UK Industry Price Movements 1970-2010: Course, Causes and Implications

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Central Research Findings:

- UK industry prices respond mainly to unit cost shifts, tempered to a degree by import prices, and hardly in any discernible way in response to demand pressure;
- The cost-price pass-through co-efficient is close to but less than unity, as required in mark-up pricing;
- The import-to-domestic price pass-through co-efficient is positive but closer to zero than the unity required in conventional trade and tariff analyses that dominate textbooks and economist policy advice; and
- Even through the global financial crisis, UK industry prices have been extremely unresponsive to demand pressure, contrary to the dominating core of marginalist pricing hypotheses.

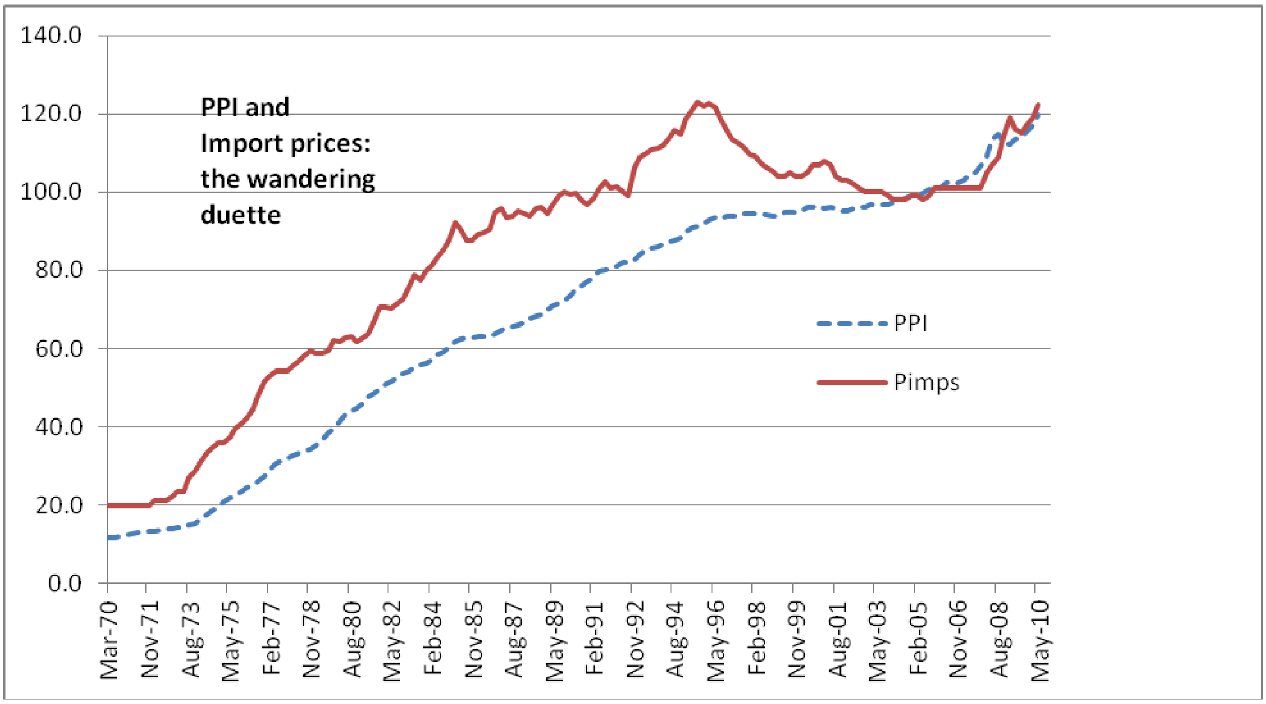
Documentation for Research Findings:

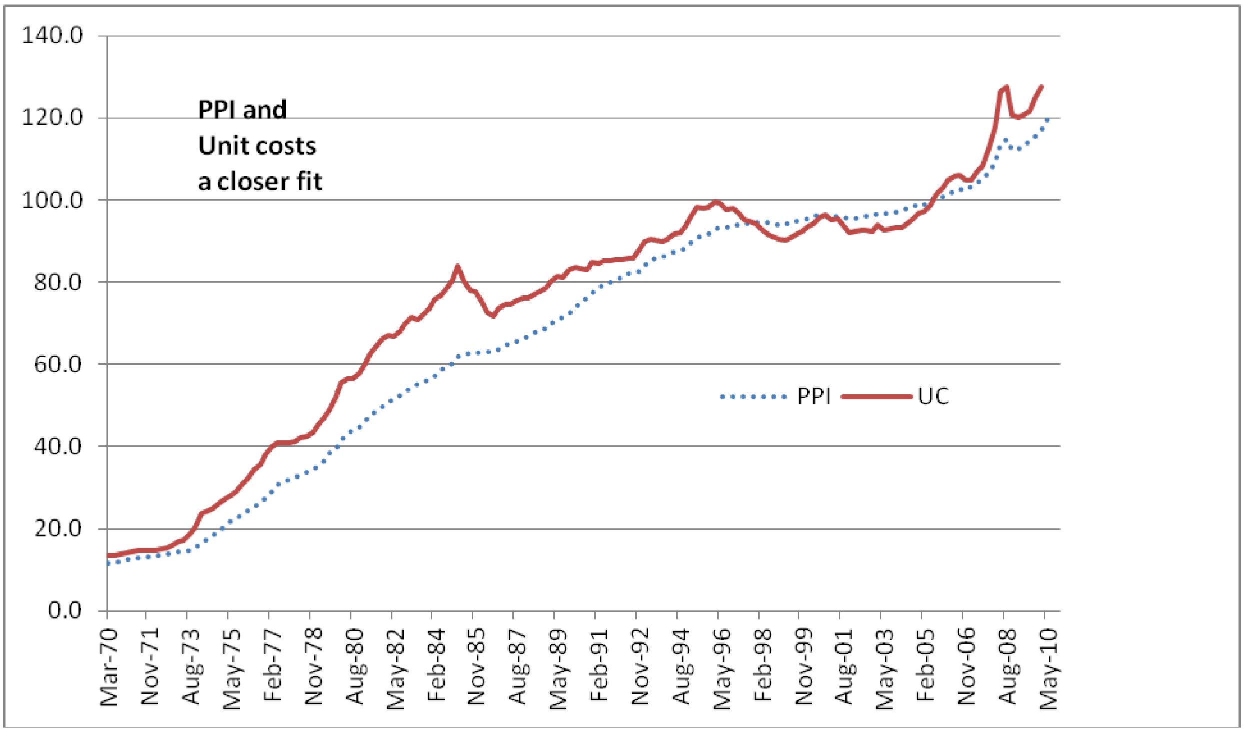
1. Previous econometric studies without import prices: Neild (1964), Godley and Nordhaus (1972), Coutts, Godley and Nordhaus (1978)
2. More recent econometric studies with import pricing influences tested explicitly: Martin (1997), Coutts and Norman (2007, 2008, and 2010 – this research)
3. Survey evidence for UK (Oxford research group in Wilson and Andrews, 1951), Bank of England (1999), also RBA for Australia (Park et al.,2010) and the Euro area (Fabniani et asl., 2006)

Implications for theory, teaching and economic policy advice:

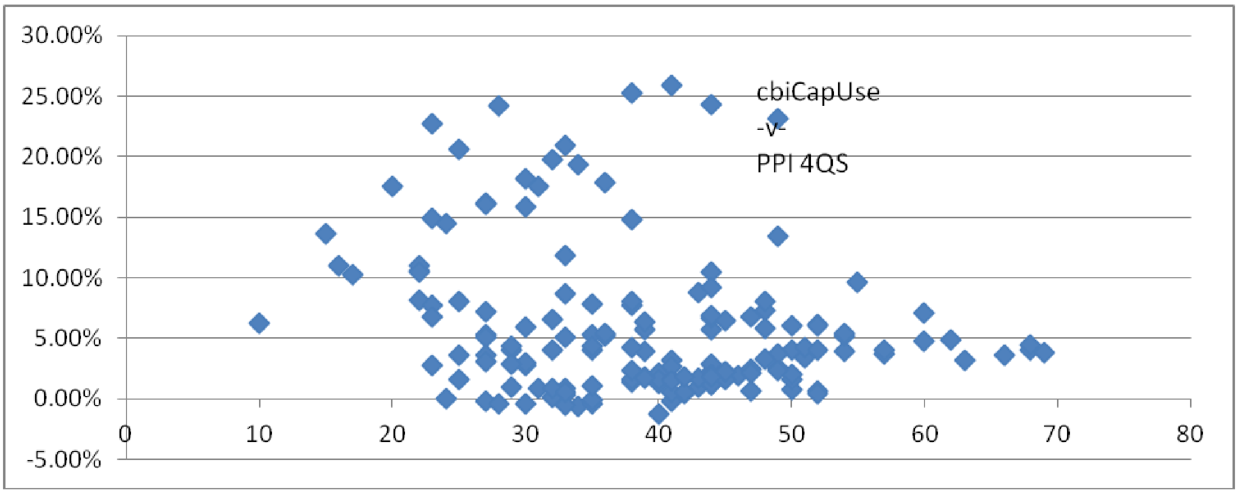
- Little or no support for economic models of pricing that suppose zero global pricing influence, full cost pass-through and especially full import-price pass-through
- Strong case for time-based (dynamic) specification to support statistical empirical work, and advise public policy processes that are nearly always time-specific
- No evidence that macro demand restraint will soften price increases in UK industry: macro policy relevance
- Standard micro models neglect global influences – or incorporate them in an erroneous and simplistic manner
- Standard trade and tariff models do not capture the forces actually at work in the price process for UK industry in the period 1970-2010. Diversity associated with differential competition and product differential, dynamics and cost dominance in pricing are hardly anywhere reflected in such models.
- The actual impact of trade policy changes is least affected by the extent of tariff policy changes and mostly by other things, such as product and competition characteristics, strategic industry considerations and business perceptions – including conscious uncertainty that drive many to adopt pricing close to mark-up models found in heterodox economics.

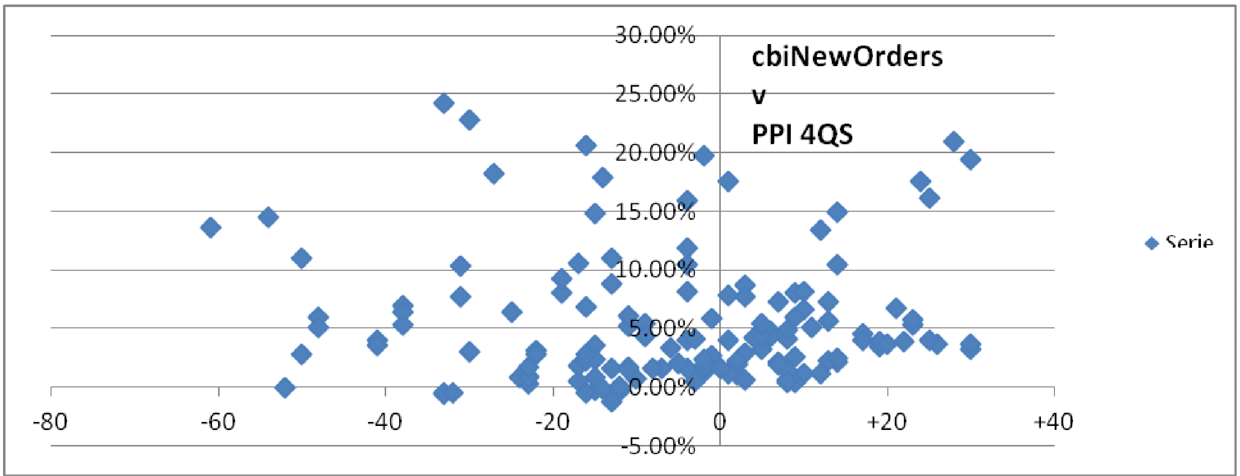
Illustration of UK pricing research findings summarised above – before the fancy econometrics, the story is very clear from these simple charts:

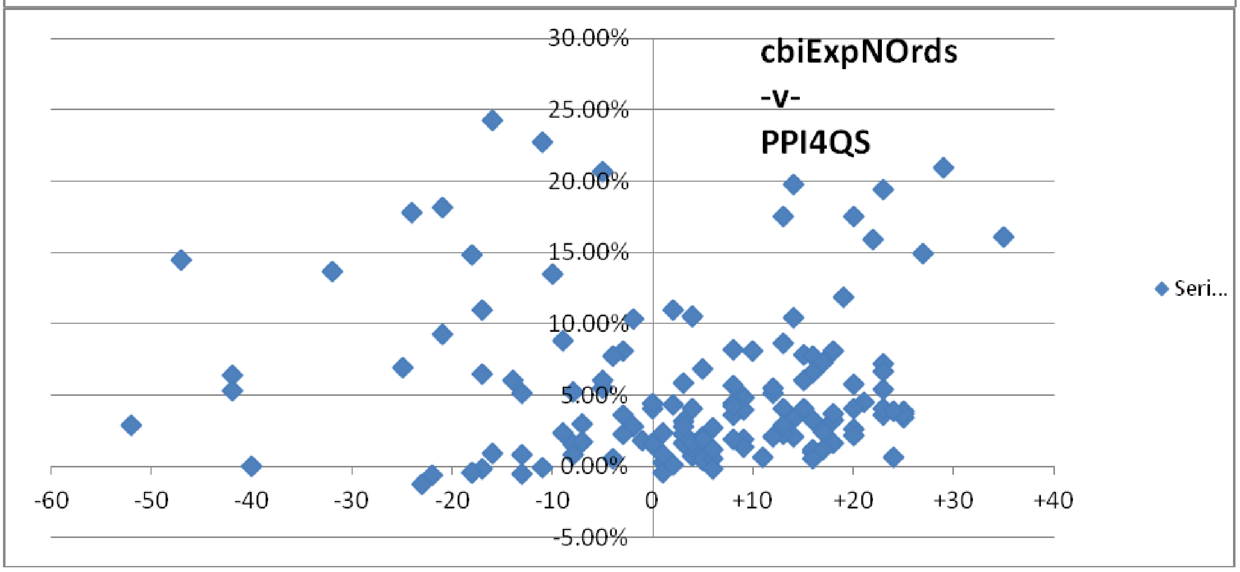




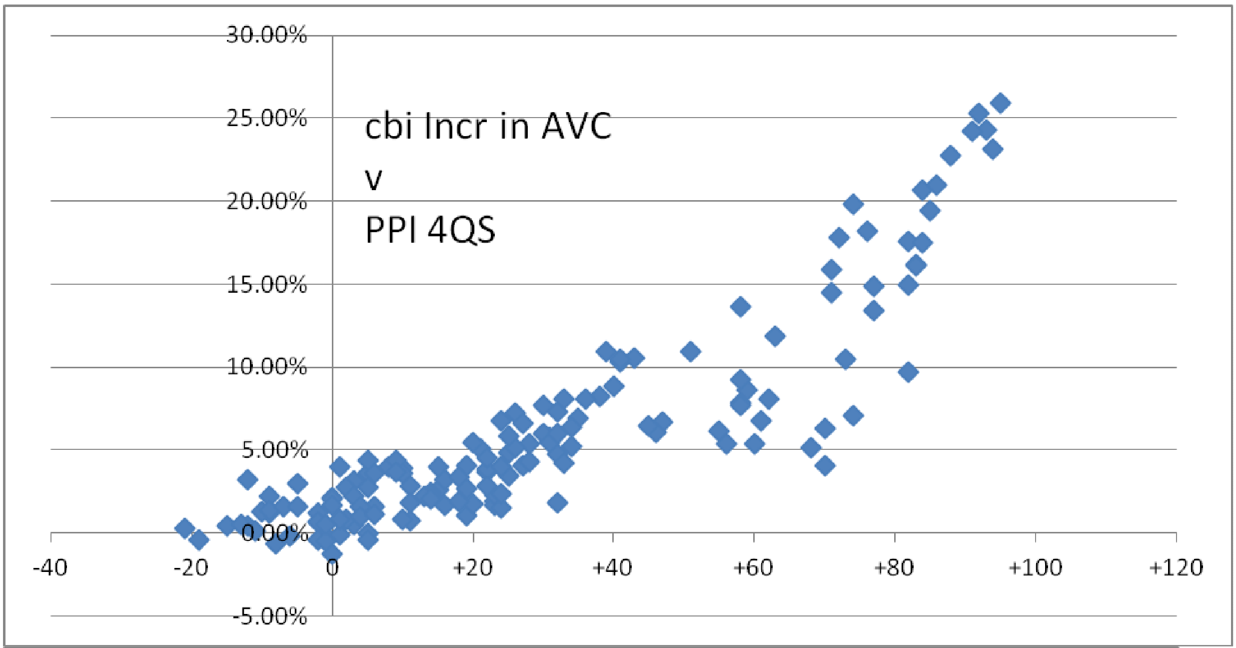
Using CBI data:







However……………….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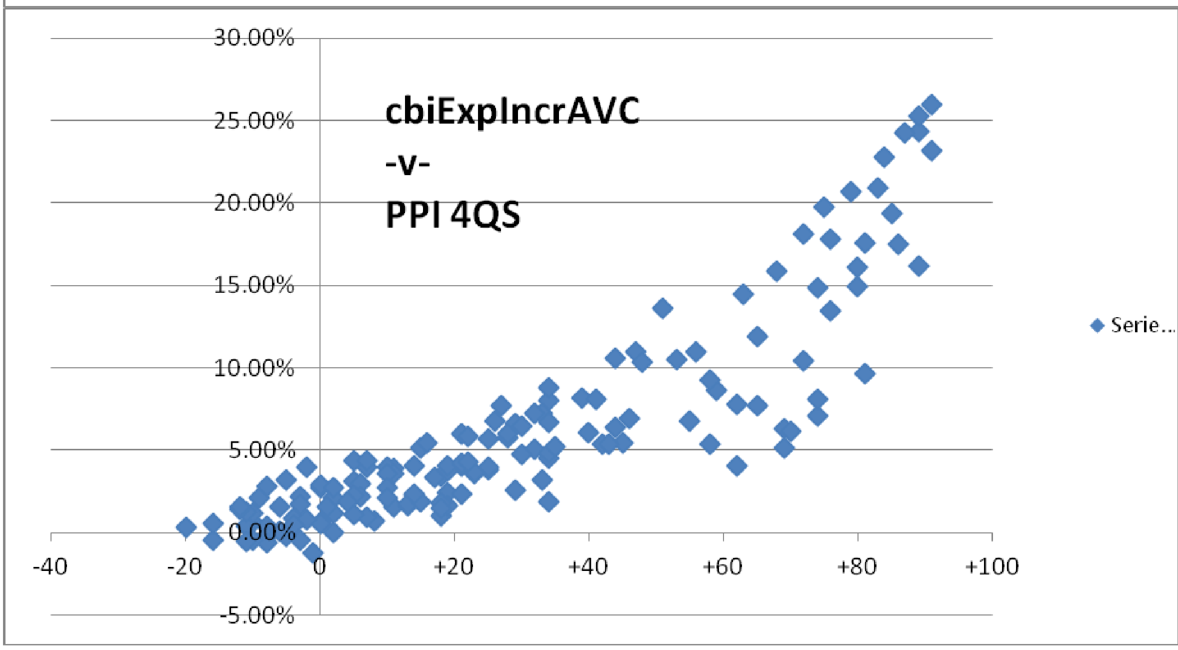
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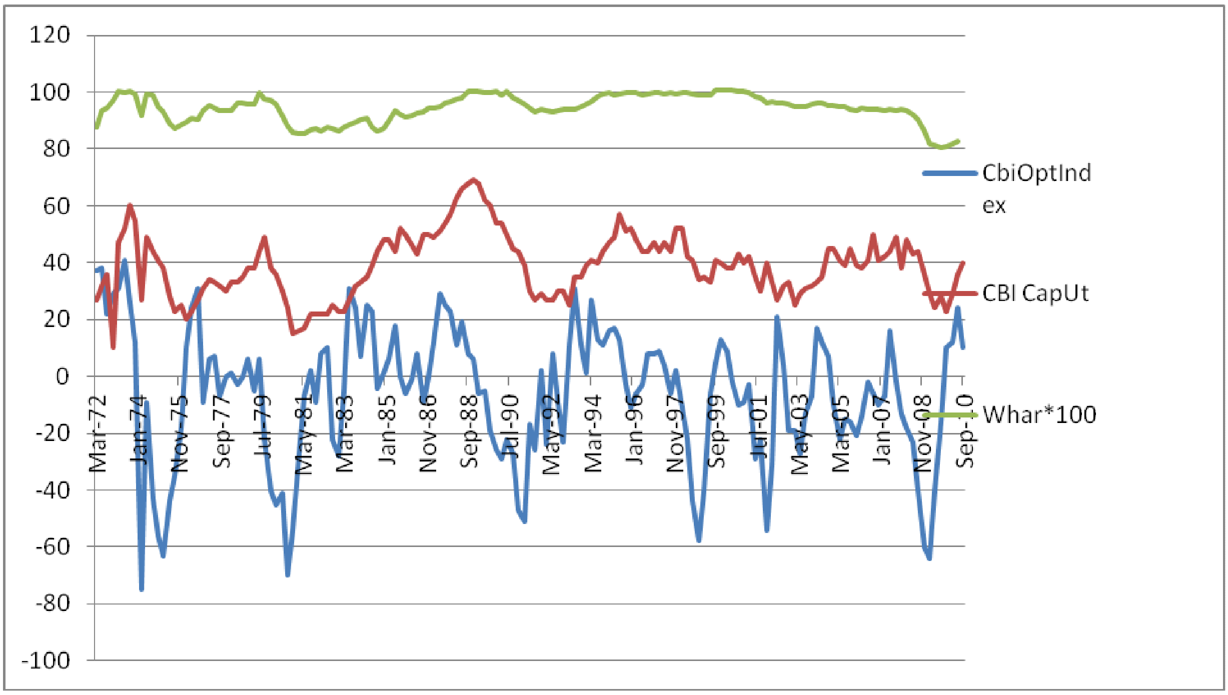
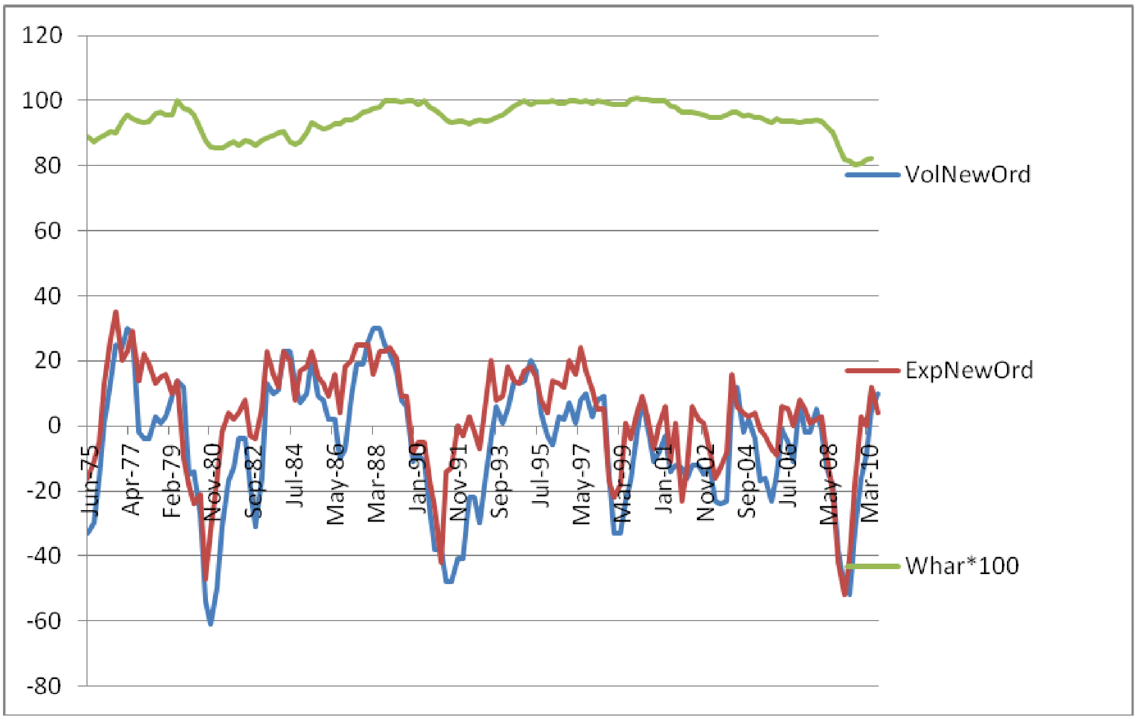
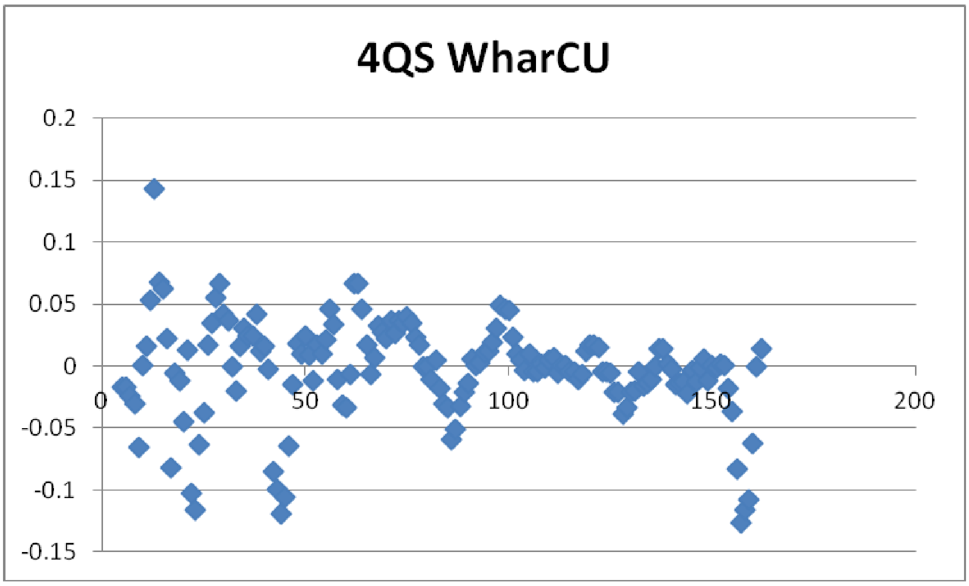


The chart above shows a good correlation between the CBI indicia of demand pressure and the Wharton actual to computed peak-capacity method once fashionable: Conclusion: as in Godley and Nordhaus (1972) we have a range of demand-pressure indicators that are different but each credible, and none of them links close to product price adjustments. Similarly with order expectation data provided by the CBI for UK manufacturing



And with the ONS PPI data in four-quarter span percentage changes against the same in the Wharton index:



So what has happened to the relationship between demand pressure and price movements since the 1930s when Hall and Hitch found the same?

(a) Real world data – tells us the same
(b) Main-core pricing postulates – impervious

References Cited:

Bank of England (1999) "What makes prices sticky? Some evidence for the United Kingdom." *Bank of England Quarterly Bulletin*, 39 (3), August 262-271

Coutts, K., Godley, W. and Nordhaus, W. (1978), *Pricing in the Trade Cycle,* CUP, Cambridge.

Coutts, K., Norman, N. (2007) "Global Influences on UK Manufacturing Prices: 1970-2000", *European Economic Review"*, 51, Issue 5, July 2007, 1205-1221.

Fabiani S, Druant M., Hernando I., Kwapil C., Landau B., Loupias C., Martins F., Mathä T., Sabbatini R., Stahl H. and Stokman A. (2006), 'What firms' surveys tell us about price-setting behaviour in the euro area', *International Journal of Central Banking*, 2(3), 03–47.

Godley, W.A.H. and Nordhaus, W.D. (1972) "Pricing in the Trade Cycle", *Economic Journal.*

Neild, R.R. (1964), *Pricing and Employment in the Trade Cycle,* CUP, Cambridge

Park A, Rayner V., D'Arcy P. (2010) "Price-setting behaviour – insights from Australian firms", *Reserve Bank of Australia Bulletin*, June Quarter 07-14.

Wilson, T. and Andrews, P.W.S. (1951) *Oxford Studies in the Price Mechanism*, Clarendon, Oxford.