Comments on papers by Gagnon and Thorstensen et al.

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I. Motivation, Scope, and Main Message

- The role of FX intervention in influencing the current account and relative prices is a controversial and yet key policy issue.
- Both papers make an important contribution to this debate.
- My discussion will focus on technical aspects of their analyses re. problems of measurement and of econometric identification.
- Will do so by drawing on broad historical trends and without delving into any particular country cases.
- Main bottom-line: measurement as well as normative inferences on effects of intervention are tricky, calling for caution on sweeping inferences.

II. Facts and Questions

- Key Stylized Fact

  Conspicuous Long-Run Association between Reserve Accumulation by EMs and Global CA Imbalances.

- 3 Key Questions

  Is this historically abnormal?

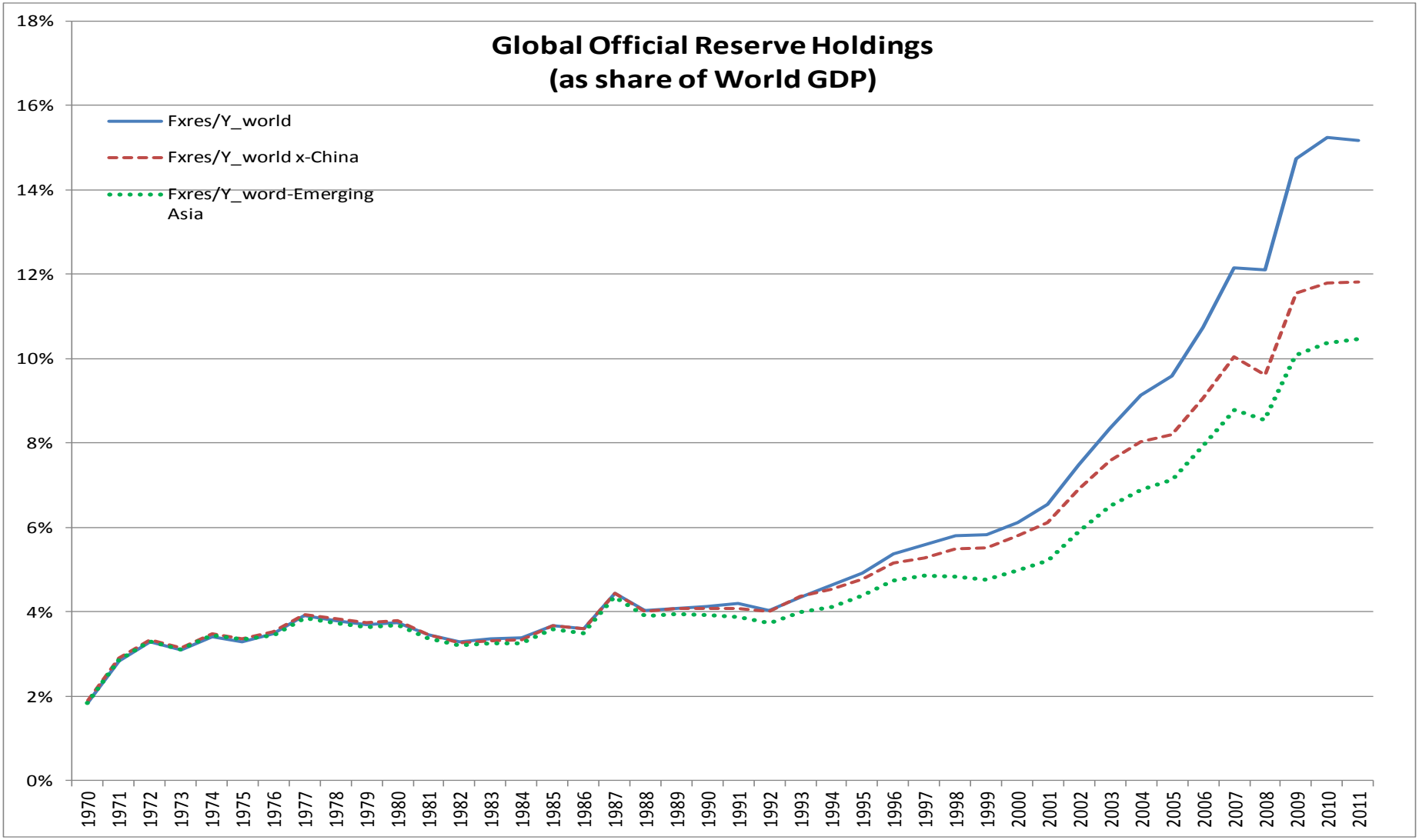
  Can we infer causality and clearly single out the role of policy?

  Do intervention policies enhance welfare, even if only national?

Fact I: post-1970 Trends

- Long upward trend in Global Reserve Accumulation [began in the early 1990s, but really picked up after the 1997-98 EM crises].
- General Trend: Not just due to China or Asia.
- Associated with widening in NFA positions between creditors and debtors.

Fact I: post-1970 Trends



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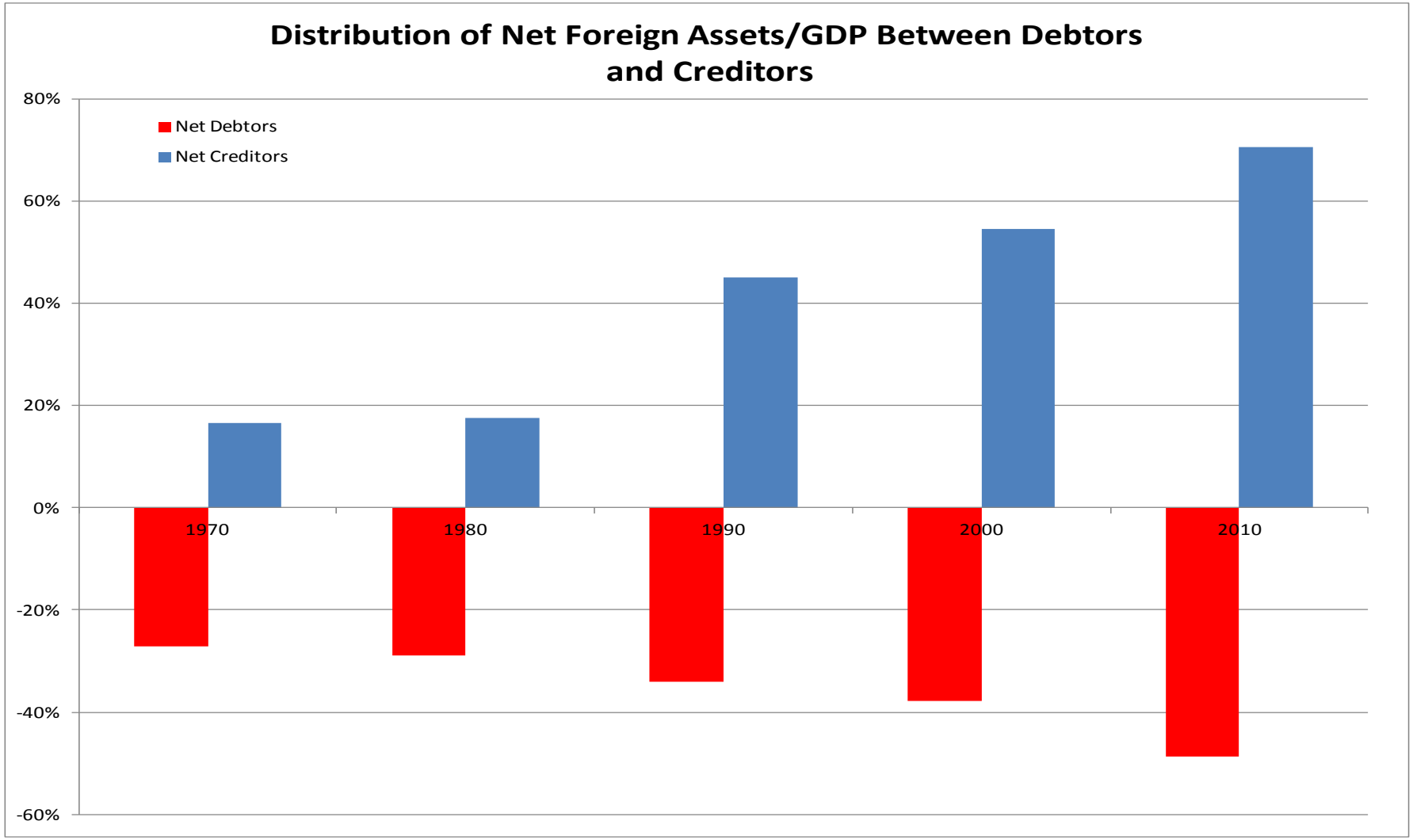
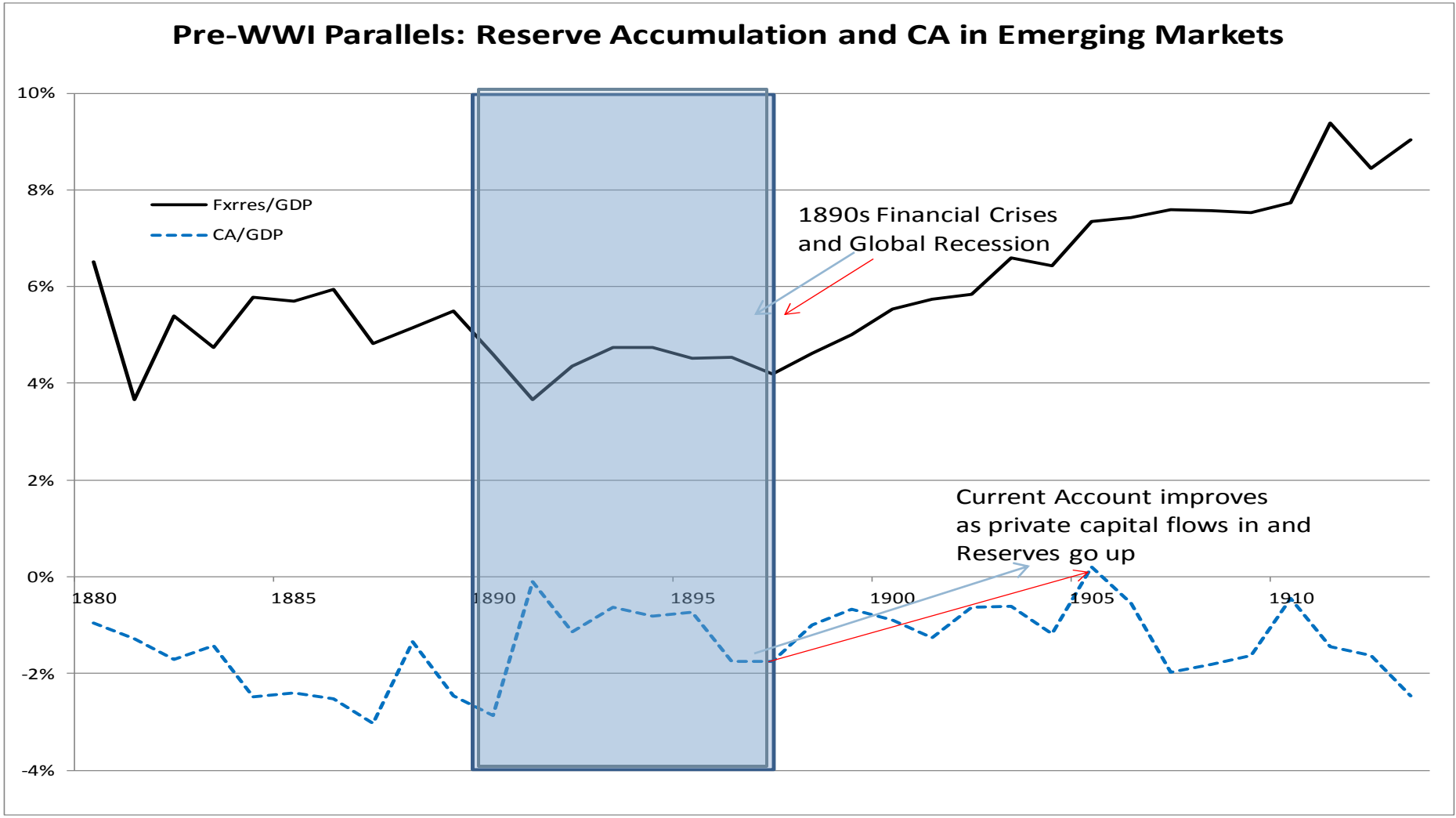


Fact II: Historical Parallels

- Similar trends also observed in past.
- Close Parallel: the 1890s financial crises
- Faced with massive recovery of capital inflows in the 1900s, many countries pegged their currencies to gold → reserve accumulation soared!
- Post-crisis CAs improve, never returning to higher pre-crisis deficits.
- Pegging to gold never dubbed “currency manipulation”.

Fact II: Historical Parallels



III. Causality: Econometric Issues

- At the root of Joe's hypothesis is imperfect substitutability between official and private foreign assets/liabilities.
  - Quite plausible (much in the way that full Ricardian equivalence is implausible).
  - But how far policy can exploit it to engineer large (and long-lasting) relative price shifts is difficult to test.

III. Causality: Econometric Issues

- Endogeneity and spurious cor. is a serious issue given accounting identity: CA = FA + ΔFXres + E&O.
- So, regressing CA = X'α + β ΔFXres will yield a biased coefficient β.
- If CAs are mainly driven by financial account shocks, β *is biased downward*.
- If trade shocks dominate, β *is biased upwards*.

III. Causality: Econometric Issues

- On annual regressions and without instrumenting, Bayoumi and Saborowski (2012) find β~0.5 and significant despite the possible bias towards zero.
- But only if ΔFXres is interacted with Kcontrols.
- Joe instruments it and finds instead that β~[0.6,1.0] with regressions on 5-year averaged data.
- But also that ΔFXres*Kcontrols is non-significant!

III. Causality: Econometric Issues

- Many potential issues with both results.
- One is sensitivity to instrumenting
- Another is accuracy of Kcontrol indices (*de jure* instead of *de facto* indices, and they sometimes disagree)
- No distinction made between the effects of FXres accumulation via ***sterilized*** vs. ***non-sterilized*** intervention.
- Nor between exchange rate regimes (pegs or near pegs vs. managed floating)
- Use of 5-year averaged data more likely to bias β upward

III. Causality: Econometric Issues

- My recent work uses instruments that distinguishes between sterilized vs. non-sterilized intervention.
  - Finds a coefficient of ΔFXres*Kcontrols~0.6 and a much smaller (and imprecisely estimated) β on the non-interacted term.
  - But also find that the ΔFXres terms in CA regressions are the ones that are the least robust to specification searches!
  - And results may not be robust to dropping a few countries from the sample (dropping just a few can notably weaken the results)
- **Bottom line: Caution to infer too much from estimates!**
- **More work will be needed to satisfy all doubts**

IV. FX intervention, Misalignment Tarification, and Welfare

- Is misalignment so tempting? Can policies aimed at a weaker exchange rate boost a country's welfare?
- One view is that tradables production -- manufacturing in particular– generates greater economies of scale and learning by doing, so play a special role in development.
- Difficult to test, prove/disprove.
- Incentive to depreciate at odds with some standard welfare analysis:

IV. FX intervention, Misalignment Tarification, and Welfare

- A policy of *appreciating* the ER in order to improve the country's terms of trade may appear attractive ("TOT externality")

- Incentive stronger for the manufacturing exporter facing a downward sloping world demand curve – the standard optimal tariff argument.

- Holding the currency down has obvious costs.

- One is to make production inputs dear, so reducing effective protection. Tarification measures of currency policies need to incorporate that!

- **Fact:** RER appreciation is typically associated with higher I/Y!

IV. FX intervention, Misalignment Tarification, and Welfare

- Capital market imperfections (e.g. risk of Sudden Stops) may justify FXres accumulation geared at mitigating appreciation.
- Indeed, Catão and Milesi-Ferretti (2013) find that higher reserves/GDP do reduce the risk of major external crises.

  And this is beyond the effect of higher NFA/gdp and higher CA balances.

- But if so, how much FX is enough, how much is too much?
  - Fiscal cost of massive sterilization (esp. at near zero world interest rates) is important for high return/high growth EMs.
  - Another cost may be the ToT loss

IV. FX intervention, Misalignment Tarification, and Welfare

- Holding currencies down with the aid of K controls may have benefits (Ghosh et al. 2008), but not problem-free.
- First, it may be ineffective, particularly in EMs with sophisticated capital markets (Chamon and Garcia, 2013).
- Second, when is done with a more comprehensive set of controls, it can generate distortions that lower TFP (Hsieh and Klenow, 2009), and so is welfare-reducing.
- Third, political economy effects can be perverse → long-lasting growth and welfare losses (Diaz-Alejandro, 1970; Taylor, 1998).

V. Concluding Remarks

- Both papers are important contributions to the debate on FX intervention and CA imbalances.
- From a positive perspective, measurement of effects of intervention is trickier than it may seem, calling for caution on sweeping inferences.
- Price-based misalignments are difficult to measure with reasonable accuracy and to sustain into the long-run just on the basis of one-side sterilized intervention without other instruments.
- From a standard welfare perspective, the net benefit for undertaking such policies is often unclear, even from a purely national/Nash perspective.