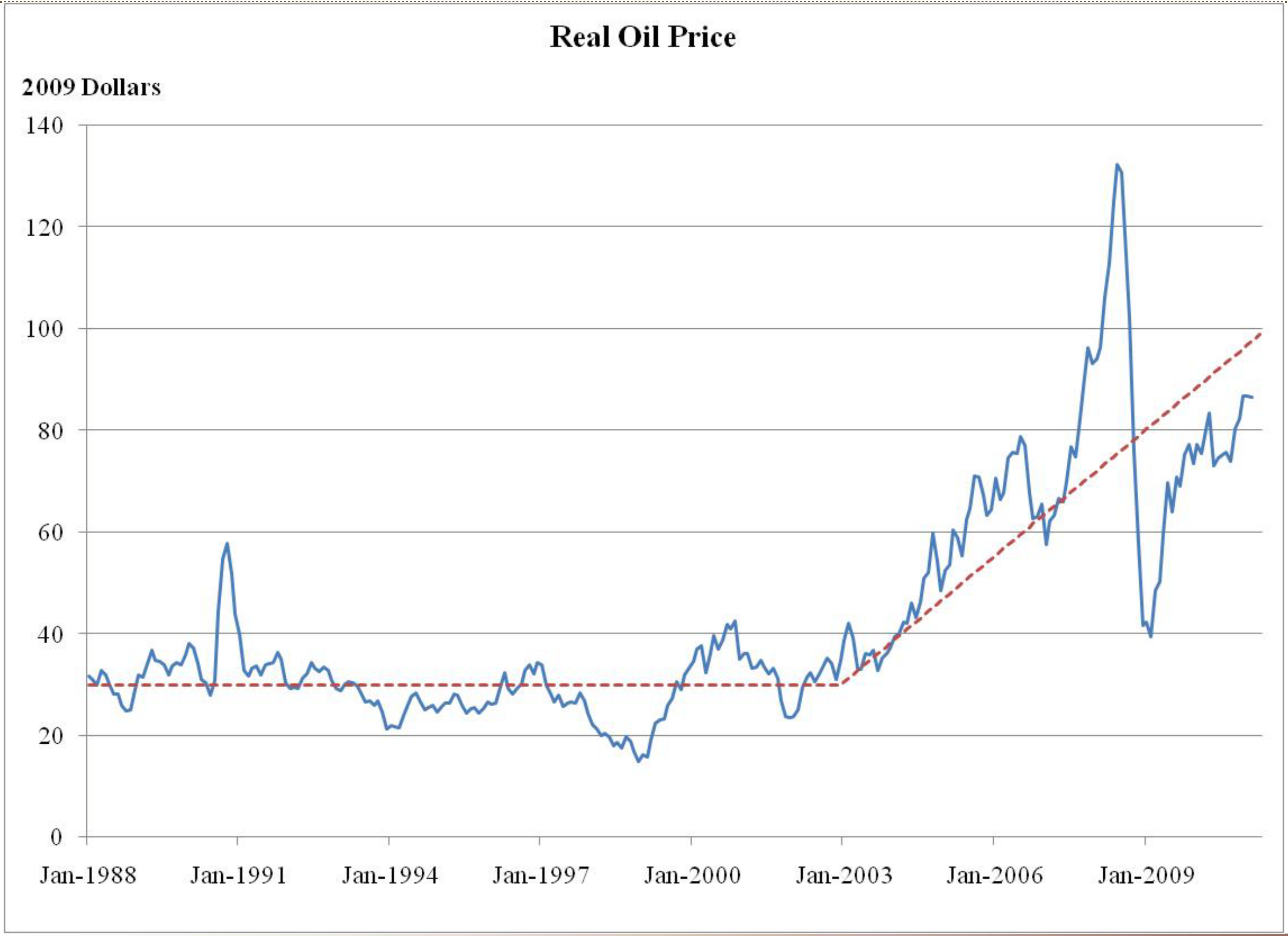
Source: Department of Energy and Wall Street Journal. Last observation: April 2011.

Natural gas and oil prices



Source: Wall Street Journal and author's calculations. Last observation: April 2011.

Real oil price: a structural change in 2003?

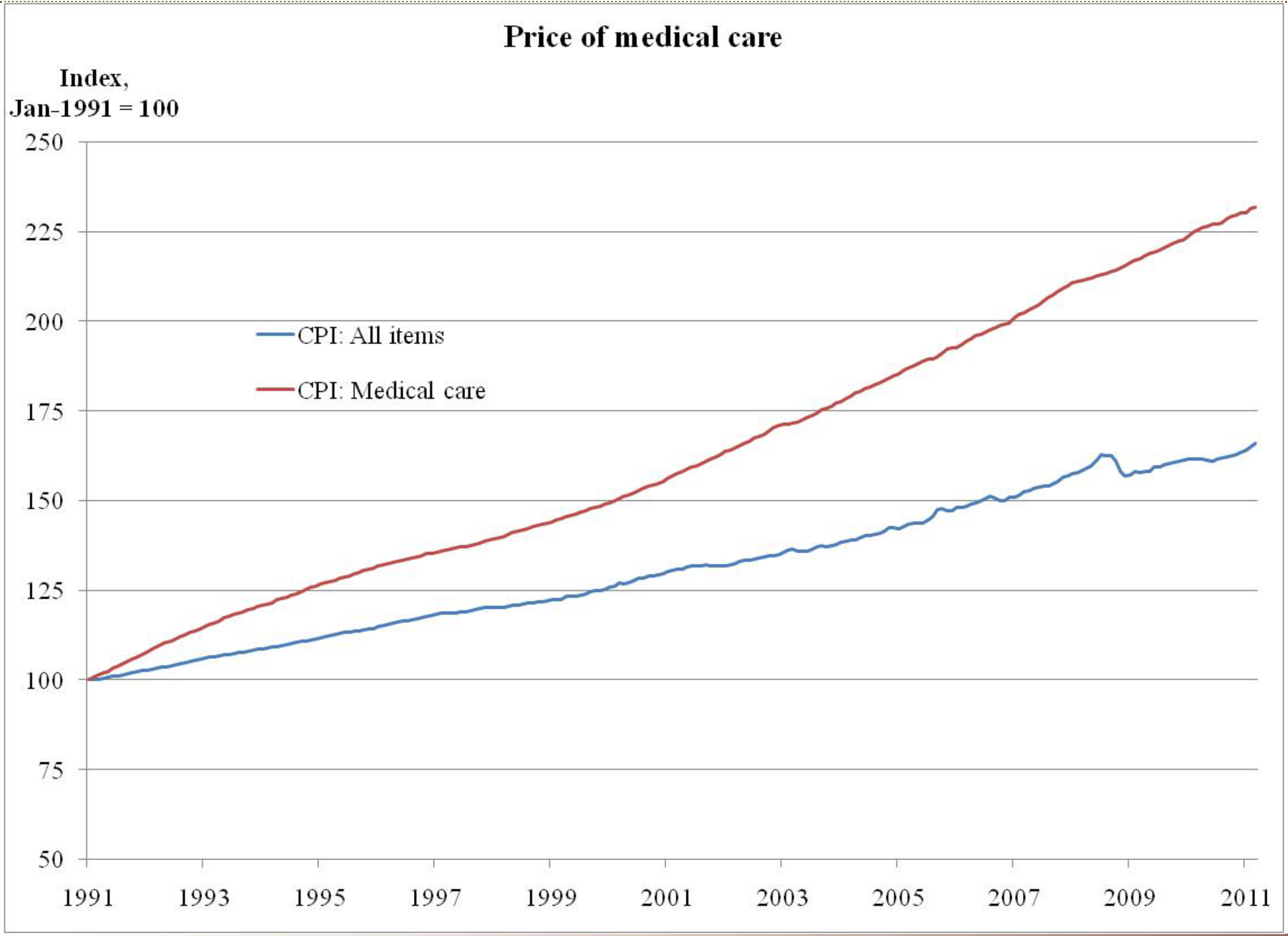


Source: Wall Street Journal, BLS and author's calculations. Last observation: March 2011.

Can energy prices continue to go up indefinitely?

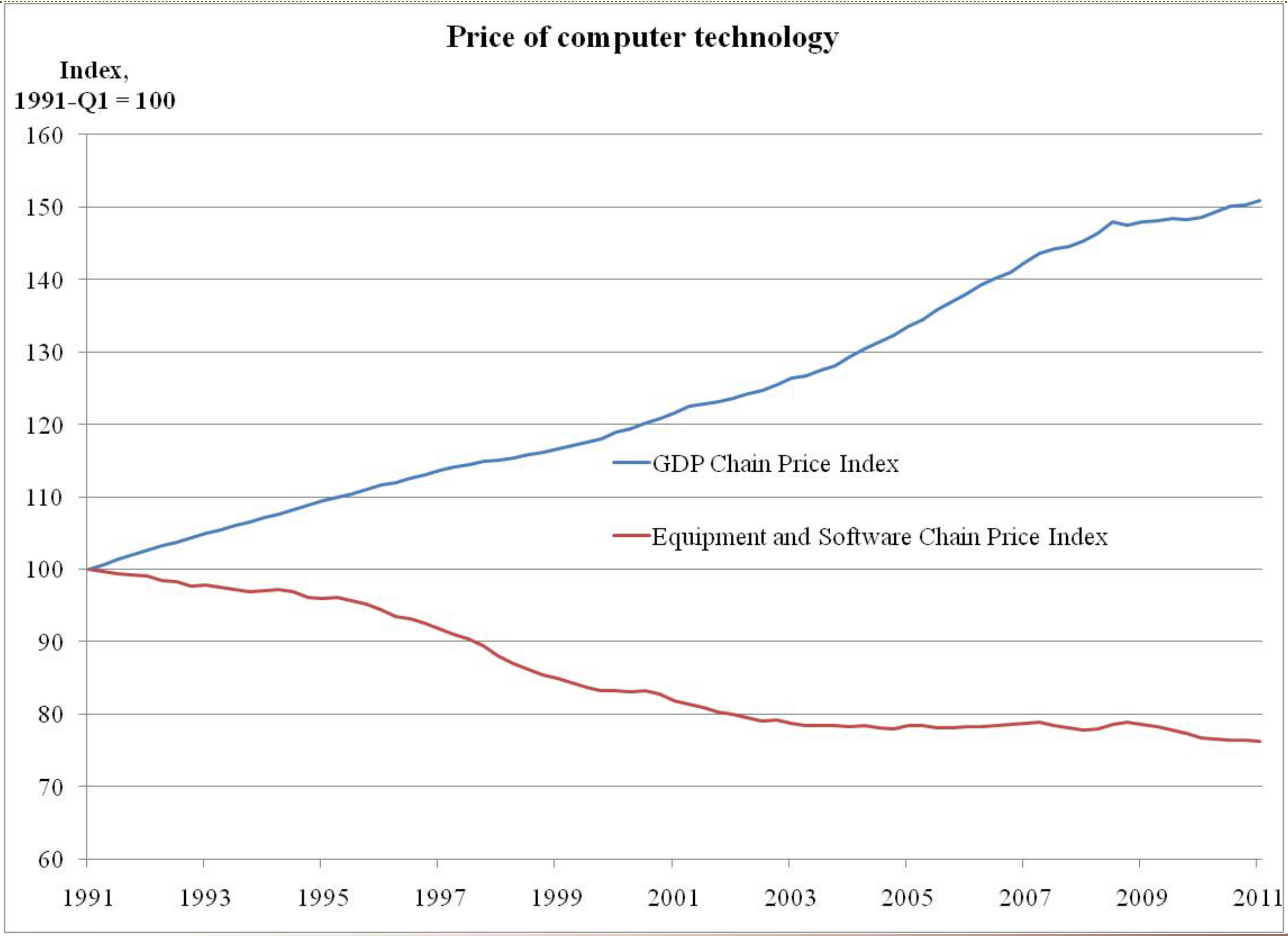
- No, because eventually we would have to spend all our income on energy.
  - Something has to give before that occurs!
- Still, some sector prices do continuously move in one direction for a long time.
- Examples: medical care prices have increased, and prices for computer technology have decreased.

Price of medical care



Source: Bureau of Labor Statistics and author's calculations. Last observation: March 2011.

Price of computer technology



Source: Bureau of Economic Analysis and author's calculations. Last observation: Q1-2011.

A "Hamilton" Oil Price Shock?

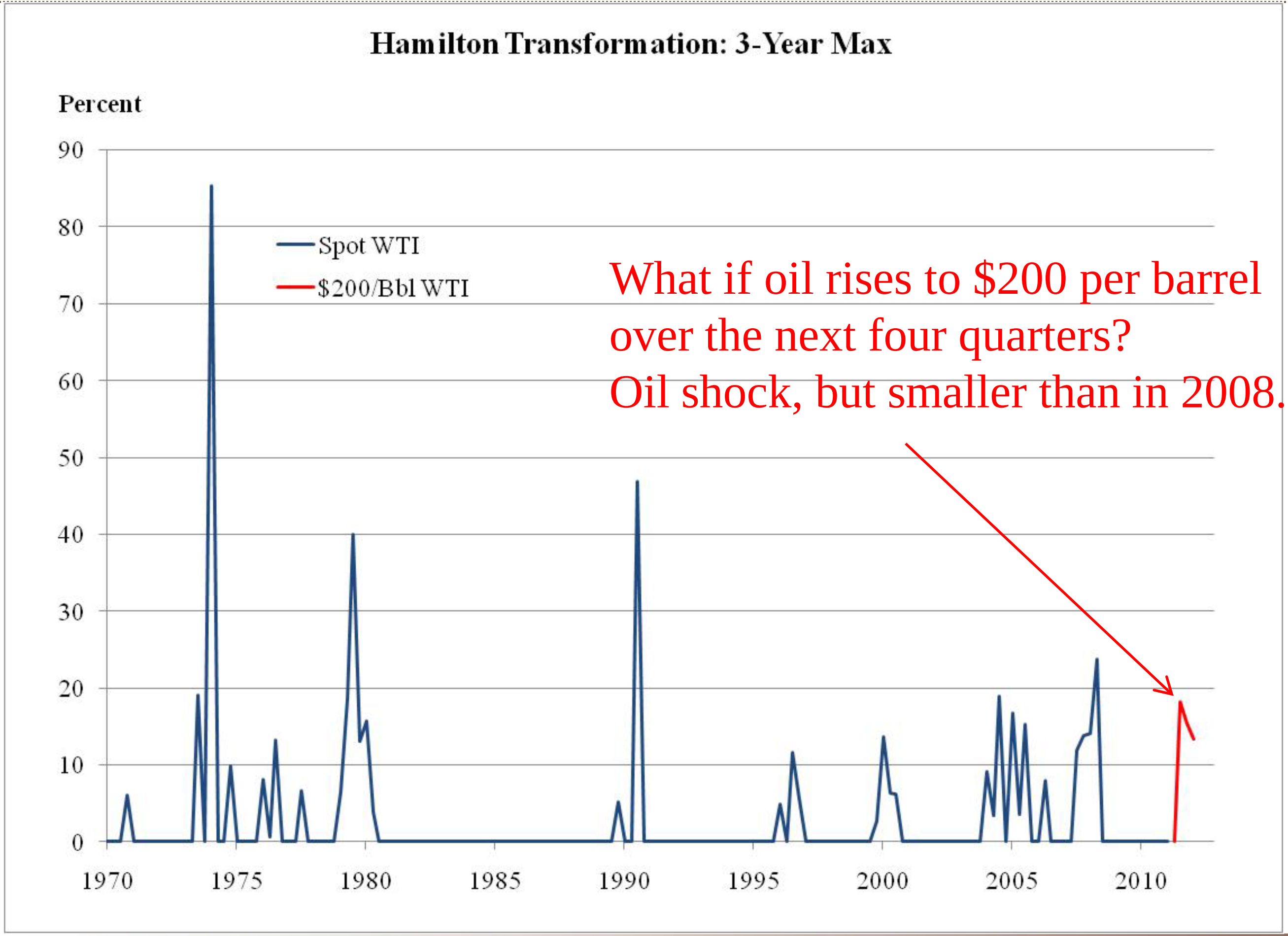
A “Hamilton” shock?

- Some leading research on oil shocks is due to James Hamilton of the University of California at San Diego.
- He has argued that certain types of oil price shocks precede U.S. recessions.
- Not all oil price movements are created equally, according to Hamilton.

More on Hamilton shocks

- Downward movements do not have much effect and so are ignored.
- And upward movements only matter if oil prices move far above levels recently experienced.
- Using this "Hamilton" analysis, the current oil price increase does not qualify as an important macroeconomic shock.
- It is unpleasant, but too small by this criteria.

Is it a Hamilton shock? No



Source: Wall Street Journal and author's calculations. Last observation: Q1-2011.

Hamilton shocks: What to conclude

- Of course, Professor Hamilton could be completely wrong this time around!
- But, the idea is that increases in oil prices like the ones we have recently experienced have occurred many times in the past without seeming to have much effect on the economy.
- It is only the really extreme ones that are reliably related to U.S. recessions.
- This gives me some confidence that the U.S. can weather the current price shock without a significant slowdown.

Core Versus Headline Inflation

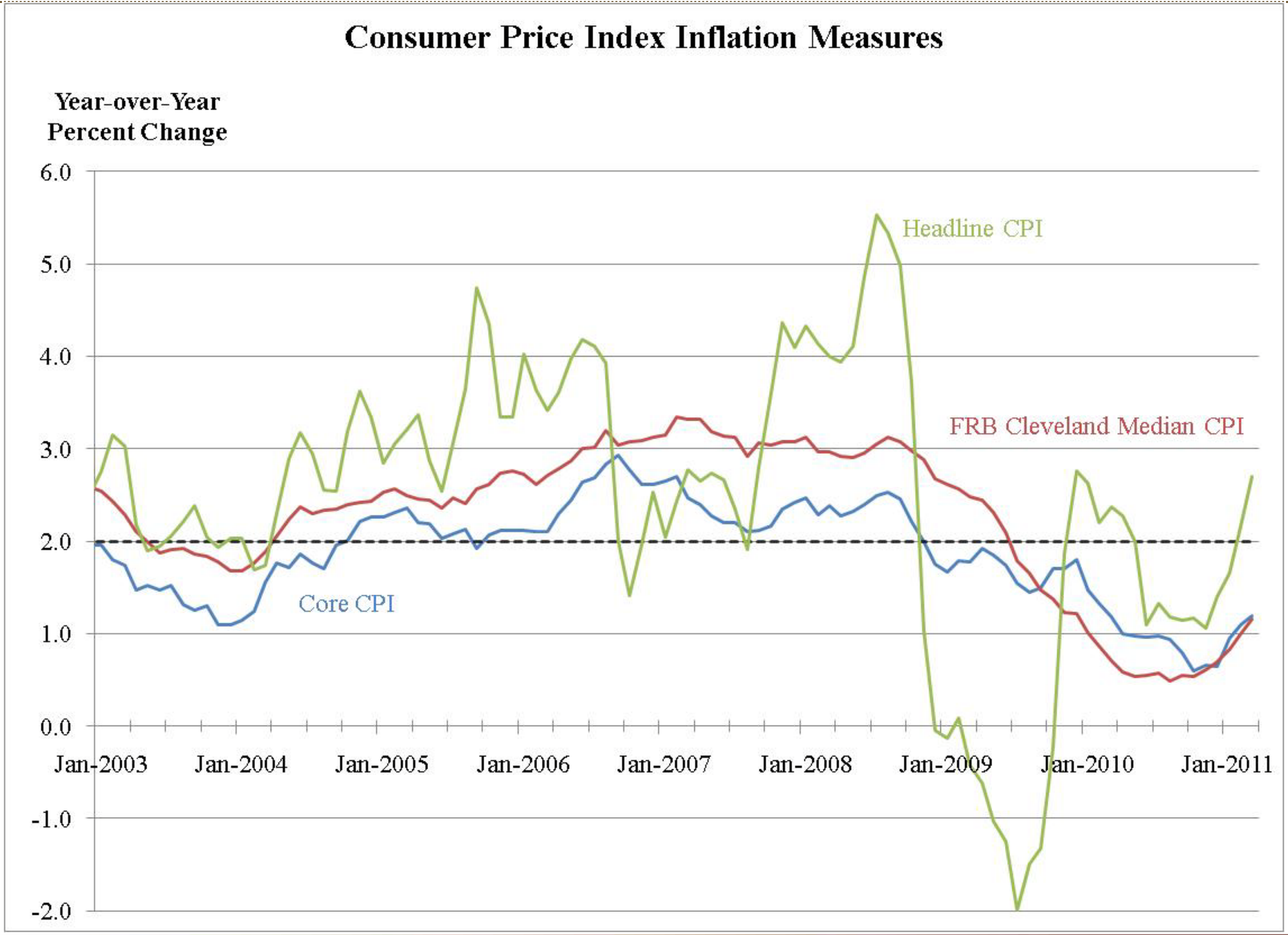
Building a price index: not easy

- There are a lot of prices out there.
- Inflation is a general rise in the price level.
  - Individual prices can go up and down …
  - … but households will shift their consumption in response.
  - This makes building a price index difficult.
- Quality adjustments are also difficult.
- The Fed does not compute the price level.
  - It is the job of the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA).

Core versus headline inflation

- Headline inflation refers to overall price indexes.
- Core inflation refers to the same indexes, but without the food and energy components.
- Core inflation is often smoother than headline inflation.
    - Core eliminates 20% or so of the prices in the index.
- The "core" concept has little theoretical backing. It is very arbitrary.

CPI inflation: headline versus core



Source: Bureau of Economic Analysis. Last observation: March 2011.

Headline inflation is the ultimate objective

- Headline inflation is the ultimate objective of monetary policy with respect to prices.
- These are the prices households actually pay.
- The only reason to look at core is as an indicator for headline.
- Core inflation is not an objective in itself.

Too much attention to core can mislead

- From 2003-2006, core inflation was consistently below headline inflation.
- Core inflation averaged about 2.0 percent during this period.
- But headline inflation averaged about 2.9 percent for the CPI, and about 2.6 percent for the PCE.
  - Core was not a good indicator of headline during this period.
  - Energy prices were rising and the economy was expanding.

Monetary Policy

Financial conditions have eased considerably

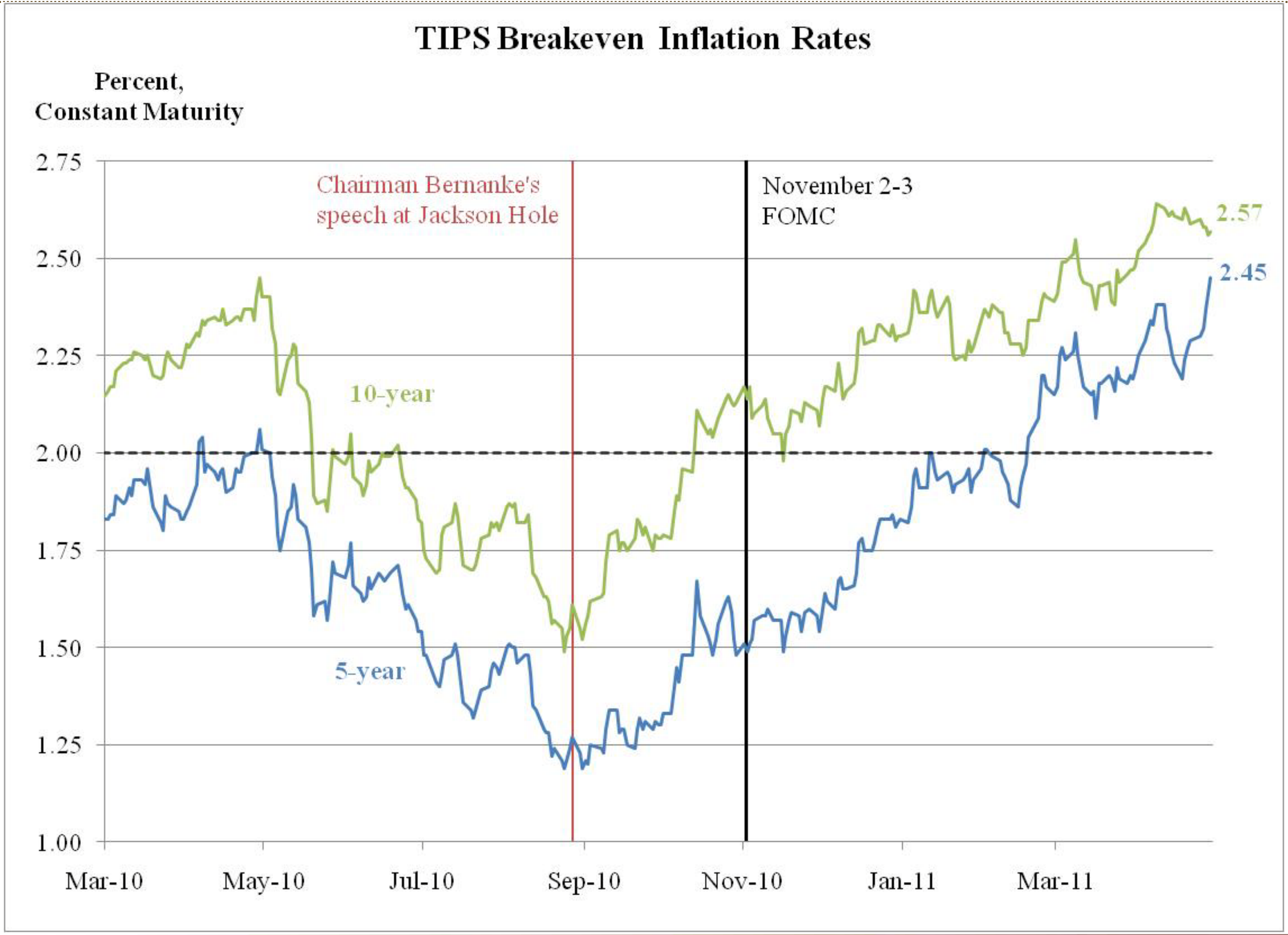
- Since last summer, financial conditions have eased considerably.

- The policy rate has remained fixed near zero.

- But expected inflation has risen about 125 basis points on the five-year TIPS breakeven measure.

- To the extent expected inflation continues to rise, financial conditions continue to ease.

Expected inflation has increased



Source: Federal Reserve Board. Last observation: April 29, 2011.

Policy on hold

- Past behavior of the FOMC indicates that the Committee sometimes puts policy on hold.
- This gives the Committee more time to assess economic conditions.
- Hold in the current environment would mean:
  - The policy rate remains near zero.
  - The "extended period" language remains intact.
  - The balance sheet remains at the level as of the time of the decision to go on hold.

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.

A commodity standard forces accountability

- A commodity standard forces some accountability on the central bank.
  - The paper currency can be traded for the commodity at any time at a given rate.

- It did not always work, because governments sometimes changed the rate between the commodity and the currency.

Inflation targeting substitutes for a commodity standard

- Inflation targeting is another way to force more accountability to the central bank and anchor longer-term inflation 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

- Is the current oil shock a "Hamilton" shock? Not so far.
- Headline inflation, not core, is the key policy goal with respect to prices.
- Higher inflation expectations in conjunction with a zero policy rate amount to an easing of financial conditions.
- Inflation targeting = modern commodity standard.

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