

Discussion of: Estimating the effect of exchange rate changes
on total exports

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Take step back. . .

Trade literature has made remarkable progress in developing a tight connection between theory and data . . . many in this room have contributed to this enterprise.

This paper is a good example of this style of research. They develop . . .

“theory-consistent aggregation of bilateral trade flows” with the aim “to quantify the response of aggregate exports to exchange rate changes.”

Two core issues:

- Aggregation bias. Trade weighted real exchange rates? Not quite...but, quantitatively, simulation suggest not that important.
- Omitted variable bias. Theory implies that “multilateral resistance” matters. Quantitatively, simulation results suggest it is important.
 - It’s not just the direct effect that matters, but how other countries are substituting between home and foreign goods.
 - Same idea as in Anderson and Van Wincoop (2003).

In the data...

The bias appears to be there. But this misses a bigger issue...

- The implied trade elasticity is very low in all specifications.

Table 5: Empirical results using Narrow index country sample

	Bilateral	Aggregate				
	(1)	Baseline ("ideal-REER") (2)	GM mistake (3)	$d \ln$ approx. (4)	REER McGuirk ("real-REER") (5)	IMF weights (6)
Exchange rate						
Point estimate	-.459	-.409	-.380	-.291	-.584	-.254
Std. error	(0.024)	(0.06)	(0.059)	(0.057)	(0.066)	(0.067)
Foreign demand						
Point estimate	1.184	1.199	.758	1.207	1.092	1.122
Std. error	(0.019)	(0.106)	(0.076)	(0.096)	(0.038)	(0.042)
Observations	27940	1077	1077	1142	1077	1198
R2	.157	.567	.570	.579	.612	.516

Notes: The sample consists of 25 countries over the period 1964-2011.

Data \Rightarrow Low price elasticity, high demand elasticity

To me this is a core issue when thinking about time-series issues with respect to trade.

- Trade models imply strong responses to prices and (relatively) less strong responses to demand.
- In the time-series, the data are screaming for the opposite pattern. Strong demand responses, weak price responses.

This is exactly what Mayer and Steingress find **independent** of the specification.

What is the solution? Not sure.

- But I'm here to speculate...better theory, in particular, the explicit modeling of dynamics would help.
- Issue may be bigger than the time series, gravity models work on the cross-section b.c. of fixed effects + trade cost specifications that correlate with demand.

What are we after?

In my mind, models have three uses

1. forecasting
2. interpretation (what forces are at work or not)
3. normative/welfare evaluation.

This paper is focused on **2.** by saying. . . “here are some issues that should concern our interpretation of the coefficients.”

You tell me...but BIS, IMF, central banks use export regressions for **1.**

- If that's the case, then McGuirk fits better (in sample).
- I love theoretical consistency, but I'll admit that there is a place to give it up for fit and prediction.

Advice: Evaluate the specifications on the basis of the intended use, i.e. what the IMF or BIS do with output from the regressions.

- Do they give the same answer? Different ones? This would be a cool exercise.

To Summarize

Nice work. My main questions/comments are. . .

1. Follows in an important tradition in trade in bringing theory and data together. Makes an important point about multilateral resistance.
2. Larger questions about reconciling time-series evidence on trade flows with cross-sectional implications.
3. Questions about the intent of the exercise. If this is about forecasting, maybe a looser connection to theory is better?