Discussion of Harris, Kasman, Shapiro, and West: Oil and the Macroeconomy—Lessons for Monetary Policy

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2009 U.S. Monetary Policy Forum
New York, NY
February 27, 2009

Views expressed are those of the author and do not necessarily reflect official positions of the FOMC or the Federal Reserve System.

A GREAT SUMMARY OF ISSUES

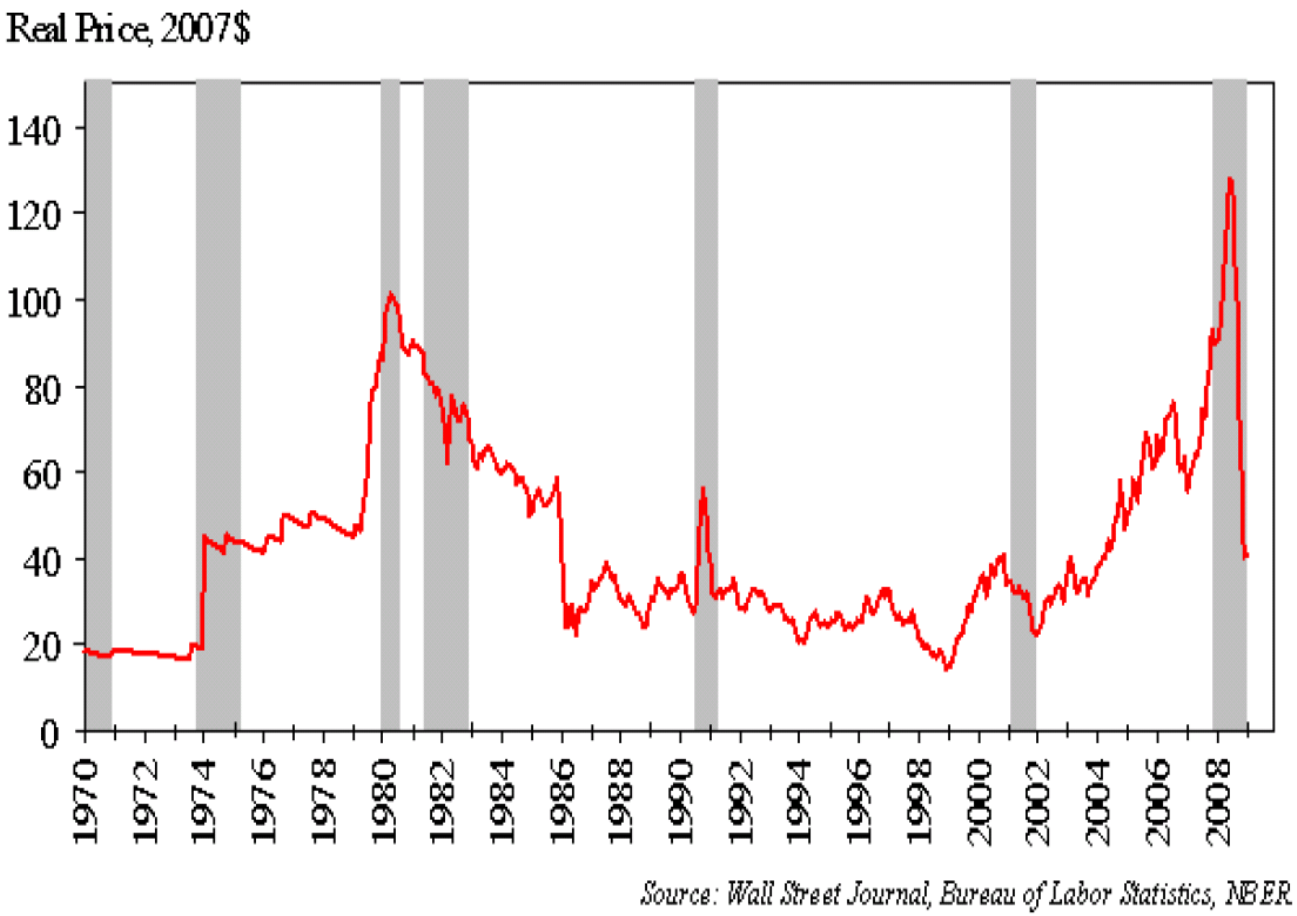
- The nature and evolution of the global oil market.
- Analysis of the claim of a long-lasting, demand-based rise in oil prices in the 2000s.
- Impact uneven; assessment requires a global, general equilibrium view.
- NK analysis suggests targeting the sticky prices.
  - The authors question the "anchored expectations" aspect of this.
- HKSW: Fed overplayed the "core inflation" card during the oil price run-up.
- HKSW: Aggressive easing by the Fed in 2007 and 2008 was appropriate.

SOME DISCUSSION AREAS

- The demand explanation for the run-up in oil prices.
- Optimal price indexes for monetary policy.
- The road ahead: long-term price changes.
- Global dimensions of monetary policy.
- Interpretations of expected inflation: a problem.

Real Price of Oil

Monthly Data. Last observation: January 2009.

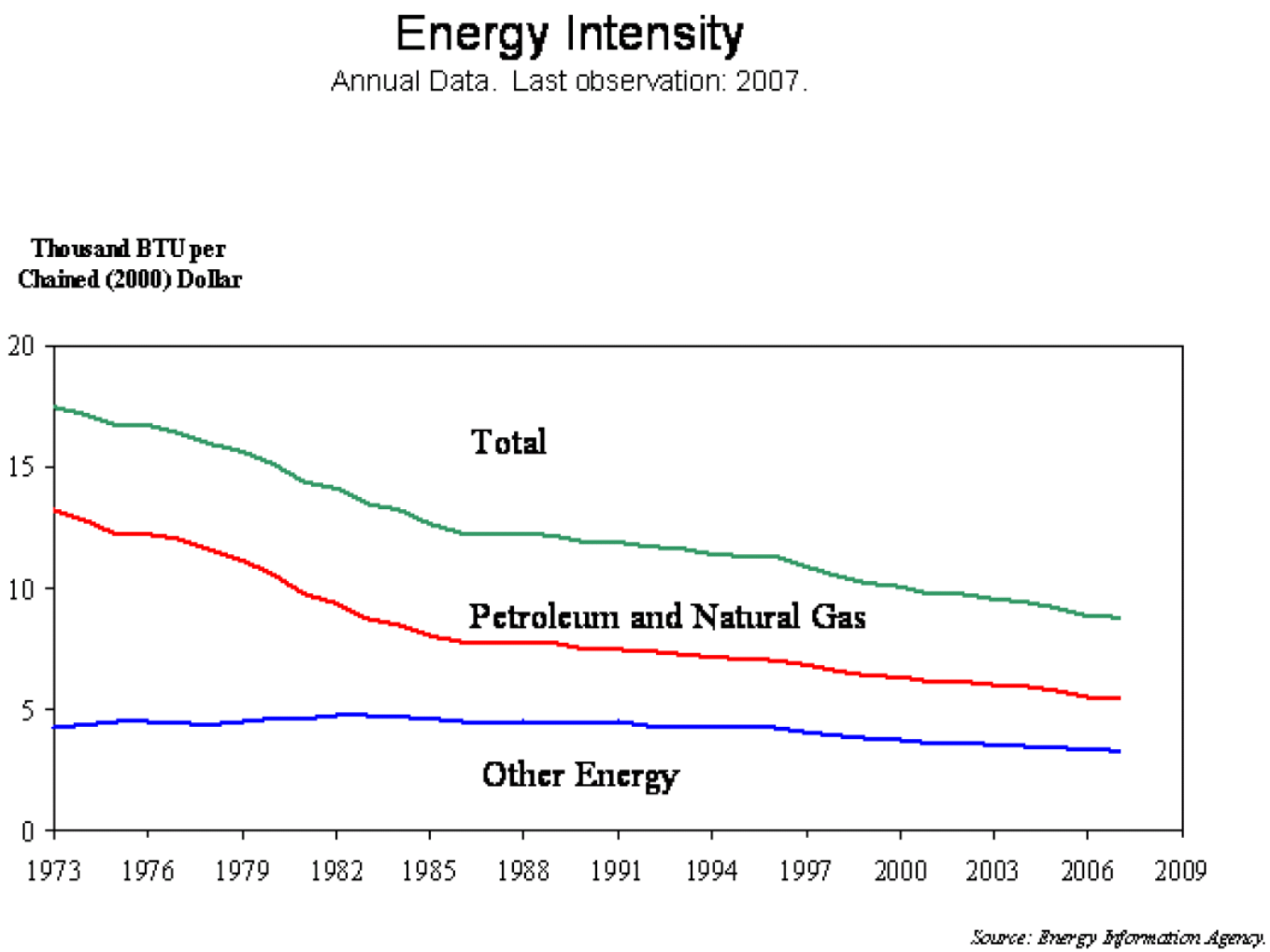


Source: Wall Street Journal, Bureau of Labor Statistics, NBER

THE DEMAND EXPLANATION

- "World oil equilibrium" 1987-2003: About $30/bbl in real 2007$, WTI.
- Abrupt structural change in 2003—probably statistically significant by now.
- Why? Emerging markets were growing both before and since. A threshold?
- Related: The 2008 peak in oil prices was larger in real terms than the 1980 peak.
- Suggests that the oil shock may have been a significant contributor to the sharp deterioration in fall 2008.
  - Unemployment claims and jobs numbers deteriorated before intensified financial turmoil.
- Mitigating factor: declining energy intensity.

ENERGY INTENSITY



CURRENT PRICE INDEXES FOR MONETARY POLICY

- "Core inflation" is an arbitrary concept for volatility correction.
  - Why take these particular prices out, but not others?
  - Can damage the credibility of the Fed when excluded prices are changing rapidly.
  - We need to do better.
- One appropriate concept for volatility correction: filtering.
  - The idea: prices that are more volatile provide less reliable signals for overall inflation.
  - All prices get included, but are weighted by appropriate signal-to-noise ratios.
  - A good area for research.

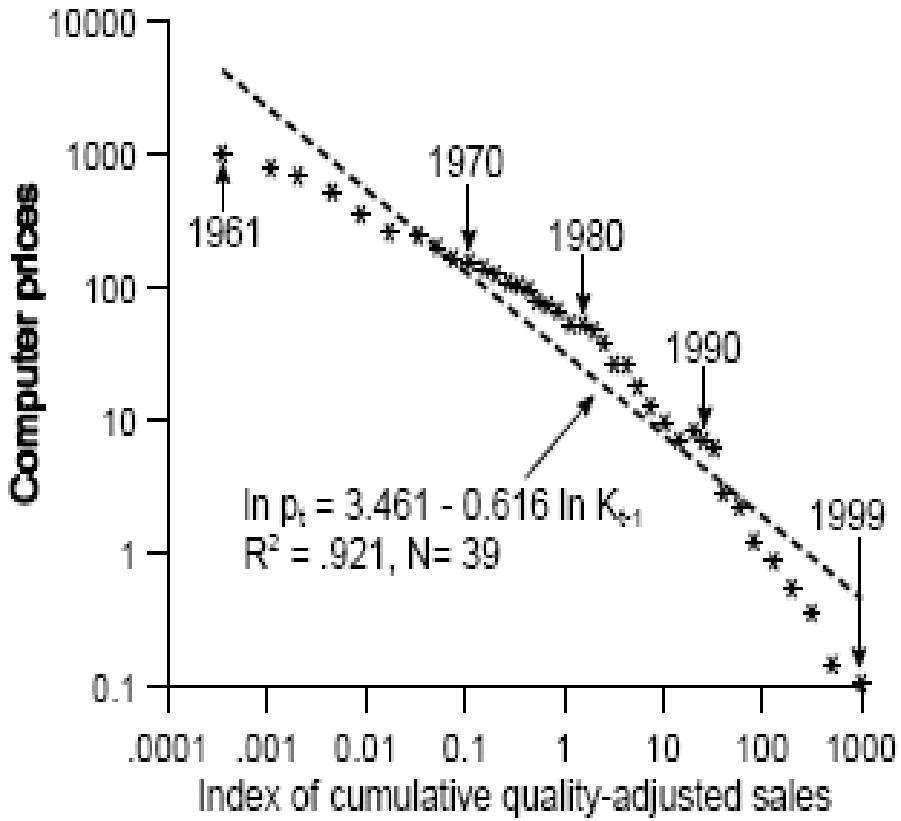
OPTIMAL PRICE INDEXES FOR MONETARY POLICY

- NK models: The price index should aggregate the prices from the sticky price sector.
- But, observed prices have "degrees of stickiness."
  - Could construct an index on this basis, and oil would presumably be weighted zero.
- Sticky prices, generally viewed as the weakest assumption in the NK framework.
  - Hang our hats on that?
- Flexible vs. sticky prices—of an input?
  - Bodenstein, Erceg, Guerrieri (2008): flexibly-priced input usage would matter for policymaking.
  - Small shares for oil, but shares are not small for flexibly-priced inputs generally.

LONG-TERM RELATIVE PRICE CHANGE

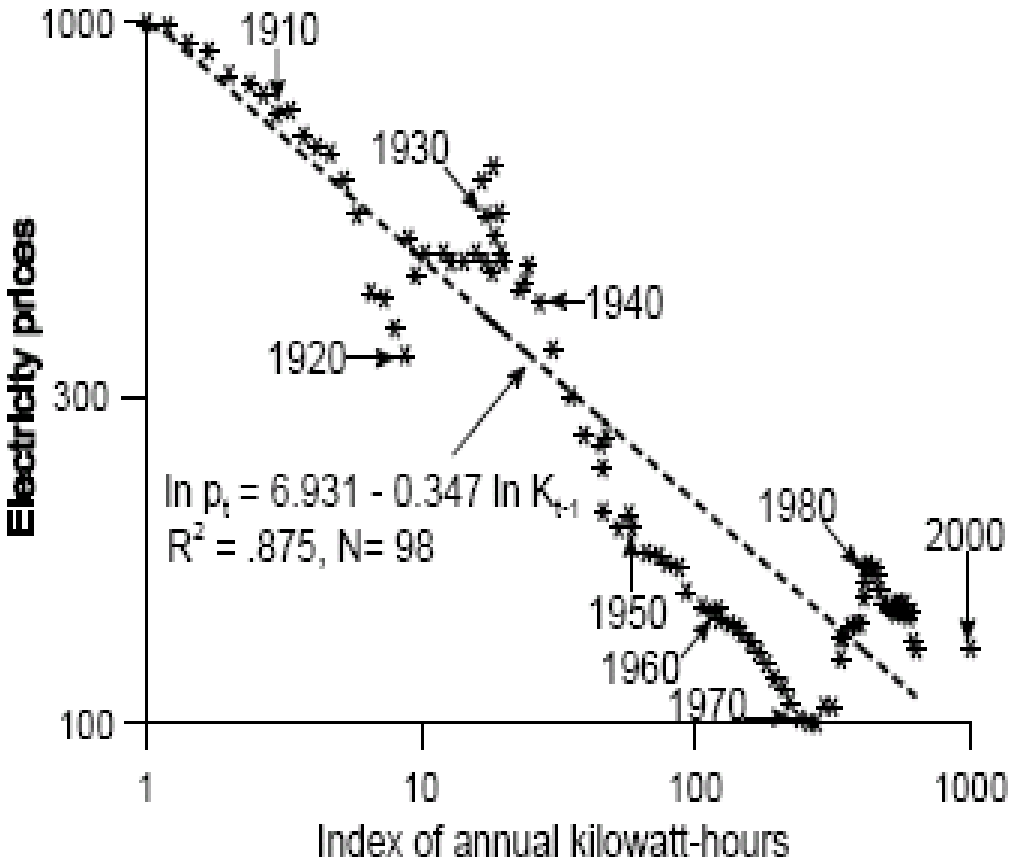
- A lot of discussion about oil revolves around the possibility of long-term "trend-like" behavior.
- Is it reasonable to think that there may be long-term "trend-like" behavior in oil prices?
  - To the extent that oil is a finite resource, this seems reasonable.
  - Explosive demand from the developing world over the coming decades.
  - The opposite of other, well-known, long-term price trends?
  - Consider Jovanovic and Rousseau (2002), "Moore's Law and Learning By Doing," *Rev. Econ. Dyn.*

LONG-TERM PRICE TRENDS: COMPUTERS



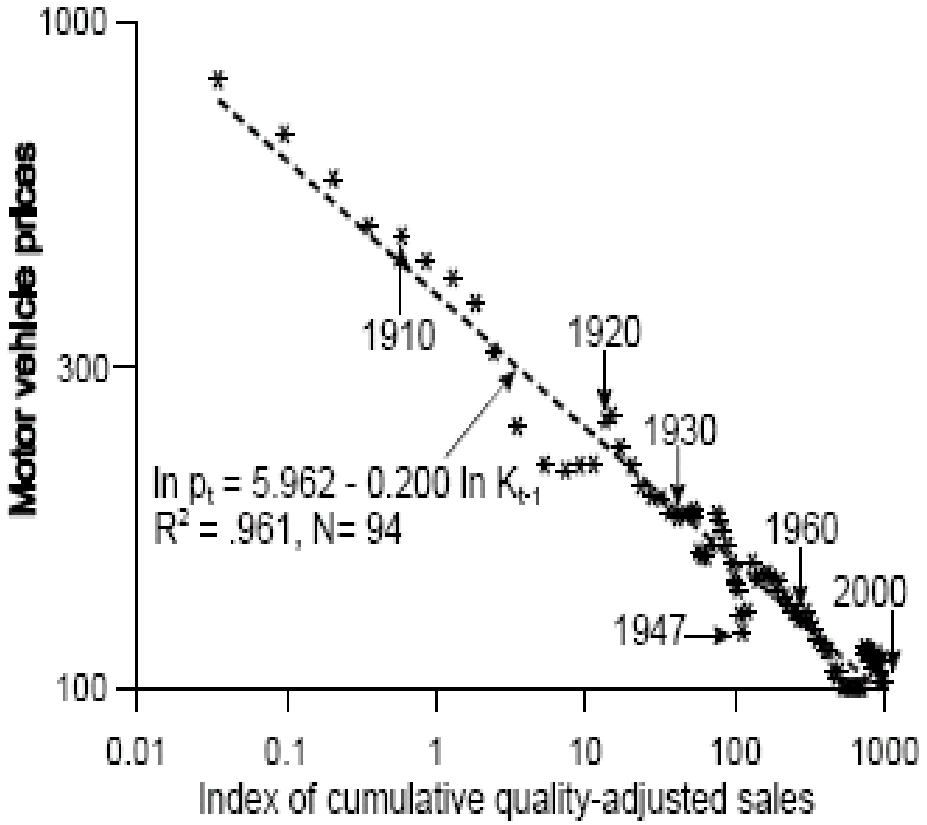
(a) computer systems

LONG-TERM PRICE TRENDS: ELECTRICITY



(b) electricity

LONG-TERM PRICE TRENDS: MOTOR VEHICLES



(c) autos, trucks, and buses

FIG. 1. Prices and quantities of "new" economy products.

GLOBAL EQUILIBRIUM

- Open economy NK models (CGG, 2002): optimal price index is to focus on domestic prices, again, the sticky sector.
- This gives us a third way to think about the optimal price index.
- In the NK context, "bad policy" means "does not respond aggressively enough to inflation."
- Global implications? See Bullard and Singh (2008), "Worldwide Macroeconomic Stability," *J. Monet. Econ.*
  - Determinacy of worldwide equilibrium depends on the joint behavior of policymakers worldwide.
  - Indeterminacy exposes all economies to endogenous volatility, even ones where monetary policy may be judged appropriate from a closed economy perspective.
  - Rationale for a type of international policy coordination.

INTERPRETATIONS OF EXPECTED INFLATION: A PROBLEM

- The problem with direct measures of expectations (p. 24, BEI).
- The expectations can be stable because participants expect the Fed to "do the right thing."
- But if the expectations do not move, the policymaker interprets that as a reason to do nothing.
- In a standard (one shock) NK model:
  - Inflation would never deviate from target because monetary policy would have the power to offset shocks exactly.
  - Surveys would reveal that the private sector expects the inflation rate to remain exactly at the target.
  - But nominal interest rates would be moving up and down every day in response to the incoming shocks.
- The "expected inflations seem well-anchored" argument is sometimes used improperly in policy discussions.

OIL AND INFLATION EXPECTATIONS

- HKSW: Possibly, failing to respond to persistent oil price shocks would leave longer-term expectations unanchored.
- This erodes credibility because the purpose of core is to help hit overall inflation targets medium term.
- The public cannot tell if the miss is intentional or because of the persistent energy price movements.
- I liked the simulations in Section A5.

MONETARY POLICY

- One main anecdotal story in the spring and summer of 2008: a sort of doubling down behavior by hedge funds and other major players in commodities markets.
  - Stopped at 2Q end.
  - Related to the financial crisis.
- The Fed debate during the spring and summer was in the context of already aggressive easing.
- The ECB and the Fed played different strategies, but ended up in the same place.

CONCLUSIONS

- I like the topic.
- I like the paper.
- Oil prices will remain a key issue for monetary policy in coming decades.