What Remains of "The Case for Flexible Exchange Rates"?

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2019: Golden anniversary of Harry G. Johnson's "The Case for Flexible Exchange Rates, 1969"

Johnson's title recalled Milton Friedman's classic, written in 1950 when convertibility had not yet been restored in Europe.

- The UK had tried in 1947 and failed.
- Meade, Haberler, Lutz, others, echoed Friedman's view.
- The Churchill cabinet briefly considered a sterling float in early 1950s.
- Hayek, Robbins, Kindleberger, Nurkse, others continued to favor fixed rates.

Johnson's timing was not accidental

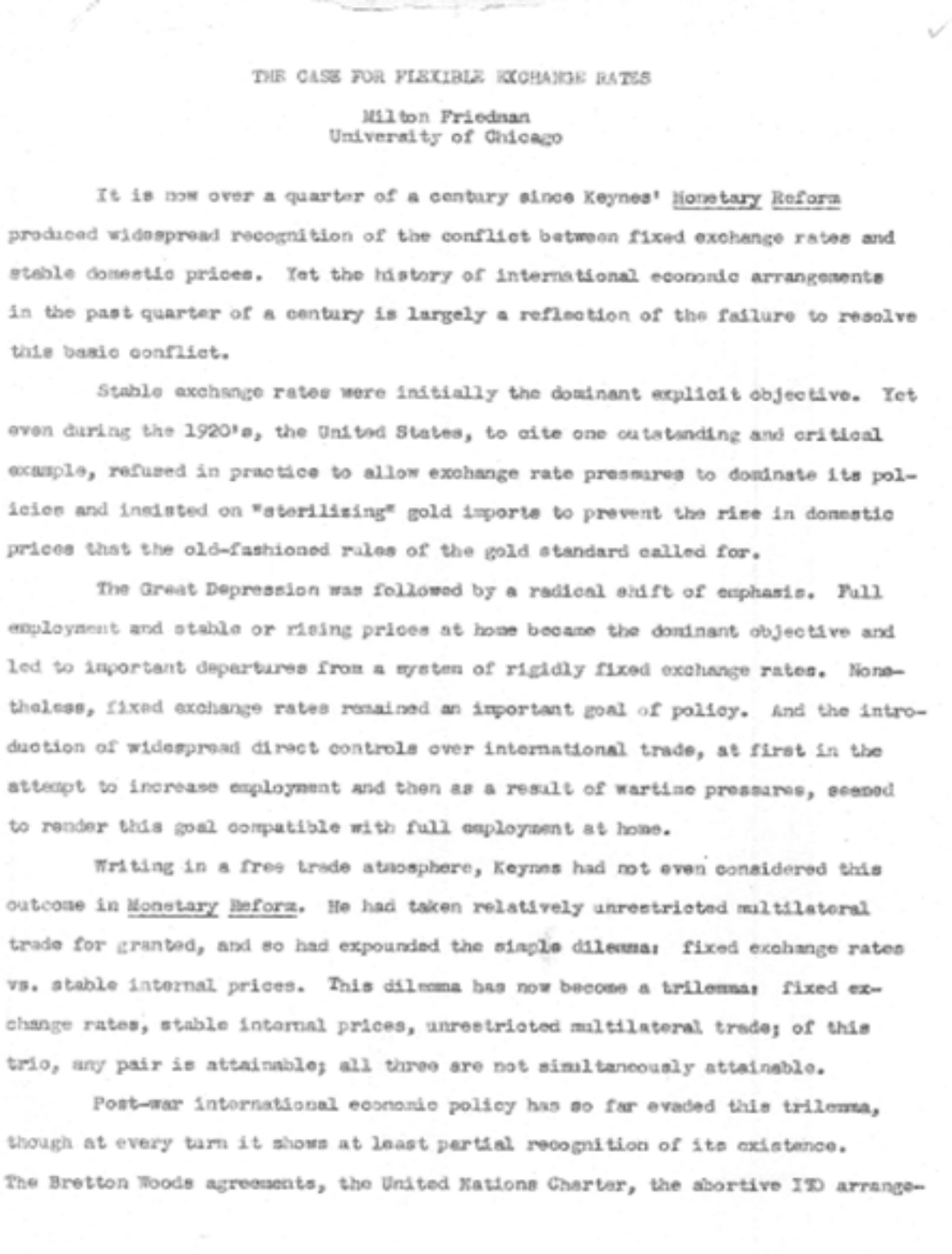
- European convertibility was reached by the end of the 1950s.
- "Dollar shortage" ended.
- The initial economic and political successes of Bretton Woods (catalyzed by Marshall aid) looked like vindication of that system.
- But by the later 1960s, severe fault lines were again very evident.
- Johnson revisited Friedman's "Case" in light of those tensions.

The first page of Friedman's manuscript

"[Keynes] had taken relatively unrestricted multilateral trade for granted, and so had expounded the simple dilemma: fixed exchange rates vs. stable internal prices. This dilemma has now become a trilemma."

Note the focus on trade openness, *not* financial openness – the same goes for Johnson, two decades on. But the latter form of openness was at the root of the system's problems.

Johnson does not mention the word "trilemma" but it lurks throughout his paper.



THE CASE FOR FLEXIBLE EXCHANGE RATES

Milton Friedman
University of Chicago

It is now over a quarter of a century since Keynes' Monetary Reform produced widespread recognition of the conflict between fixed exchange rates and stable domestic prices. Yet the history of international economic arrangements in the past quarter of a century is largely a reflection of the failure to resolve this basic conflict.

Stable exchange rates were initially the dominant explicit objective. Yet even during the 1920's, the United States, to cite one outstanding and critical example, refused in practice to allow exchange rate pressures to dominate its policies and insisted on "sterilizing" gold imports to prevent the rise in domestic prices that the old-fashioned rules of the gold standard called for.

The Great Depression was followed by a radical shift of emphasis. Full employment and stable or rising prices at home became the dominant objective and led to important departures from a system of rigidly fixed exchange rates. Nonetheless, fixed exchange rates remained an important goal of policy. And the introduction of widespread direct controls over international trade, at first in the attempt to increase employment and then as a result of wartime pressures, seemed to render this goal compatible with full employment at home.

Writing in a free trade atmosphere, Keynes had not even considered this outcome in Monetary Reform. He had taken relatively unrestricted multilateral trade for granted, and so had expounded the simple dilemma: fixed exchange rates vs. stable internal prices. This dilemma has now become a trilemma: fixed exchange rates, stable internal prices, unrestricted multilateral trade; of this trio, any pair is attainable; all three are not simultaneously attainable.

Post-war international economic policy has so far evaded this trilemma, though at every turn it shows at least partial recognition of its existence. The Bretton Woods agreements, the United Nations Charter, the abortive ITO arrange-

Johnson's perspective was very UK-centric

- Sterling's 1967 devaluation, though long anticipated, was seen as a policy defeat for the Wilson government.
- It was viewed as symbolic of Britain's economic and political decline.
- Not coincidentally, the next (Heath) government took the UK into the EC; there was a UK debate on the merits of Common Market entry; the academic establishment was split; Johnson, Kaldor, others feared a common EU currency
- With hindsight, Brexit fault lines clearly visible.
- Sterling was still a reserve currency: its devaluation set off a period of severe exchange instability that ended with the Bretton Woods system's final collapse in 1973.
- Johnson is silent on a number of systemic issues also behind that collapse – the asymmetric policy power of the United States, inadequate international liquidity, the dollar's unique role, the Triffin problem ….
- Maybe he thought they would be irrelevant under floating? If so, he was wrong: they remain with us, albeit mostly in different forms.

Johnson over-promised in important ways

- Exchange rates would not move unless fundamentals did; they would adjust smoothly and "predictably" to fundamentals, though, speeded by stabilizing support from speculators. ✗
- The balance-of-payments rationale for intervention in trade and capital movements would "disappear." ✗
  - Competitive pressures and protectionism (US today; trade and capital accounts).
  - Macro-prudential rationales.
- Under a flexible rate system, most countries would peg to a major currency—limiting disruptions to trade. Issues of poorer countries barely mentioned—they benefit from freer trade but likely continue to peg. ✗
- The dominant factor in currency movements would be inflation tends; Phillips curve argument. ✗
- Political economy: central bankers' prestige and "power" over government policies would decline – in his mind, a good thing. ✗

Despite an analysis that is largely free of data or empirics, he also got many key things right

- Flexible rates can reconcile diverse governments' policy preferences. ✓
- Within a currency union, stability relies on internal transfers. ✓
- Fixed exchange rates, in themselves, do not force policy "discipline," and can undermine inflation stability/credibility. ✓
- The interwar cannot be viewed as an indictment of flexibility; rather flexibility was a response to chaotic conditions. ✓
- Currency depreciation *per se* need not be inflationary. ✓
- Market exchange rates helpfully adjust to unexpected developments. ✓
- Flexible rates need not hamper trade expansion. ✓
- The word "insulate" does not appear. ✓

Johnson got one other very big thing right

"A flexible exchange rate is not of course a panacea; it simply provides an extra degree of freedom, by removing the balance-of-payments constraints on policy formation. In so doing, it does not and cannot remove the constraint on policy imposed by the limitation of total available national resources and the consequent necessity of choice among available alternatives; it simply brings this choice, rather than the external consequences of choices made, to the forefront of the policy debate."

- Much of international finance asks: How important is this degree of freedom? The answer has changed, with a changing world.

The view that flexible rates aren't all that helpful is persistent, and with economic change, it evolves

- Clearly, this view dominated the construction of the immediate postwar monetary system.
- See Irwin's chapter in the Lamoreaux-Shapiro (2019) volume.
- But since World War II, there have been at least *ten* variants of the argument that flexible exchange rates may not deliver the goods (more than I surveyed in Obstfeld 2002).
- Taking these together, one might conclude that the benefits of flexibility are outweighed by the costs in terms of trade disruption, etc.
- I will argue that despite considerable validity in some of these arguments, a strong case for flexible exchange rates still stands 50 years after Johnson.

Variant 1: Elasticity pessimism (the thing that would not die)

- Born in the 1930s.
- Orcutt (1950) and Machlup (1950) famously showed how various econometric biases (e.g., aggregation) could make estimated trade elasticities spuriously low.
- They seem in fact to be reasonably high, whether between alternative foreign suppliers or domestic and foreign goods (e.g., Feenstra et al. 2018) – especially longer term

Lloyd Metzler on elasticities—1948 AEA survey

"Considering the low price elasticities which have been found in most empirical studies of demand, it seems probable that depreciation, in the short run, cannot [much] improve a country's trade balance … and a substantial movement of exchange rates may … be required to eliminate rather modest deficits. In other words, over comparatively short periods of time, movements of exchange rates are not an efficient means of allocating resources between foreign and domestic use."

Journalistic accounts persist and may build on rather brief periods of unconditional disconnect

Opinion **EM Squared**

FT study shows danger to global trade from EM currency weakening

Benefits of depreciation on exports may have evaporated

ANDREW WHIFFIN + Add to myFT

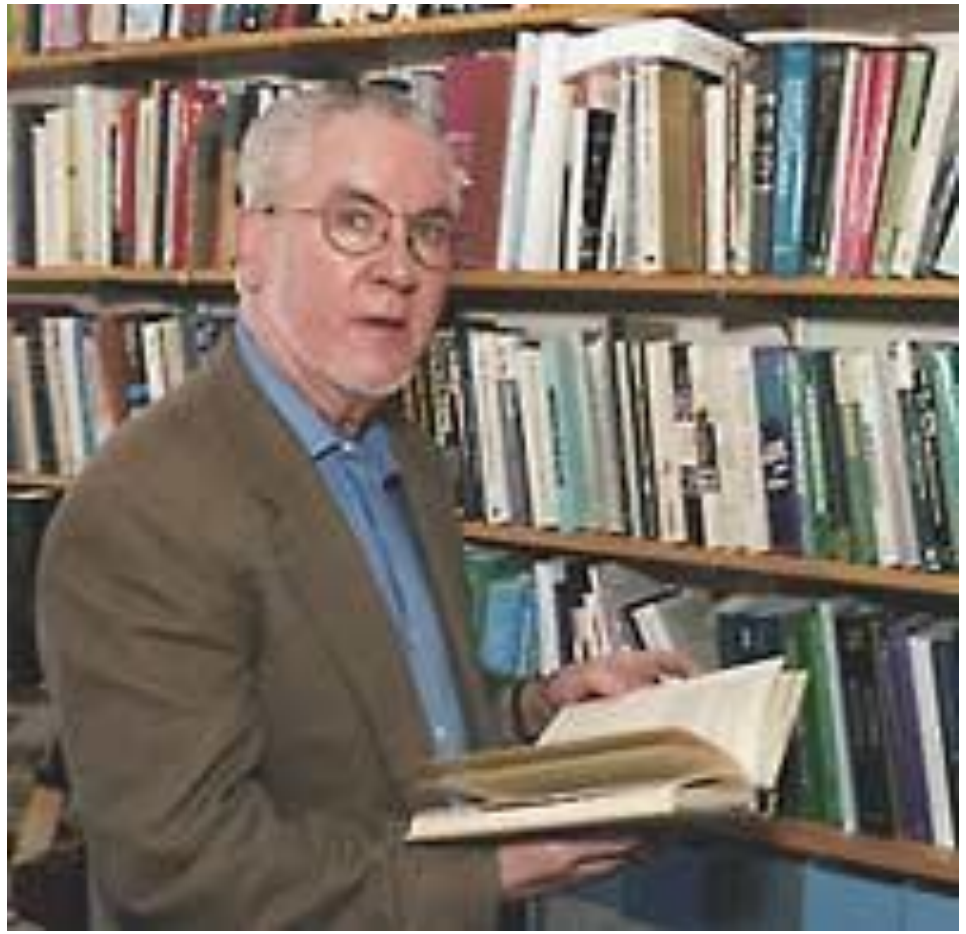
Financial Times, August 31, 2015

Variant 2: Extreme purchasing power parity

- This variant is in some sense the opposite of the last.
- It holds that economies are *so* open and elasticities *so* high that *real* exchange rates do not respond to exchange rate movements.
- In this case, better to fix rates – yields global monetarism, as espoused by Mundell and McKinnon

Variant 3: Real wage rigidity

- Alleged to be endemic to Europe, modeled by Branson and Rotemberg (1980) and Sachs (1980).
- Monetary expansion causes depreciation but no gain in output, as nominal wages rise to prevent an expansion of aggregate supply or gain in competitiveness.
- Deployed as an argument that the single currency would cost little—but implications for ECB?



Variant 4: Pricing to market (PTM)

- USD depreciation after the 1985 Plaza Accord initially seemed to affect current account perversely.
- Dornbusch (1987) advanced models of segmented markets in which PTM would blunt, but not kill, the relationship between currencies and terms of trade.
- Subsequent research has documented PTM (Burstein and Gopinath 2014).
- The horizon over which exporters practice it, however, may vary.

Variant 5: Sunk costs in international trade

- Based on the same post-1985 experience, Dixit (1989) and Baldwin and Krugman (1989) showed how sunk costs of establishing trade “beachheads” could lead to hysteresis.
- On this view, an exchange-rate change might need to be *more than* reversed for its trade effects to be undone.
- Rationalizes limited adjustment to exchange rate changes.
- But Krugman (1991) concluded that the exchange rate had worked as expected in mainstream models —with a lag.
- A premature declaration of victory?

Variant 6: PTM with local-currency pricing (LCP)

- If exporters set prices in the importers' currencies—the case of LCP—then an exchange rate change will alter neither imports' nor exports' nominal prices, unlike in the Mundell-Fleming model.
- It *will* alter exporter profits, → entry/exit over time.
- Betts, Devereux, and Engel proposed this and explored framework, which has been explored further by Corsetti, Dedola, Leduc, and others.
- Robinson (1937) was an important precursor.
- Even if LCP at the consumer level, exchange rates will matter at the level of intermediate imports.
- The empirical relevance of LCP seems limited compared with other pricing practices, including producer-currency pricing (see Gopinath 2015; more on invoicing below).

Variant 7: Exchange rates at the ELB

- Cook and Devereux (2016) shows that absent credible commitment of forward monetary policy, idiosyncratic home demand shocks can destabilize at the ELB when exchange rates float; see also Gaspar et al. (2016, online appendix) on Japan.
- Imagine a deflationary domestic shock
- Home currency appreciation will ensue, owing to interest parity:

$$q_t = \lim_{T\to\infty} \sum_{s=0}^{T} (r^*_{t+s} - r_{t+s}) + \lim_{T\to\infty} q_{t+s}$$

$$\equiv \sum_{s=0}^{\infty} (r^*_{t+s} - r_{t+s}) + \bar{q}.$$

Exchange rates at the ELB

- Corsetti et al. (2017) show flexibility still may be preferred with foreign real shocks.
- A foreign deflationary shock, if the rest of the world is at ELB, would raise foreign real rates and depreciate the home currency.
- One could temporarily intervene to depreciate or hold down the currency:
  - Switzerland imposed a cap on the Swiss franc, 2011-15.
  - Al-Mashat, Clinton, Laxton, Wang (2018) on Czech intervention and cap, 2013-17.
  - Japan in the middle 2000s – and Svensson's (2003) "foolproof way."
  - Argument is for managed floating, not a fixed rate

Variant 8: Global value chains

- If export prices depend on import prices through intermediates, the effect of a depreciation on export prices is muted (backward linkage).
- Also, if a depreciation lowers my export prices and these exports goods are incorporated in foreign exports to me, which thereby become cheaper, this lowers the rise in my import prices (forward linkage).
- Generally, $NX = P_X X - P_M M$, so if $\varepsilon_X = \frac{\mathrm{d}p_X}{\mathrm{d}e}$ and $\varepsilon_M = \frac{\mathrm{d}p_M}{\mathrm{d}e}$, then with full pass-through of the exchange rate:

$$\frac{\mathrm{d}NX/Y}{\mathrm{d}e} = \frac{P_X X}{Y}[\varepsilon_X + \eta_X(1 - \varepsilon_X)] + \frac{P_M M}{Y}(\varepsilon_M \eta_M - \varepsilon_M)$$

Global value chains

- Again: $\frac{\mathrm{d}NX/Y}{\mathrm{d}e} = \frac{P_X X}{Y}[\varepsilon_X + \eta_X(1 - \varepsilon_X)] + \frac{P_M M}{Y}(\varepsilon_M \eta_M - \varepsilon_M)$
- Absent global value chains, $\varepsilon_X = 0$ and $\varepsilon_M = 1$, so that if trade is balanced ($P_X X = P_M M$), a currency depreciation raises net exports when the Marshall-Lerner condition holds: $\eta_X + \eta_M > 1$.
- Some points:
  - GVC price effects dampen the volume elasticities of the exchange rate, which become $\eta_X(1 - \varepsilon_X) < \eta_X$ and $\varepsilon_M \eta_M < \eta_M$.
  - *J*-curve-like value effects increase stimulus when $\varepsilon_X > 0$ and $\varepsilon_M < 1$.
  - If both "traditional" elasticities η_X and η_M < 1, GVCs enhance effect of d*e*
  - Adler et al. (2019): GVCs expand scale of volumes *X* and *M,* raising $\frac{\mathrm{d}NX/Y}{\mathrm{d}e}$

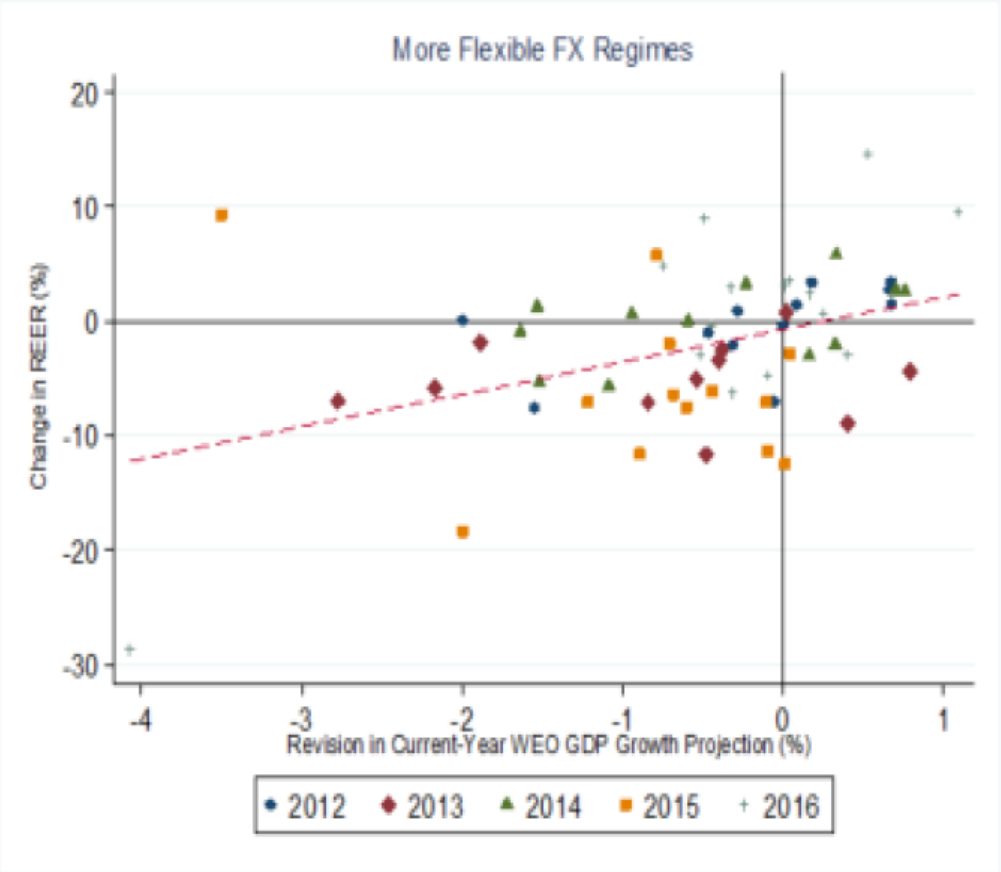
Variant 9: Global financial cycle

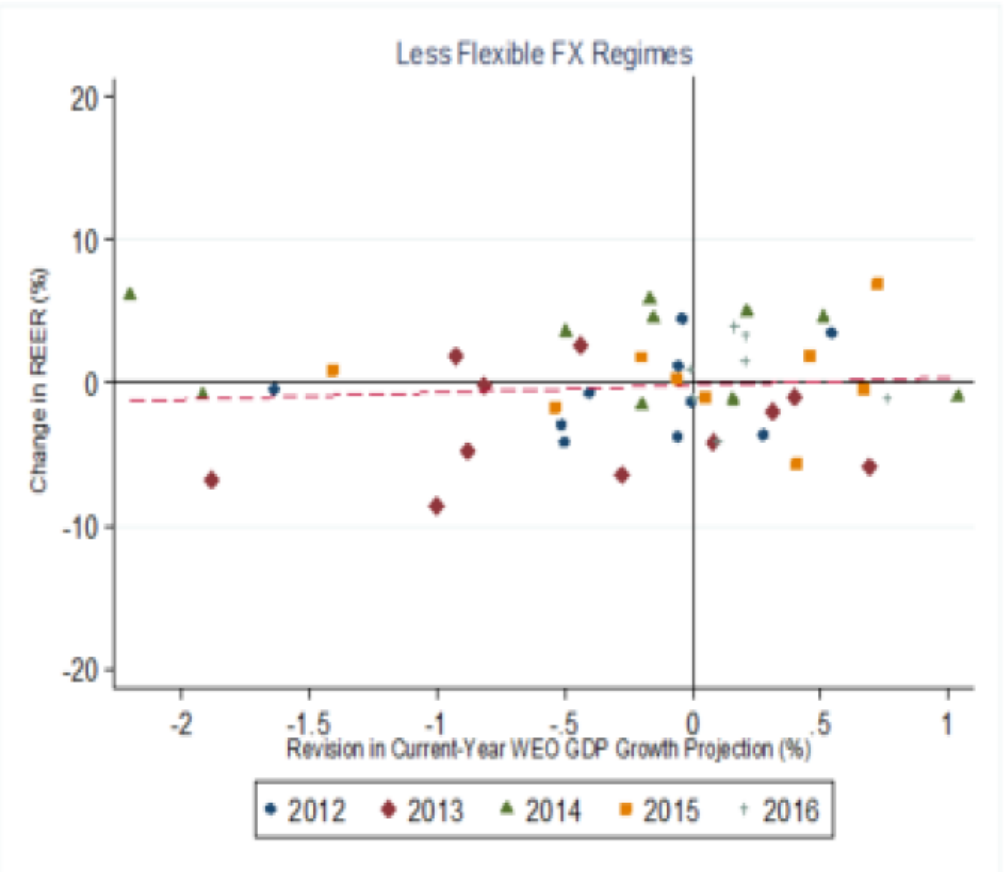
- Rey (2013) has most forcefully made the case that for financially open economies, floating exchange rates may do little to mitigate the effects of the global financial cycle.
- Her claim restores Friedman's trilemma as a dilemma: As she puts it, unless macro-pru is very effective, the only choice is an open capital account with no monetary autonomy or a closed one with autonomy.
- The global cycle is largely driven by the dominant-currency country.
- Work by Bruno and Shin (2015) and others points in the same direction, with the strength of USD a bellwether of global liquidity.
- Cerutti, Claessens, and Rose (2017) see a global cycle in asset prices, as does Rey, but not in capital flows.

Interest-rate independence is key

- Flexible rates provide critical scope for varying the monetary policy interest rate.
- But there are (at least) three caveats.
  - Longer-term nominal rates are more highly synchronized.
  - Short-term rates are not a sufficient statistic for overall financial conditions.
  - In turn, financial conditions may have financial stability implications.
- These caveats imply, not that the degree of freedom from exchange flexibility is useless, but that *open-economy* policy makers face a harsher policy tradeoff – one that indeed may justify stronger macro-prudential policies and even some forms of capital controls.
- Schoenmaker's financial trilemma.

Flexible exchange rates do have a buffering role





Source: IMF. *International Financial Statistics*, and BIS

Variant 10: Dominant-currency pricing

- Invoicing choice can be key to the exchange-rate mechanism.
- But as many have pointed out, it *is* a choice, and so, endogenous.
- Goldberg and Tille (2006, 2008), Gopinath (2015), Gopinath et al. (2018) point out the US dollar is prevalent as an invoicing currency.
- Gopinath (2015) further stresses that export and import prices are very sticky in their invoice currencies.
- But also, that invoicing and pricing choices may serve to approximate flex-price allocation.

Macro implications

- Non-US countries facing dollar import prices see full, fast pass-through.
- But if their exports are invoiced in USD, depreciation of their own currencies does not make their exports more competitive.
- Since imports often invoiced in dollars, the short-term adjustment is there, apart from value effect on exports invoiced in the dominant currency.
- But this leaves aside adjustment through *profitability* and *entry.*
- For the US itself, exports become cheaper when the dollar falls, but imports (also overwhelmingly invoiced in USD) show very little pass-through.
- Globally, when the US dollar strengthens, countries that invoice exports in dollars suffer loss in export competitiveness.
- There are many of these, so this is another channel for Fed tightening to spread contraction to EMDEs (Goldberg and Tille 2009; Canzoneri et al. 2013; Boz et al. 2017).

Even EU countries invoice heavily in USD

Figure 1: Extra-EU Imports by Invoicing Currency

Euro Area, 2016, % of Total

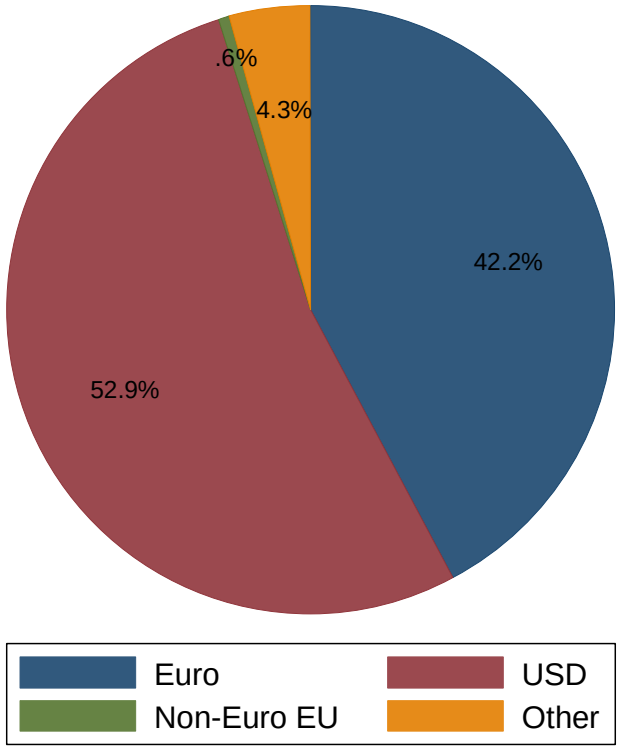
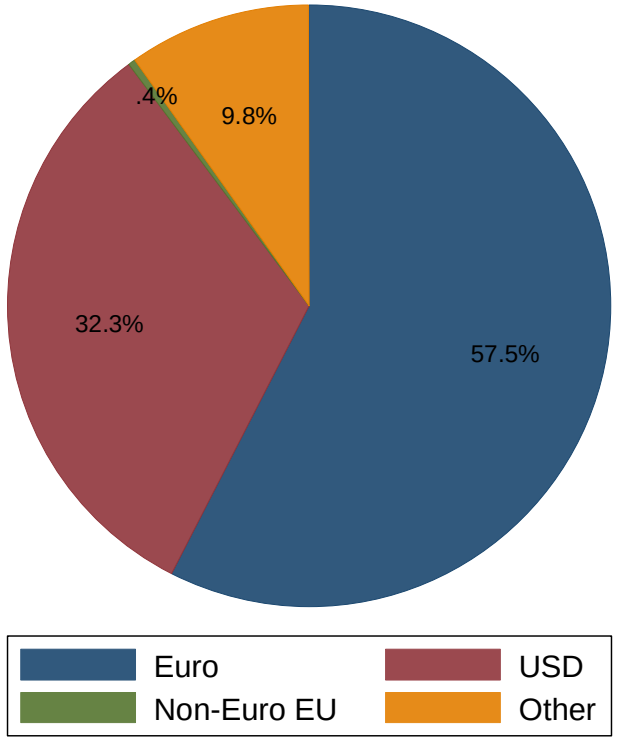


Figure 2: Extra-EU Exports by Invoicing Currency

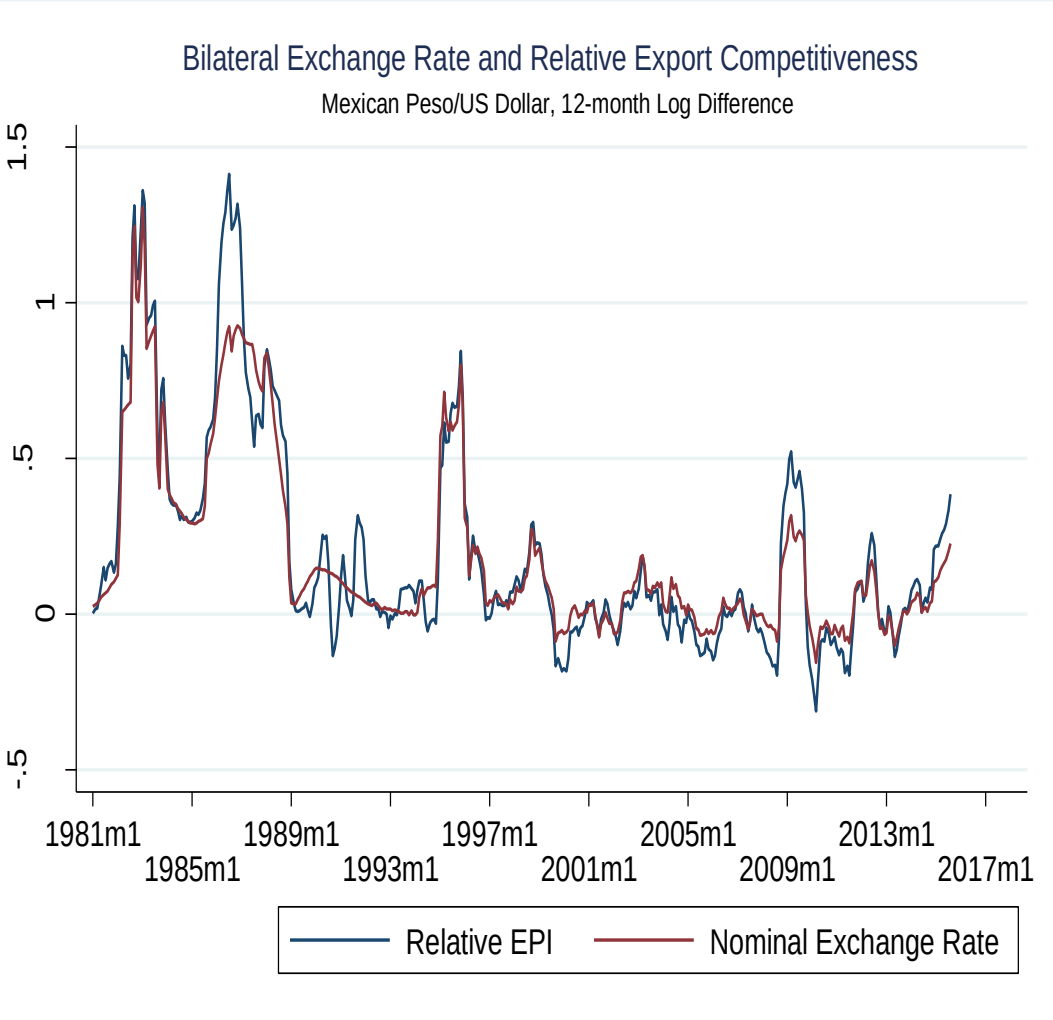
Euro Area, 2016, % of Total

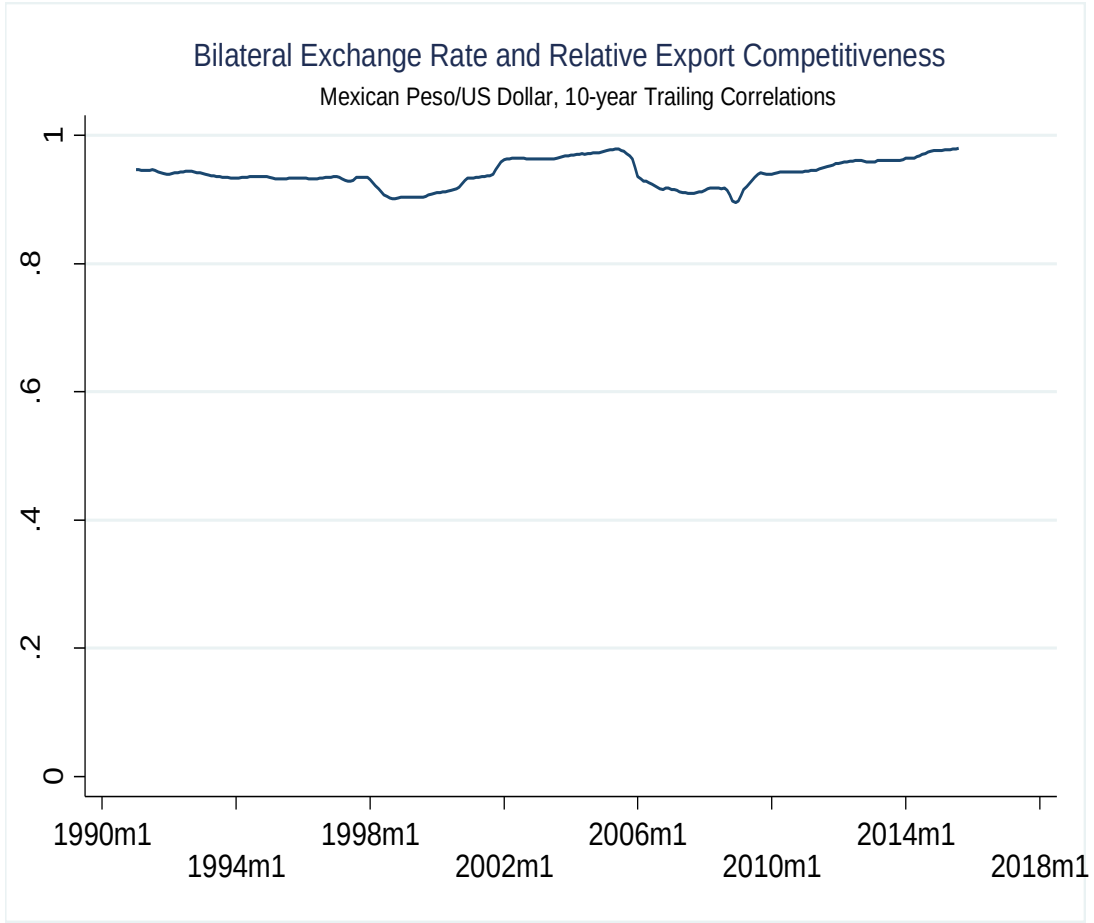


Source: Eurostat

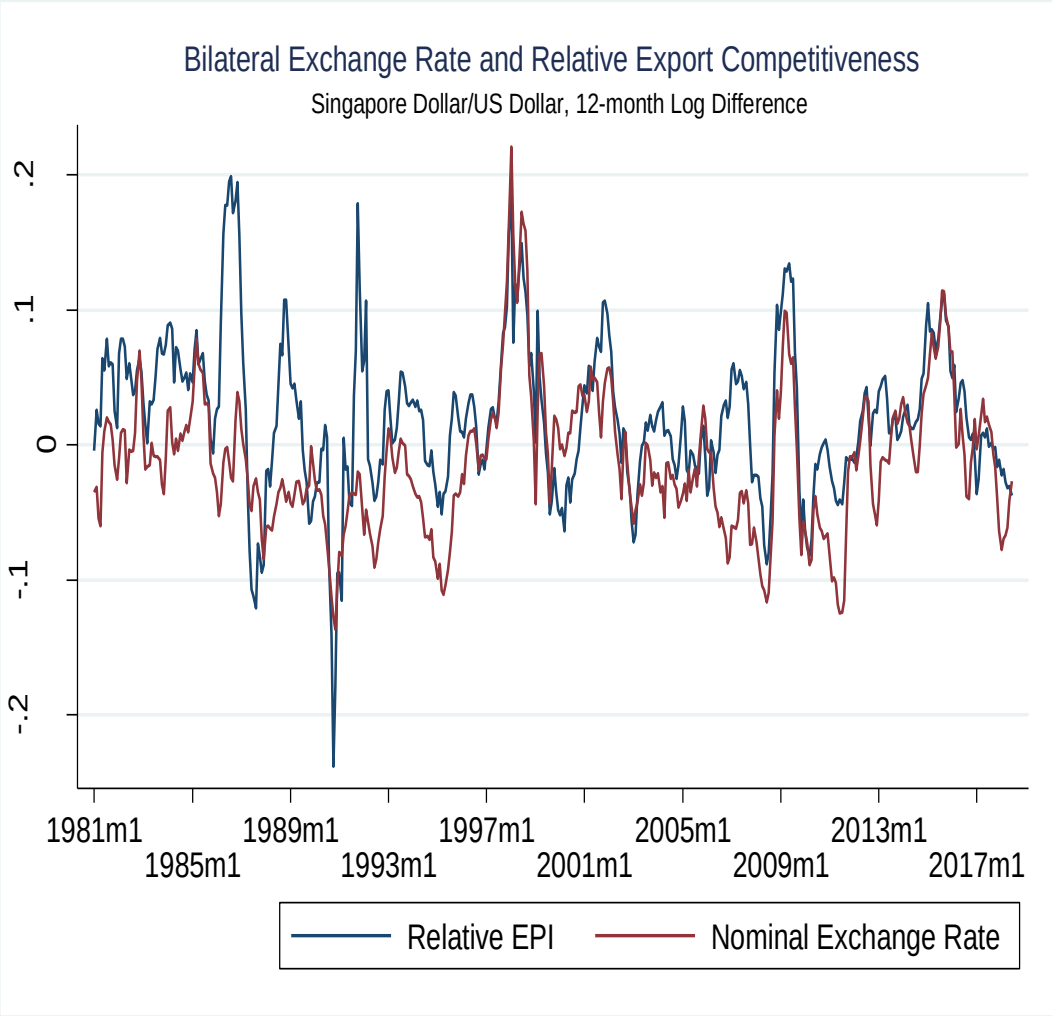
Exchange rates and relative export competiveness: MXN

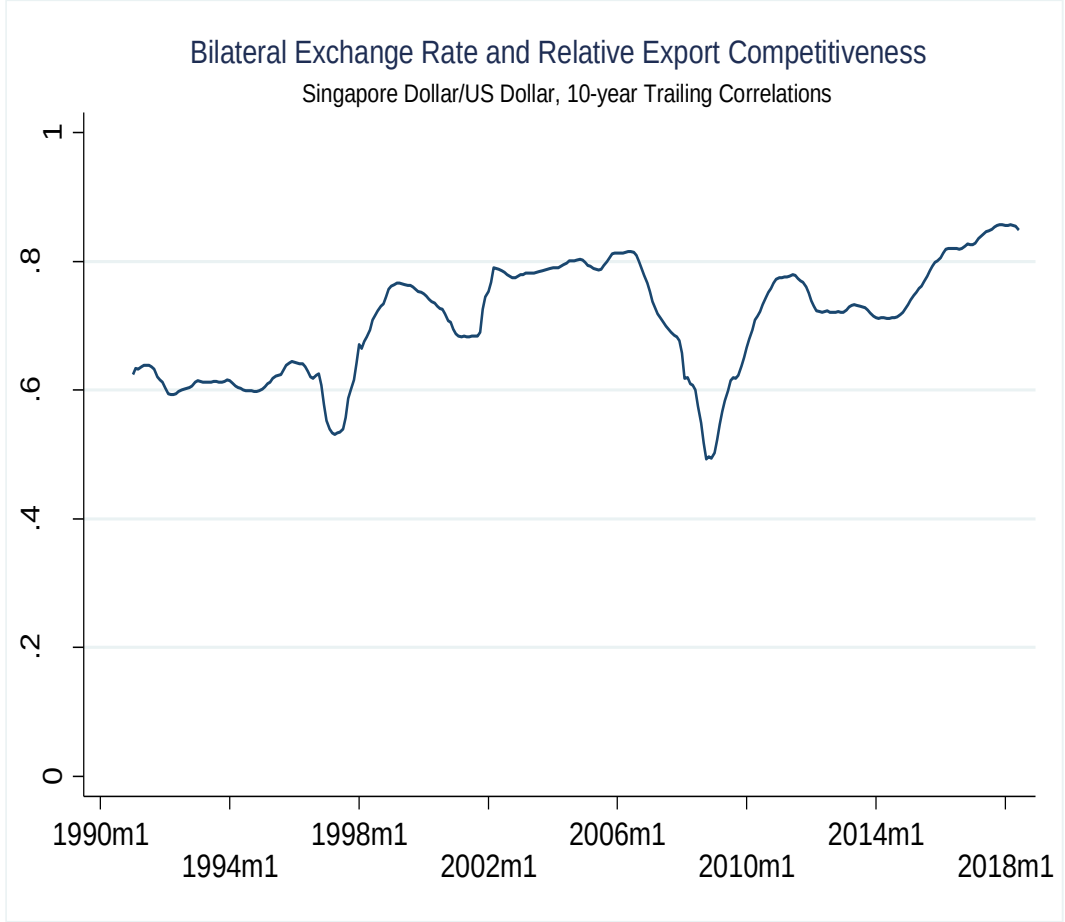
Consistent with dominant-currency pricing?



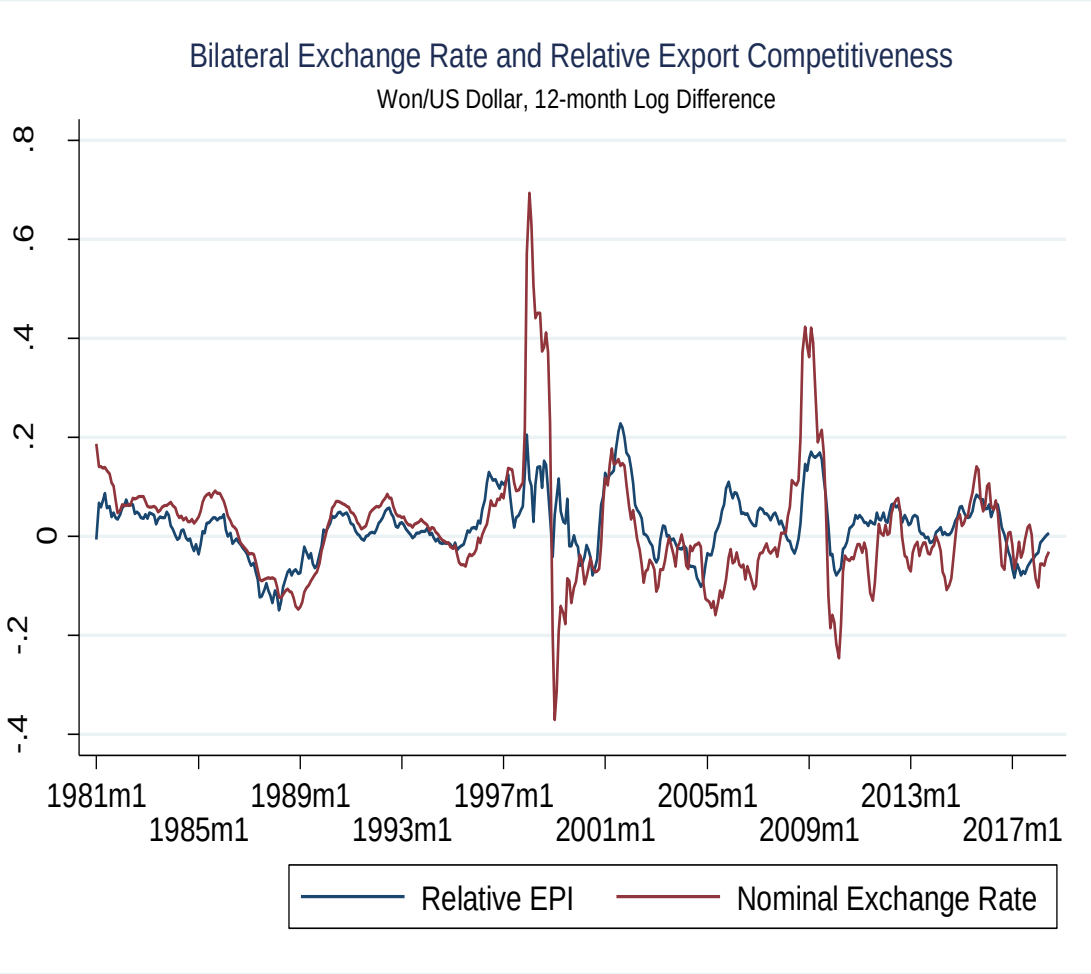


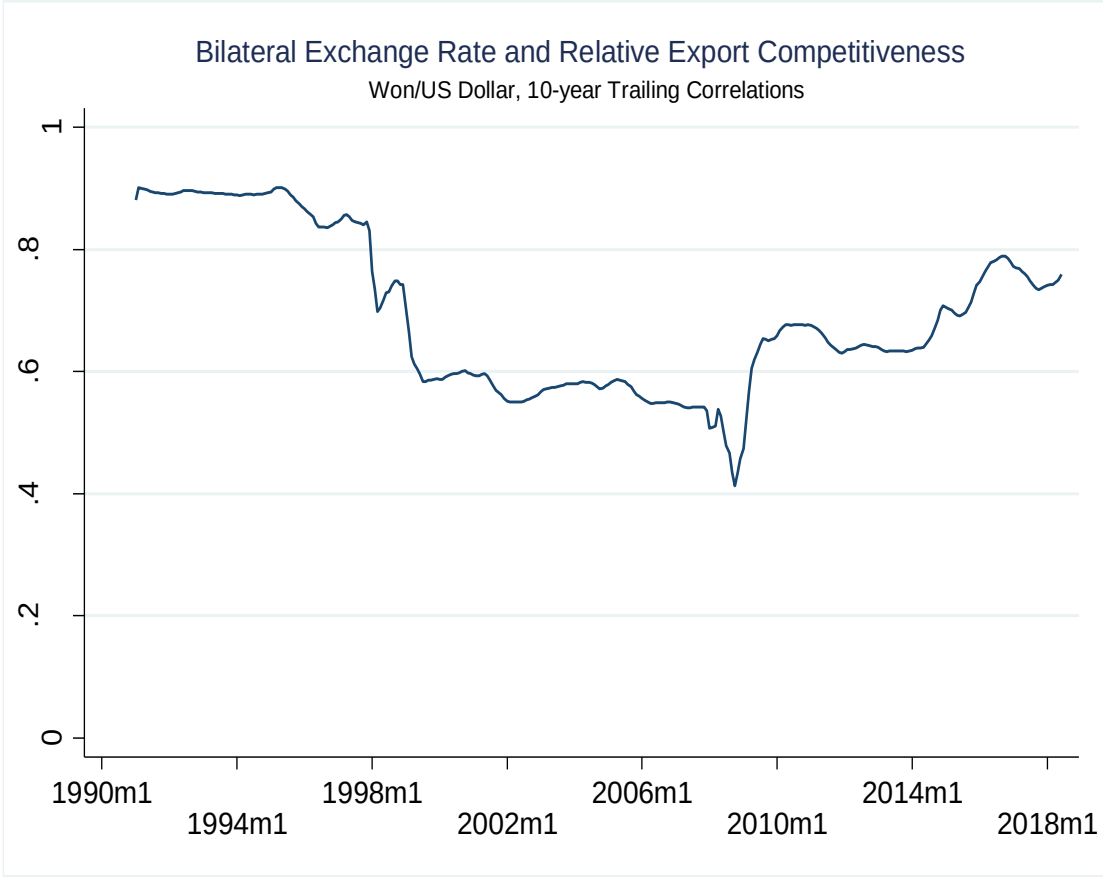
Exchange rates and relative export competiveness: SGD





Exchange rates and relative export competiveness: KRW





- Is it plausible that this is reverse causation – relative competiveness drives exchange rates?

Summing up: "The worst currency system …?"

- Fixed rates invite attack—and so are rarely *credibly* fixed.
- As per Johnson, that reality defines the *true* counterfactual.
- Countries can reap big benefits from the "added degree of freedom" without full, free floating.
- Intervening can help, notably for EM.
- Demise of flexibility is an exaggeration.

To paraphrase what Churchill said about democracy: "It has been said that [exchange-rate flexibility] is the worst [currency system] except for all those other forms that have been tried from time to time …."

Churchill, an important figure in 20th-century exchange rate history, later regretted returning to gold in 1925. He said in 1932: "It has been used as a vile trap to destroy us."