Lessons for Empirical Analysis to Support Trade Negotiations

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Trade policy economics has been used more fully every year

- **Economics is used because it is useful for several phases of trade negotiations and trade disputes.**

- **Nonetheless, many economists are frustrated that economics is not more influential in the resolution of disputes and negotiations.**

- **But, is our analysis is ready to play an even larger role?**

- **How can we be more relevant and accurate to be more useful?**

Empirical economics may be more used and useful in trade remedy and dispute settlement

Trade dispute resolution all apply volumes of economic analysis

This will spread globally from North America

Already there is more economics in the WTO dispute settlement process than a few year ago

We need more development of standard tools and standards for how to evaluate the economics applied by staff and parties

Uses of trade policy economics in negotiations

- Set the general understanding of the benefits and costs of more open markets

- Project outcomes of specific options and proposals

- Provide ex post projections of actual negotiated agreements to guide understanding of what to expect

- Assess the outcomes and effects of previous agreements or dispute settlement

Each of these requires different approaches and must not be confounded

All are difficult

General quantitative sense of impacts of reform

The idea is to give the flavor and rough idea of implications of various policy reforms

- Stylized policies and proposals
- Estimates based on historical base data
- Aggregate summary results

Improvement on the gross misrepresentations of non-economic approaches and rhetoric

- Not detailed or specific enough to guide negotiations, but can motivate policy directions

CGE models and most academic studies

Detailed projections of specific options

With sufficient policy detail, projections can guide choice of negotiating options.

- **Often requires short turn-around and rapid communication to negotiators.**

- **Requires comprehensive understanding of policies, markets and alternatives**

- **Requires underlying research and models that can be adapted quickly.**

- **Academic style research supplies data, parameters and model development, usually not detailed projections relevant to negotiation process**

Projections of impacts of negotiated policy reform

Can guide expectations and plans of market participants and may influence implementation

- Requires comprehensive understanding of policies, markets and alternatives

- Requires underlying research and models that can be adapted to the detailed specification of the actual agreement.

- Most academic-style research models do not have sufficient policy detail and are not adapted to specify complex policy changes.

Estimation of outcomes attributable to specific policy reform

Most reforms are partial and normal market flux makes isolating of policy reform complicated.

- Requires careful specification of expectations of real policy changes real changes
- Most expected market shifts are gradual and small relative to agricultural market variability
- Requires marshalling as much data as can be found
- Econometrics must be developed carefully and creatively
- Can be useful for understanding of future policy change

List some points that will facilitate discussion of specific cases

My personal views on where our analysis needs the most improvement

Reexamine basics for reasonable modeling

It is not simple to develop simple practical analyses of policy questions

Let us review the obvious basics

Elements to improve applicability of empirical trade research

1. **Model approximations of policies and alternatives carefully**

All models rely on approximations, but this is not the place to cut corners for useful analysis

Gross approximations of policy are helpful pedagogic tools, but may be more misleading than helpful for empirical trade policy research

Seemingly small differences can have significant impacts

Domestic support schemes in agriculture provide many examples

Farm production impacts of the Farm Act of 2002 differ from 1996 and earlier

Of course, most payments are not tied directly to current production

- But, current production may affect future base, and so anticipated linkage to future base changes affects current area planted and current yield.

- Analysts therefore must incorporate expectations about base updates and the gain in base value from planting the program crop now.

- This requires developing some assessment of the magnitude of these impacts

- The expectations under the 2002 Farm Act may differ from those under the 1996 and ad hoc Acts.

Effects of updating program base and yield for farmer incentives

We must investigate how farmer expectations of an update are formed and adjusted.

Models must incorporate how much a farmers current planting of a crop affects expectations of future payments for that crop relative to relevant alternative crops.

No empirical estimates of this relationship is available yet, but the impact is bounded by 0.0 and 1.0 and we should have strong priors that neither the lower bound nor the upper bound applies.

Implications of base updating for degree of decoupling

Example: farmer now places a 60% probability on an update in 5 years with a 1/5 weight on this year's planting. (Later updates depend on later planting with same weight.) The program has 90% chance of remaining, conditional t+5 payment is 90% of current, interest rate 5%.

➢ **The payments are 42% coupled. That is, under this set of expectations a payment has 42% as large an effect on planted acres as a payment tied directly to current planted acres.**

Elements to improved applicability of empirical trade research

2. **Understand details of commodity markets and relationships**

- **Definitions of commodities may not be obvious**
  - Is wheat wheat? (Is durum a different product? How closely related are HRS and HRW?
  - When can indica and japonic rice be aggregated?
- **Similar aggregation questions apply to markets**
- **These are research questions that can be approached with a thorough empirical research**
- **Econometric evidence is often lacking and difficult to develop**

Elements to improved applicability of empirical trade research

3. Parameter values drive model results

- Model complexities may hide reliance of results on a few supply or demand elasticities

- Yet, we continue to have problems conceptualizing appropriate parameters and how they might be defined and obtained

- Parameters depend on the specific market situation and policy question. Eg. it makes no sense to ask what is *the* supply elasticity for wheat.

- Much econometric effort has not helped

Econometrics alone cannot yield estimates of trade policy relevant supply response

Government programs and expectations about the programs affect the relevant supply response parameters. As policies change or when we investigate new policies, we must use parameter estimates that are structural and not functions of the policy in place.
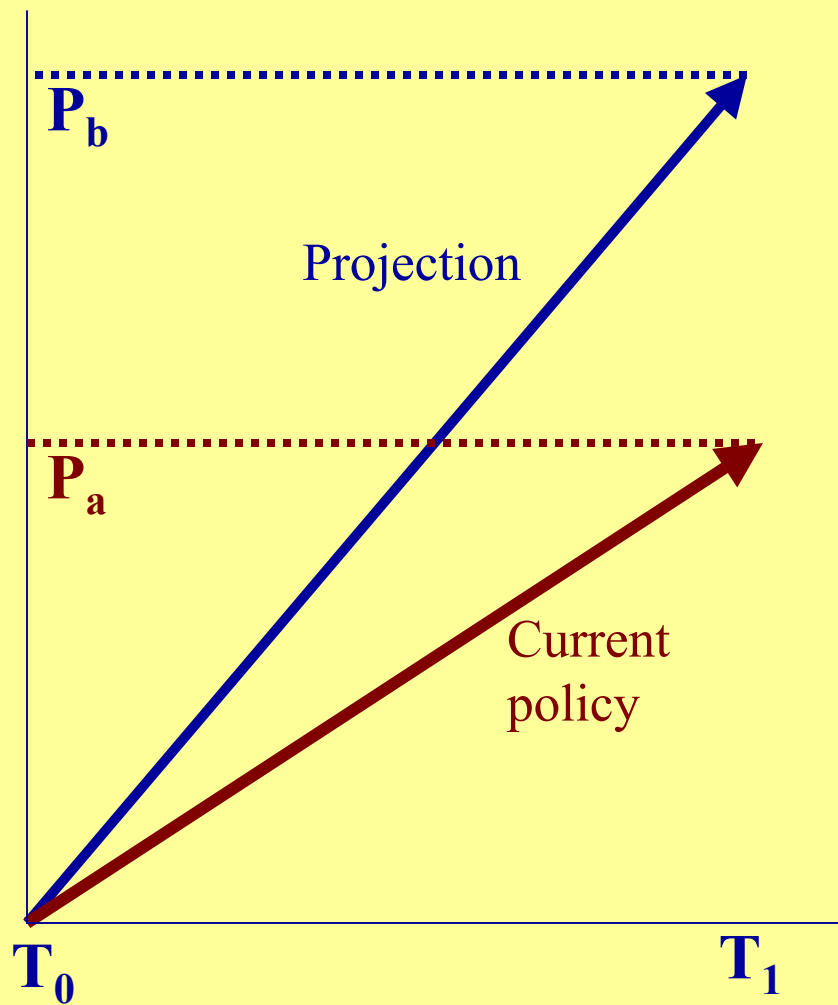
Econometric estimates from the literature will seldom have this property.

Defining the counter-factual baseline projection may be crucial

4. Even comparative results are not invariant to baseline projections under the alternatives

Effects of TRQs and deficiency payments depend on projections of world and domestic prices

This means investing more in baseline projections to understand impact of policy reforms

We may only attempt to project $P_b - P_a$, rather than P_b itself.

Still, relative impact of removing a, for example, deficicency payments (marketing loan or C-C payment) depends on the baseline.

The same applies to the impact of removing a TRQ. When comparing different internal prices this implies that long term exchange rate projections are required!

Is our economic analysis ready to play a larger role?

It is not clear that we have consensus estimates or projections that are ready to be used?

Consider the following recent summary:

Do these estimates provide information that is accurate and interesting for the purposes listed above?

How useful are projections of the effects of liberalization on commodity markets?

Commodity	Average tariff	Domestic support	World price impact
Cotton	5.2%	$5.3 B	10 to 20%
Dairy	29.4%	$11.6 B to $39.4B	20 to 40%
Rice	43% (217% japon., 21% indica)	$20.8B to $24.3B	33% (90%? japon.)
Source: Beghin and Aksoy			

The role of economics in the breakdown in Cancun

I have questions not answers.

Could more and better economic analysis have created a consensus for reform? Could more and better economics removed misunderstandings?

Do we have consensus answers to questions that separated the parties?

Maybe we do have a consensus that helped lead to the Cancun collapse?

Consider cotton, are there real and serious disagreements about the impacts of the subsidies?

Perhaps policy differences reflect real policy choices and economics played its appropriate role

Concluding comments

Services provided by economists will continue to be demanded in all phases of dealing with disputes and negotiations

We have a long way to go to improve our performance

But the most economics can do is fully inform parties of projected economic impacts

Decisions are made based on interests and economics can make these more transparent

That does not necessarily imply policy change or "success" in negotiations