International Capital Flows and U.S. Interest Rates

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WW on Foreign Flows and US Interest Rates

- Do foreign purchases of US debt significantly affect US interest rates?
  - tighter short-term interest rates since 2003 have not led to much higher long-term interest rates
- Estimate an IS/LM motivated empirical specification for US long-term interest rates (10-yr Treasuries)
  - foreign (official) purchases have large effects on US interest rates (90 basis points!)
- Unspoken implication: what will happen when foreigners stop bailing out Uncle Sam?

Discussion

- Nice paper on an interesting question!
  - surely captures an important driver of interest rates given large foreign participation in US bond markets

- Large foreign flows during the 2000s consistent with low interest rates despite large budget deficits
  - but can they explain the second half of the 1990s?
  - is the stock market boom/bubble the missing ingredient?

- How exogenous are foreign official purchases of US Treasuries?
  - are they a pure demand shock?
  - possible correlations with shocks to supply?

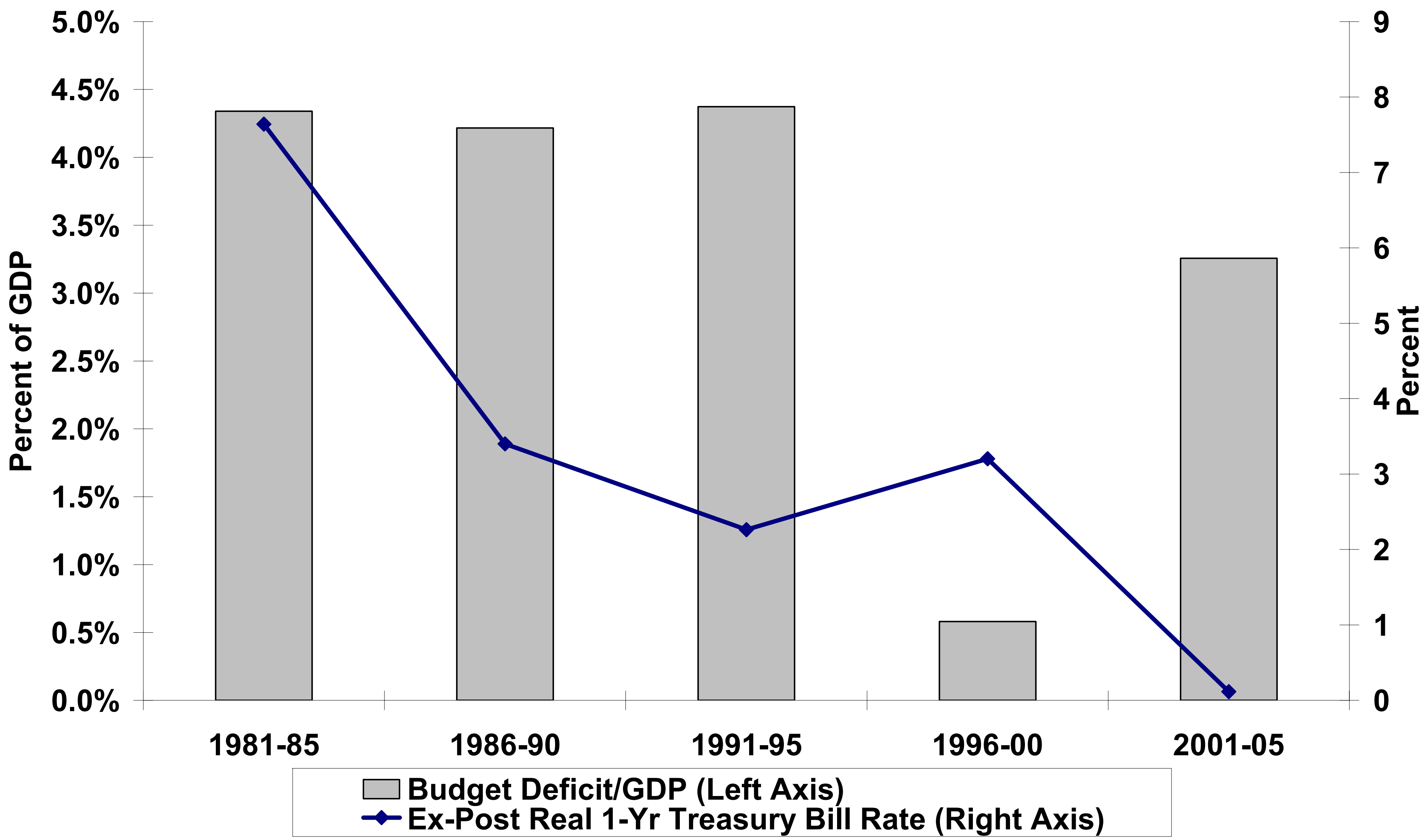
Budget Deficits and Interest Rates

- There has been a dramatic weakening of the relationship between budget deficits and interest rates
    - 1981-1995: High deficits, high r
    - 1996-2000: Low deficits, high r
    - 2001-2005: High deficits, low r

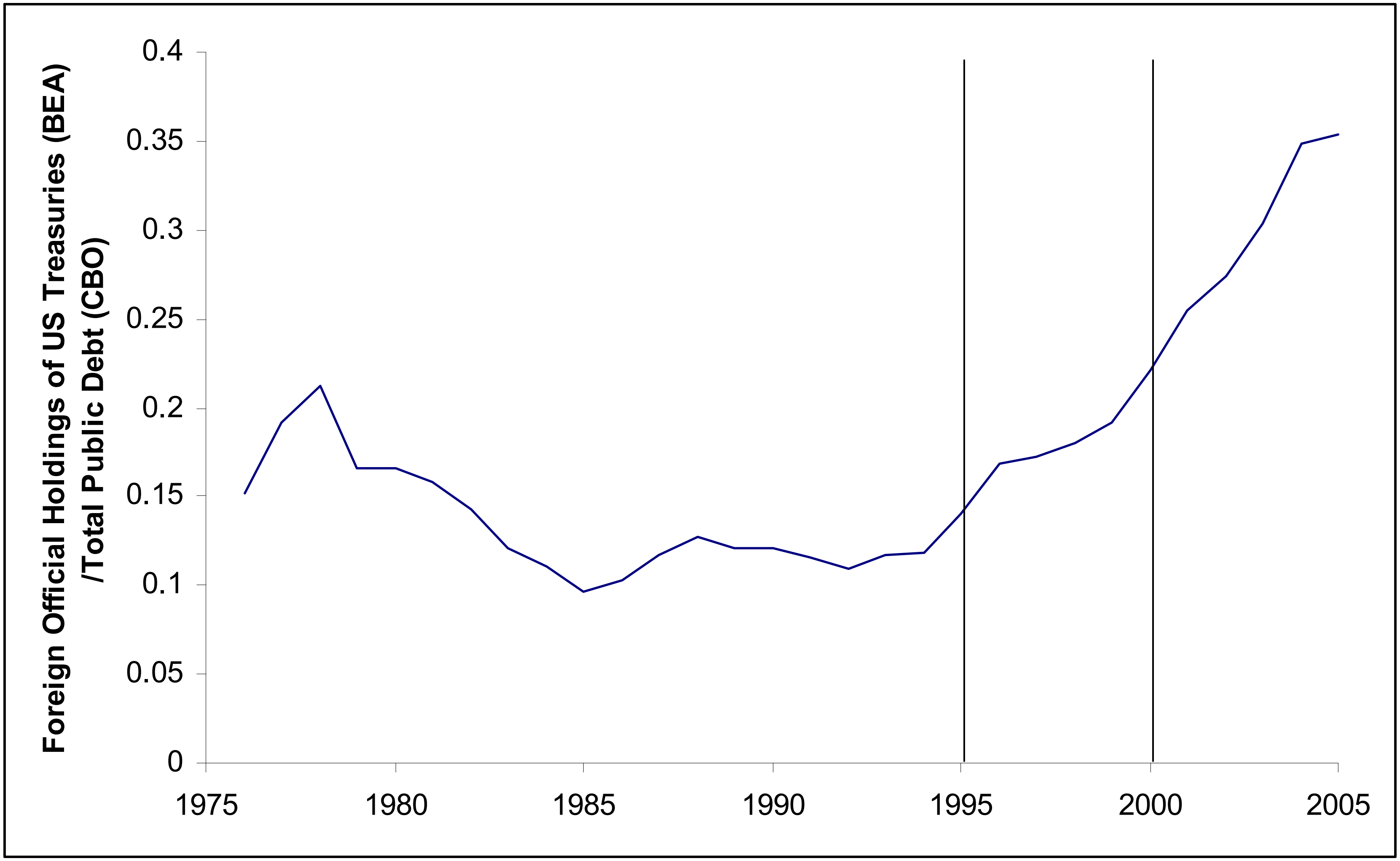
- WW story (large foreign capital inflows keep rates low) surely helps to explain part of last period

- But why were interest rates relatively high 1996-2000 despite:
    - low budget deficits (and even small surpluses)?
    - significant foreign capital inflows?

Budget Deficits and Interest Rates



Foreign Holdings of US Public Debt



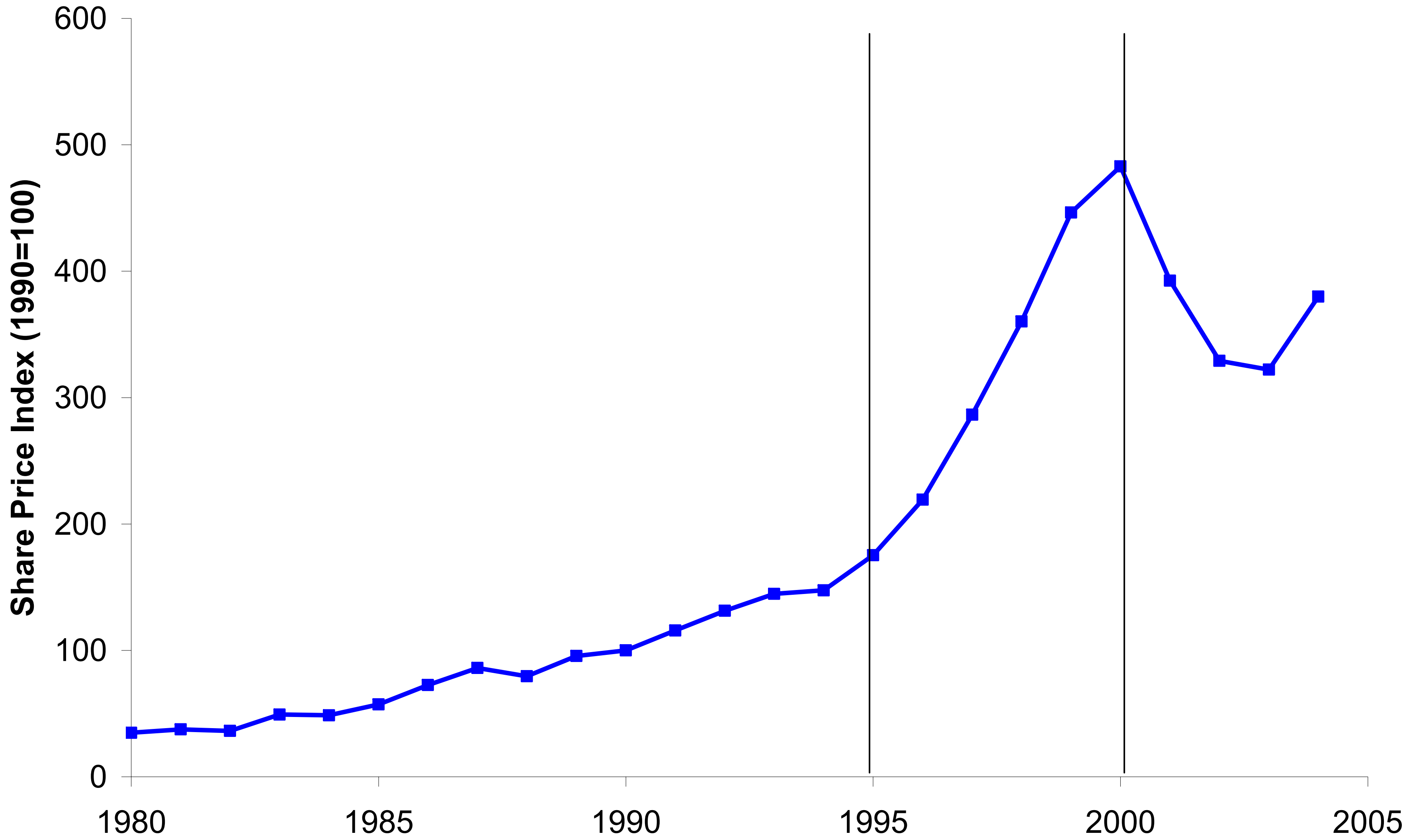
Simple Alternative/Complementary Story

- Stock market booms (or bubbles?) in second half of 1990s
  - public debt has to offer a higher return in order to induce investors to hold it

- Stock market crashes (or bursts?) in first half of 2000s
  - public debt no longer has to offer such a high return in order to induce investors to hold it

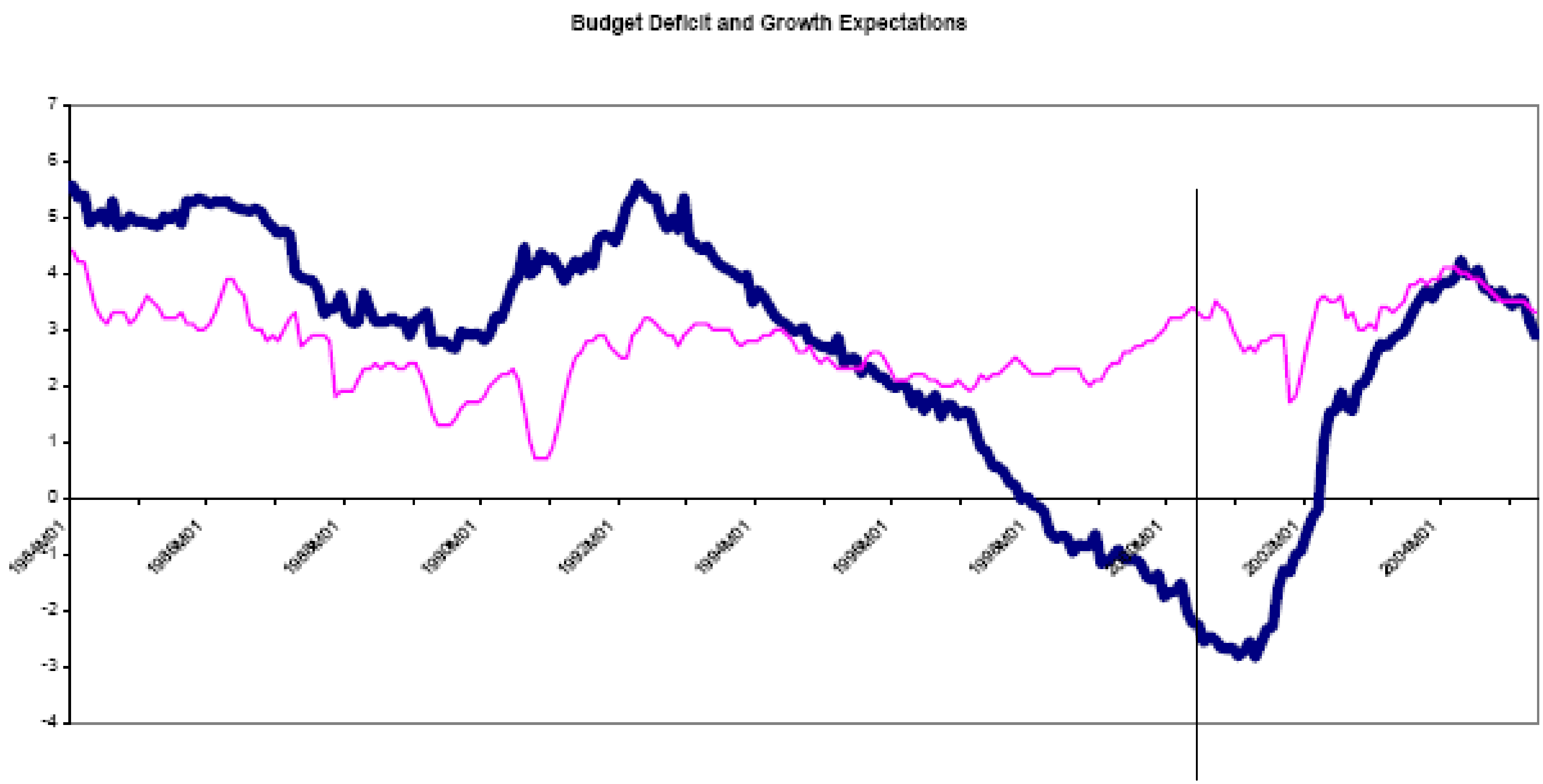
- Kraay and Ventura (2005) “The Dot-Com Bubble...” provide a model with dynamic inefficiencies in which this operates
  - 1990s: stock market bubble eliminates inefficient investments and raises welfare
  - 2000s: bubble bursts but expanding public debt enhances welfare in same way
  - stock market bubble and public debt compete for saving

U.S. Stock Market Boom and Bust



Do Growth Expectations Capture This?

(c) One-year ahead growth expectations (thin line) and structural budget deficit scaled by GDP (thick line).



Are Foreign Official Purchases Exogenous?

- WW identification strategy hinges on interpreting foreign official purchases as pure shocks to demand for US Treasuries
  - not implausible – after all, who knows what motivates foreign central bankers?
  - hard to assess precisely because of data limitations, and confidentiality of foreign central bank holdings
    - “benchmark consistent flows” more accurate measure of total foreign (not just foreign *official*) purchases
    - “TIC-reported foreign official flows” a lower bound on even foreign official flows
    - purchases by individual central banks confidential

- What if shocks to demand for US Treasuries correlated with shocks to supply?

Exogenous Foreign Official Purchases (1)?

- Recycling of petrodollars?
  - shock is high oil prices
  - revenues from high oil prices reinvested in US Treasuries (outward shift in demand)
  - what if high oil prices also slow US economic activity leading to higher budget deficits (outward shift in supply)?
  - observed fall in interest rates *understates* effect of foreign purchases

Exogenous Foreign Official Purchases (2)?

- Dooley, Folkerts-Landau, and Garber story of the new Bretton Woods system (a.k.a. “The Giant Communist-Capitalist Conspiracy”)
  - Chinese Central Bank buys US Treasuries to “bribe” US for access to export markets
  - Cyclical implications not spelled out by DFG, but presumably value of access to US markets is higher when US in boom
    - higher bribe value (outward shift in demand)
    - lower budget deficits (inward shift in supply)
    - *overstate* effect of foreign purchases on interest rates

Conclusion

- Again, nice paper on an interesting question, that surely is picking up an important effect of foreign bond purchases on US interest rates

- Hard to think about portfolio considerations in IS/LM framework, possibly shocks to other asset returns explain low interest rates

- Finding exogenous shocks to foreign purchases is hard, even foreign official purchases may not be sufficiently exogenous, although direction of bias is unclear