Discussion of "Don't Panic: The Hitchhiker's Guide to Missing Import Price Changes" by Etienne Gagnon, Benjamin R. Mandel and Robert J. Vigfusson

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GMV: Bias in estimated pass-through coefficients

- Selection bias: products that change price more likely to enter/exit sample $\rightarrow$ downwardly biased long-run pass-through (LRPT) estimates
- Selective vs. random entry/exit matters (e.g. random entry mitigates selective exit)
- Pricing model and dynamics matter! Menu-cost (faster pass-through given LRPT and freq.) more biased for selective exit/random entry, Calvo more biased for random exit/selective entry
- Suggest correction for bias using 6-9 month delayed entry
- Bottom line: bias is not as bad as Nakamura and Steinsson (2009) claim, US import pass-through really is low at 2-year policy horizon

What do Nakamura and Steinsson (2009) claim?

- NS benchmark: correcting for product replacement bias raises pass-through estimate from 0.43 to 0.64
- GMV: correcting for product replacement bias raises pass-through estimate from 0.24 to 0.30
- Why don't GMV match NS numbers for similar random exit/selected entry scenario?

Table: NS(2009) vs. GMV(2011) differences

	NS	GMV
Results		
Measured pass-through	0.43(0.32)	0.24
Correction	0.64	0.30
Period	1982-2008	Jan.1994-Mar.2010
Sample		
Period	1994-2004	Oct.1995-Apr.2005
Foreign currency?	Yes	No
Intrafirm?	No	Yes
Exclude fuel/material intensive?	Oil only	Yes
Monthly obs.	12,500	20,000
LRPT calibration		
Selected exits	0.25	0.15
Incl. out of business	Yes	No
All exits	0.49	0.3
Price change freq.	0.151(0.066 median)	0.062/0.0776 (alt.)
LRPT Lags	6 quarterly	24 monthly
Distribution of freq.	Flexible distribution	Common within end-use cat.
Distribution of item sub.	Common to all items	Common within end-use cat.
Weights	Annual BLS item-level weights	None within end-use cat./2006 weights across
Exchange rate	Major-currency	Broad/trade-weighted by end-use cat.

Data differences

- Which differences drive results for (a)level of uncorrected pass-through, and especially (b) magnitude of "product replacement" bias?
- GMV include intra-firm: higher frequency (Neiman 2009 for "differentiated products" in BLS import data) which lowers bias
- Sensitivity to other outliers (Producer currency priced goods, fuel/material intensive goods, bias term concave in item frequency and GMV assume it is common within 3-digit end-use categories)
- GMV justify some differences in sample/specification but could do more
- What is goal - sample that policy-makers care about or non-representative but robust sample that overcomes data limitations?

Need (to use) more information on substitution patterns

- Report frequency of item exits for the 7 different reasons (especially out of business)
- Report frequency with which exit is accompanied by entry (linked with quality adjustment, or as new product) vs. delayed until next biennial sample redrawing (due to planned phaseout within 18 months)
- Lags in random entry following selected exit imply less offset to pass-through bias over 24 month horizon
- p.15 "for convenience posit that entry/exit occur simultaneously"
- Paper introduces interesting institutional detail to debate but then ignores it! Why not use some of this in the simulations and model?

Selected exits and size distribution of price change

- Selected entry/exit assumed to affect price changes regardless of magnitude.
- Why should we think that the distribution of censored price changes at exit/entry is identical to that observed?
- Bias to pass-through estimates could be non-linear in exchange rate changes (or input cost shocks, etc.).
- Difficult to address with this data (but certainly much evidence for other data sets that quality change bias is not identical to monthly inflation rate!)

Timing of selected exits and price change

- Why not assume NO price change is more likely to experience entry/exit? Or higher probability of exit a few periods after price change (when probability of further adjustment is lower than at random)? Upwardly biased LRPT?
- Many scenarios could generate price change and constant volumes, or constant price and change in volumes (which could trigger out of business, "selected exit" or accelerated phaseout), or simultaneous change in price and volume
- Think about stock-outs, inventory cycles and clearance sales

garlic.png

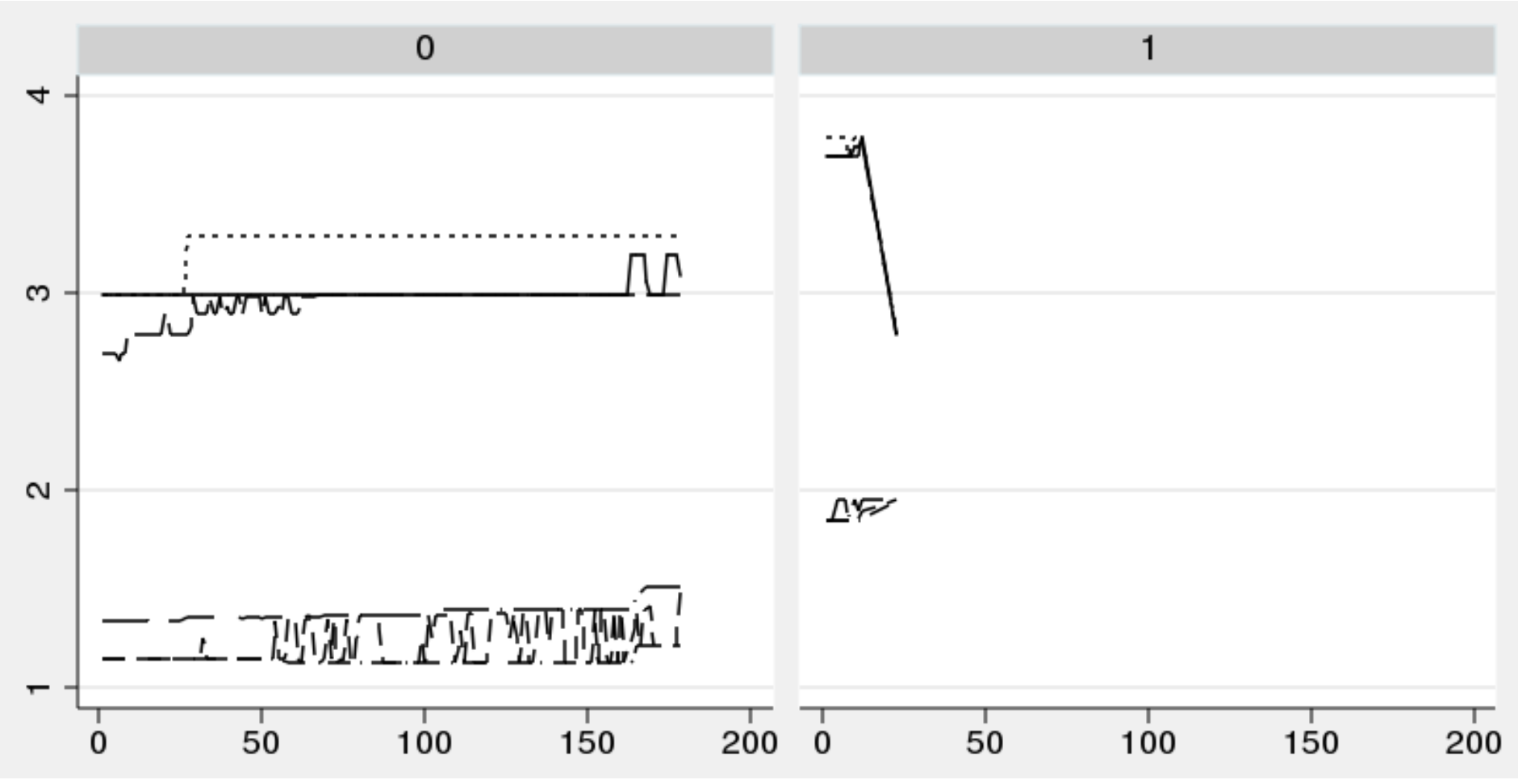

Figure: Athenos Roasted Garlic Hummus (0-US,1-Canada), y-axis price, x-axis week

feta.png

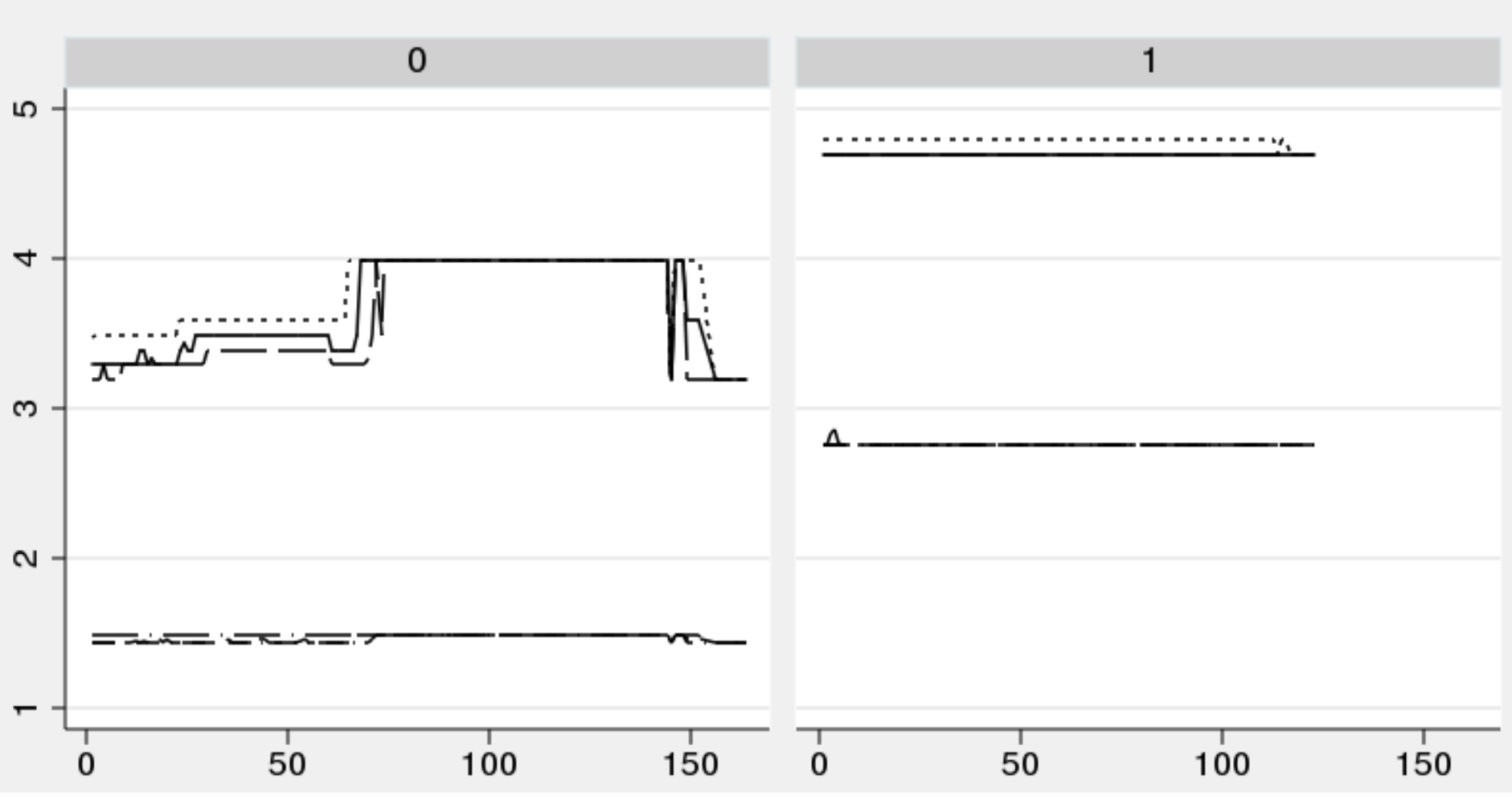

Figure: Athenos Feta Tomato/Basil (0-US,1-Canada), y-axis price, x-axis week

crackers.png

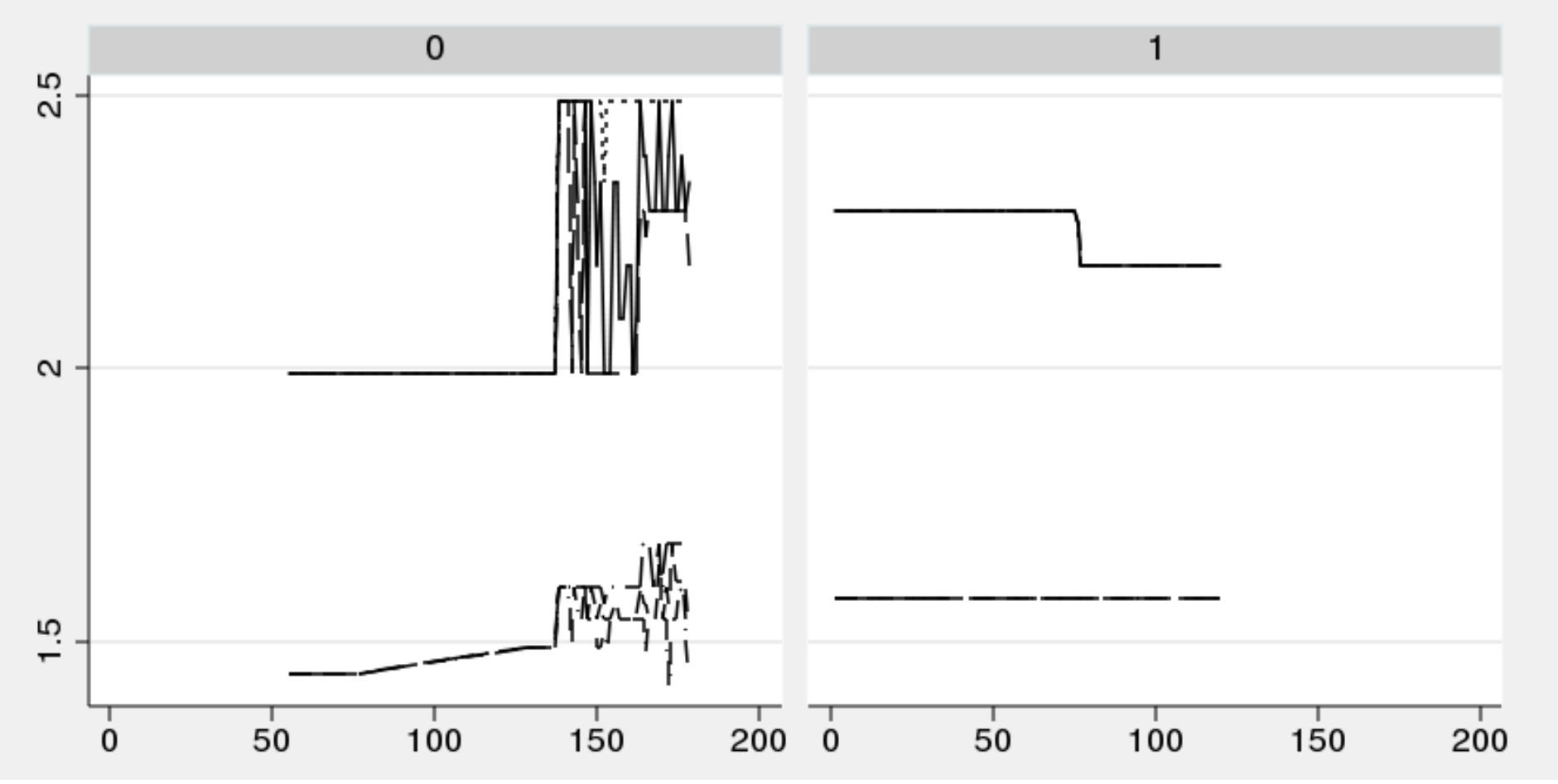

Figure: Jacob's Crackers (0-US,1-Canada), y-axis price, x-axis week

Empirical evidence on timing of selective exits

- Selective exit (and entry) in the paper is 'state-dependent' in menu-cost model because it depends on the period by period frequency of price change, which increases following exchange rate shock
- Figure 3 shows forced exit (out of scope) rate is increasing as US dollar depreciates
- Can variation over time in selected exits help discipline, calibrate models? Shed light on impact of size of price changes, level/rate of change of exchange rate?

Reducing bias

- Propose 6-9 month delayed entry into sample
- Idea is that this makes newly entered items that changed price just prior to entry more sensitive to past exchange rate movements
- Why not condition on first actual price change like in Gopinath and Itskhoki (QJE 2010) 'life-time' regressions?

A few more points

- BLS sample selection bias - pick items that are traded regularly, higher volume with established price histories, drop items that are insufficiently traded. Is this really random sampling? What implications might this have for frequency, pass-through, selectivity of exits and entries?
- Rate of random exits d and selective exits $(1-d)ef$. If item would experience both do we know that this order of precedence is observed by BLS in sampling and coding? E.g. why not $(1-ef)d$ and ef, especially for refusals, out of business?

Conclusion

- Nice theory and model, impressive clarity, well motivated by discussion of actual BLS practices.
- Main concern - not even close to replicating results for 'product-replacement' view of Nakamura and Steinsson
- May be difficult to resolve debate without alternative data sets that do not feature the same limitations, or without even more detailed analysis (and modeling) of BLS practices and selective exit/entry