Discussion on: "India in the Global and Regional Trade – Determinants of Aggregate and Bilateral Trade Flows and Firms' Decision to Export"

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Motivation

- The purpose of this paper is two-fold:
- First, to examine the extent to which 'PTA (FTA/CU/DEU) effects' can impact India's trade flows along with other determinants (gravity models)
- Second, it examines firm-level determinants of exporting decision and propensity to export by Indian firms (discrete choice models)
- These are two separate topics and I guess they will be published as two separate papers.

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Key insights

- In the recent years, many countries have been actively pursuing bilateralism through negotiation of RTAs (commonly referred to as FTAs) as a key strategy of their commercial trade policy
- Whether FTA is a good thing or not can only be examined via its possible effect on trade flows, which is an important contribution of this paper.
- Besides, it is possible that there can be some bilateral common factors that could drive the probability of India having FTAs with different countries (or group of countries). This could make FTAs as an endogenous variable.

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Findings

1. Using aggregate data (1981-2006), there is empirical support for the claim that the pursuit of PTAs is counter-productive, hence unilateral and multilateral trade liberalization is the way forward.

2. Using firm-level data (1995-2006), firm-heterogeneity is seen in the decision to export. Exporting firms are significantly larger, more R&D intensive, low wage-intensive, and more profitable than non-exporting firms.

- The missing link is whether different PTAs can have any impact on exporters' decision to export in the firm-level analysis

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FTAs

- The issue of whether FTAs are beneficial or harmful is a live on in trade theory.
- We can distinguish between effects on members (Viner's trade creation/trade diversion distinction) and on non-members. Outsiders are usually expected to lose from trade diversion. The latter is more relevant here.
- Kemp and Wan showed that, in principle, a FTA need not damage outsiders, if tariffs are adjusted to keep World prices the same. In practice, most economists think this will not happen.
- However, an FTA may benefit outsiders EVEN IF THERE IS TRADE DIVERSION, if its benefits on growth and local demand are big enough to raise import demand. This may be more relevant in the case of recent EU enlargements.

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Notes on the motivation

- The gravity idea relies on the interaction of domestic and foreign GDP and having different combinations of these in the sample.
- Here it is more of an export equation, which is nevertheless very interesting but different from a gravity approach.
- The paper finds that the bilateral agreements do not seem to be improving India's exports; as RTA is a recent phenomenon, going forward it may change export flows.

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Comments on the empirics

- p.10: whether the variables are real or nominal need to be mentioned: X, GDP, E
- Exchange rate is defined as units of currency *j* per *INR*; so it is not real exchange rate as mentioned on p.6
- Exchange rate coefficient being insignificant in the export equation goes against intuition. In the import equation, the coefficient is significant with both positive and negative signs in two different models. Table 1C, random effect model has a positive coefficient for E.
- p.11 for Table 1: 4 types of models are presented. As the Hausman test rejects fixed effects model, then I guess the discussion refers to random effect model as the best model

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Notes on the empirics

- If we take the random effects model as the best model, with India as part of a trading bloc, India's exports decline; if India is NOT part of a trading bloc, exports to some trading areas go up.

- Suggestion: PTAs can be associated with strong geographical orientation of trade flows

- So a simple aggregate indicator could be used to control for such orientation and then see whether the effect of PTA dummies change

$$ROX_t \equiv \frac{\sum_j x_{jt}^{RB}}{x_t}$$

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Comments on the empirics

- Time dummies can only take account of the shift in intercept. There may be potential shift in slope parameters over time.
- In this respect, some kind of test to examine the parameter stability would be useful, e.g. sample period can be split into 2 or 3 to see any shift in slope parameters. This may strengthen the empirical results.
- In diagnostic tests on p.33 and 34. Prob>F? which test does it refer to; The serial correlation tests could be presented as well.
- Additionally, time series properties and dynamic behaviour can be discussed, given the long time span.
- p.47: Typo: Columbia

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Firm-level results

- It appears from Table 2 that there could be more non-exporting firms in the dataset? If so, there are more zeros. In this case, Zero Inflated probit model may be more appropriate. Harris and Zhao (2004, 2005) have developed the Zero Inflated Ordered probit.
- However, Multinomial results in Table 5 are interesting which consider non-exporting firms as a benchmark and then estimate which firm characteristics determine export propensity.
- Only the signs of the coefficients estimated by both the Logit and Probit models are informative. As many coefficients in the binary models are very small (0.000), further post-estimation needs to be done to report marginal effects.
- Also Tobit regression involves absolute quantity; so the coefficients need to be adjusted (Heckit procedure/McDonald and Moffitt decomposition).
- Are the results reported in Table 5 odds ratios or coefficients? These results can be discussed briefly.

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The Issue of endogeneity

- Would not it be quite natural to explain the existence of a bilateral trade agreement by a deep trade relationship between two countries?
- What determines the formation of FTAs among major trading partners of India could be interesting?
- Formulating FTA can be an endogenous variable in the form of a binary model, although it is possible that FTAs can contribute to higher trade flows in the future
- Foreign ownership variable could partly capture the degree of outsourcing by overseas firms
  - Whether intermediates trade could be distinguished from trade in final goods?

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DEEPER INTEGRATION

- Multilateral approach alone may not be enough. So there is a school of thought that talks about improving trade via deeper trade integration.
- Regional Integration may involve deeper integration agreements, such as agreement on common goods standards or mutual recognition, removal of customs barriers etc.
- These remove resource costs, and may benefit outsiders to the agreement by boosting local incomes enough to increase imports.
- In addition, if a country like India can gain access to regional integration agreements, this may pave the way to deeper integration for India, with potential benefits.

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Conclusions

- This is an interesting and promising paper.
  - Provides useful empirical evidence on the effect of PTAs on which there is limited research
  - PTAs can divert trade, hurting importers in PTA and competitive third country exporters
- Some clear avenues for further development:
  - Including PTA dummies in the firm level exercise
  - A PTA can encourage further FDI, which is an important channel for productivity enhancing deep integration via technology and knowledge transfer, quality improvement and specialisation.
  - Controlling for the level of FDI flows in the aggregate exercise can help assess any potential for deep integration

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