# Discussion of International Friends and Enemies by Kleinman, Liu, and Redding

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### The big picture

- Why do countries choose to cooperate with one another over international political questions?
- What leads countries toward strategic international alliances?
- Do economic fundamentals productivity, technology, trade structure lead to economic interdependencies that, in turn, cause political alignment?

**This paper:** Changes in economic dependency driven by a changing economic environment are an important driving force behind international political alignment.

#### Assessment:

Convincing analysis that a new network-based measure of economic dependence – "real income exposure" – is useful in explaining changes in "political alignment."

But this raises a new question: What exactly are we measuring with "political alignment" and through what mechanisms might it be driving further increases in economic dependence?

### What does this paper do?

- Outlines a general model for how costly political action by one country impacts the real income of other countries.
- Shows how to define and measure real income exposure/dependency in a trade model.
- Assembles economic data on real income exposure of country n to country i from 1970 to 2010
- Assembles measures of "political alignment" from UN votes and formal alliances.
- Estimates the impact of (plausibly exogenous) changes in Chinese productivity on political alignment with China (repeat the analysis with exogenous changes in cost of air travel).
- Ocnclude that exogenous increases in economic dependence cause increases in political alignment.

### Theoretical Contributions:

Offers a model where (costly) cooperation in international politics impacts a trading partner's productivity and, hence, real income.

- Countries maximize real income by choosing costly political actions. Political actions affect productivities of other countries.
- In the non-cooperative Nash equilibrium, the reaction function of a country's costly political actions  $(\xi_{ni})$  is given by

$$\underbrace{\left(\frac{\partial lnu_n}{\partial lnz_i}\right)}_{U_{ni}}\left(\frac{\partial lnz_i}{\partial ln\xi_{ni}}\right)\frac{u_n}{v_n}-\left(\frac{\partial lnv_n}{\partial ln\xi_{ni}}\right)=0$$

#### which captures how

- Country n's real income  $(u_n)$  responds to country i's productivity  $(z_i)$
- Country i's productivity responds to political actions of other countries, including n
- County n's utility costs  $(v_n)$  respond to its political actions towards country i  $(u_n)$

### **Empirical Contributions:**

The key object to define and measure is **real income exposure** ( $U_{ni}$ ).

The key empirical challenge is that tighter political alignment can cause increased economic dependency. But the objective is to estimate how increased economic dependence affect political alignment.

Solutions: (1) exogenous changes in Chinese productivity from domestic reform and (2) exogenous changes in air freight costs

- Use a model-based instrument counterfactual change in real income exposure to China from an exogenous increase in Chinese productivity.
- Instrument real income exposure using a predicted value from a gravity regression with time-varying costs of air and sea freight.

#### Conclusions:

• Convincing evidence that exogenously-driven increases in economic dependency are leading to tighter political alignment, but why? What does this evidence mean?

### Real income exposure and Preferential Trade Agreements

The political economy model that opens the paper argues that political actions cause economic productivity gains in trade partners.

The authors validate the measure of real income exposure by showing that it rises AFTER countries sign a preferential trade agreement.

But, more generally, how should we think about why countries cooperate at the UN or the WTO?

What types of benefits do countries hope to attain from this cooperation? What is the mechanism through which UN votes can deliver on higher productivity?

## International Economic Cooperation – Trade Agreements

The economics literature on trade agreements asks: If governments like tariffs, why do they sign trade agreements that eliminate tariffs?

• The terms of trade theory answer: If governments are motivated to set non-zero tariffs because they want to manipulate (raise) their Terms Of Trade ⇒ a trade agreement characterized by reciprocal tariff cuts raises welfare by reducing production and consumption distortions / expanding trade volume.

Analysis is static with productivity in different industries fixed.

The political commitment answer: If a government is caught in a time-consistency problem in which it would like to remove tariffs to allow optimal long-run reallocation of resouces toward export sectors, but it faces a high short-run cost of industrial adjustment, ⇒ a trade agreement can serve as an external commitment device that aids the government in overcoming its time-consistency problem.

The reason for a country to join a trade agreement is to support productivity-enhancing changes in domestic institutions.

### Closing thoughts

The trade agreements literature offers useful answers to a more narrowly defined question: how does a trade agreement deliver higher welfare?

In this paper, we learn that political alignment rises with increased economic dependency, but we don't have a clear sense of why this would happen.

The next step in this research should be to flesh out what these UN votes entail and whether there are patterns of the types of political alignments that follow exogenous changes in economic dependence.

### A welfare-enhancing multilateral trade agreement

Welfare, tariffs, and the terms of trade.

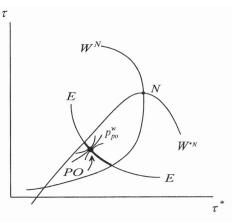
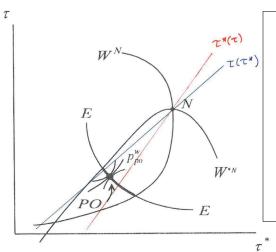


FIGURE 2. THE PURPOSE OF A RECIPROCAL TRADE AGREEMENT

- This graph shows each country's indifference curve in tariff-tariff space.
- The home country's welfare increases as its indifference curves move to the west.
- The foreign country's welfare increases as its indifference curves move to the south.

### A welfare-enhancing multilateral trade agreement

Welfare, tariffs, and the terms of trade: Nash equilibrium in tariffs.



- A Nash equilibrium in tariffs occurs when both countries try to use tariffs to improve their terms of trade.
- If they both reduce tariffs while keeping world prices unchanged, they will both move to higher indifference curves by reducing the distortions in their economies.

FIGURE 2. THE PURPOSE OF A RECIPROCAL TRADE