

Discussion of Maskus & Ridley (2019)

Intellectual Property-Related Preferential Trade Agreements and the Composition of Trade

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Discussion

- Intellectual property rights (IPRs) protection \implies \uparrow imports and exports, esp. in high and middle-income economies, in IPRs-sensitive sectors
 - ▶ Strong and robust empirical link
 - ▶ e.g., Branstetter et al. (2011), Delgado et al. (2013), Maskus and Yang (2018)...
- Less known: what is the impact of **additional** IPRs strengthening on trade?
 - ▶ Non-linearity?
 - ▶ Non-monotonicity?
- This paper investigates this question empirically
 - ▶ Impacts of “TRIPS++” standards imposed by PTAs with US, EU, and EFTA on imports & exports
 - \implies Modest effects
 - ▶ Heterogeneities across
 - ★ countries of different development levels
 - ★ industries with different intensities to IPRs protection
 - \implies Larger for IP-intensive sectors, in emerging countries

Overview

- A very nice and interesting paper!
- Well-defined and topical research question
- Careful empirical implementation
- Innovative consideration of “outside-agreement” trade effects to address potential endogeneity issue

Comment 1: Empirical specifications

$$\begin{aligned}\log(TR_{ist}) = & \beta_1 \log(GDP_{it}) + \beta_2 High - IP_s \times \log(GDP_{it}) \\ & + \sum_g \beta_{3g} Group_i \times Low - IP_s \times IPA_{it} \\ & + \sum_g \beta_{4g} Group_i \times High - IP_s \times IPA_{it} \\ & + \sum_g \beta_{5g} Group_i \times Low - IP_s \times TRIPS_{it} \\ & + \sum_g \beta_{6g} Group_i \times High - IP_s \times TRIPS_{it} \\ & + \alpha_{gst} + \alpha_i t + \varepsilon_{ist}\end{aligned}$$

- Triple difference set up:
 - ▶ Countries: involvement in the agreements
 - ▶ Sectors: High vs Low IP
 - ▶ Before vs after **complying** with standards in the agreements

Comment 1a: Treatment time

- The paper argues the policies are “effectively randomly assigned”
 - ▶ US, EU and EFTA have greater bargaining power
 - ▶ Limited scope for the other party (esp. low and medium income ones) to endogenously select into (or out of) such policies
- However, compliance dates can be endogenous
 - ▶ Countries signing into such agreements may expedite or delay compliance due to considerations related to exports / imports
 - ⇒ Robustness checks using signing dates, remove observations close to signing periods
 - ▶ Other countries (outside of the agreement) may hold off or bring forward their exports and imports in anticipation of such compliance
 - ⇒ Should only affect trade volumes in the short term
 - ⇒ Remove observations close to signing periods. Event study to see if short-term trends taper off later on

Comment 1b: Treatment countries

- The paper argues the policies are “effectively randomly assigned”
 - ▶ US, EU and EFTA have greater bargaining power
 - ▶ Limited scope for the other party (esp. low and medium income ones) to endogenously select into (or out of) such policies
- However, US, EU and EFTA can choose with whom to sign PTAs with, and to impose IPAs
 - ▶ Selection by US, EU and EFTA
- The paper cleverly addresses this problem by removing US, EU and EFTA from the analysis
 - ▶ Table 2: results change drastically when US / EU / EFTA is included / excluded
 - ▶ Concern: *spillover effects*, e.g., countries importing more goods from US may import less from other countries

Comment 1c: Additional comments

$$\begin{aligned}\log(TR_{ist}) = & \beta_1 \log(GDP_{it}) + \beta_2 High - IP_s \times \log(GDP_{it}) \\ & + \sum_g \beta_{3g} Group_i \times Low - IP_s \times IPA_{it} \\ & + \sum_g \beta_{4g} Group_i \times High - IP_s \times IPA_{it} \\ & + \sum_g \beta_{5g} Group_i \times Low - IP_s \times TRIPS_{it} \\ & + \sum_g \beta_{6g} Group_i \times High - IP_s \times TRIPS_{it} \\ & + \alpha_{gst} + \alpha_i t + \varepsilon_{ist}\end{aligned}$$

- GDP_{it} controls for correlation between trade volume and size of the economy
 - ▶ BUT changes in IPRs can endogenously affect GDP too: “bad controls” in Angrist and Pischke (2009)
 - ▶ Use initial level of GDP instead
- Why not include country-sector FE?

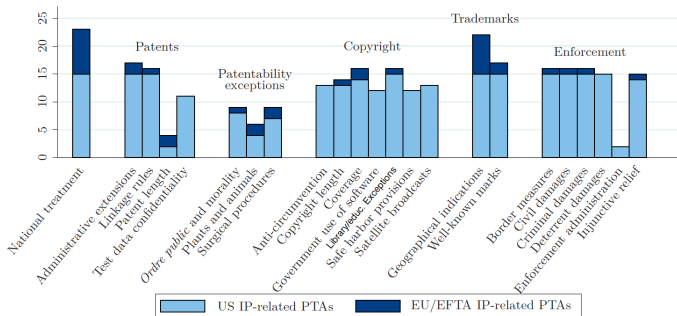
Comment 2: Mechanism

- Very rich set of empirical results
- Most interesting results: non-linear effect of IPRs protections on trade
 - ▶ Aggregate trade: largely zero effect for TRIPS, positive effect for IPA
 - ▶ Bilateral trade: greater effects for TRIPs, smaller effects for IPA
- Provide more guidance to the readers on how to interpret these results, e.g., possible underlying mechanisms
- Perhaps the paper will benefit from having a formal model:
 - ▶ Easier for readers to interpret the results through the lens of a model
 - ▶ Use empirical results to answer important quantitative questions

Comment 3: Heterogeneities

- The paper is already excellent in this respect: country income groups, IP intensities, sectors
- Types of agreements?
 - ▶ Treatment = 1 if there is strong IPRs chapters in the PTAs
- Lots of heterogeneities in IPAs across PTAs:

Figure 2: Number of IP-related trade agreements by presence of specific provisions



Comment 2: Heterogeneities

- Further, some are targeted at specific sectors, e.g., pharmaceuticals and chemicals
- It may be interesting to run analysis separately for different types of IPAs
- For example, any differences in IPAs imposed by US vs EU/EFTA?
- For example, IPAs targeting at specific sectors
 - ▶ Effects for sectors targeted? Spillover effects for other sectors?

Other minor comments:

- Country income group: High, Upper-middle, Lower-middle, Low
 - ▶ China and India are low income
 - ▶ Brazil and South Africa are upper-middle income
- IP-intensive sectors are highly correlated with high-tech sectors
 - ▶ Examples of low-IP sectors: animal and food products, leather, wood, minerals, apparel
 - ▶ Is it technology or IP intensity?
 - ▶ Robustness check to control for sectoral skill intensity

Final remarks

- A very nice paper
- Important research question:
 - ▶ IPR protections, trade, heterogenous effects: serious policy implications
- Innovative empirical approach
- I look forward to the next revision, and encourage everyone to read it!