Implementation and Evaluation of PTAs

Enhancing the contribution of PTAs to inclusive and equitable trade:

Islamic Republic of Iran

13-15 August 2017

Tehran

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

BANGLADESH   ISLAMIC REPUBLIC OF IRAN   MONGOLIA   MYANMAR   VIET NAM

Workshop outline

- Trade, growth and development
- Trade protection and liberalization: from efficiency to meeting social objectives
- PTAs and multilateral trading system and PTAs in Asia-Pacific
- Trade reforms and PTAs of Islamic Republic of Iran
- Towards PTA's contribution to inclusive and equitable trade
- Getting a PTA done:
  - Stakeholders
  - Negotiation
  - Implementation
- What if the expectations are not met?

IMPLEMENTATION AND EVALUATION OF PTAs

SESSION 7

Key Learning Objectives

1. So the PTA is signed. What now? Understand next steps to be undertaken so to meet obligations internally and towards the third parties.

2. Understand evaluation of PTAs. Not a review done for the WTO transparency purposes (transparency mechanism), but the impact assessment of the PTAs (or other policy moves):
   i. To that end, understand the benefits of evidence-based policymaking in relation to PTAs, and its potential to influence form, substance, and modalities.
   ii. Appreciate the differences between ex ante and ex post impact assessment, and understand that there are appropriate methods for answering particular questions.
   iii. Be aware of availability of different models commonly used in applied trade policy (e.g. CGE and econometric models), as well as simple data based techniques for examining impacts.

3. Reflect on the skills needed to promote evidence-based policymaking as part of the PTA process, and the ways in which politics, policy, and economics interact to produce outcomes.

Outline

1. What is to be done after the agreement is signed?

2. How to go about evaluating the PTA? Is it a one-off task?
   i. WTO transparency mechanism
   ii. Impact assessment

3. Value of Evidence-based Policymaking.

1. Steps Towards Implementation- Signing and Ratifying the Agreement

Effectivity of PTA depends on two factors

1 "Entry into force" provision

- Depending on the nature of the agreement, the PTA may take effect on:
  - The date it is signed
  - On the date one party gives notice to the other party that it has complied with all the legal requirements
  - On the date the PTA becomes effective and binding as domestic law
  - The date of effectivity may also be agreed upon by the signing parties

2 Domestic procedures of signatories

- Act of signing by authorized officials
- Letter of acceptance by the president
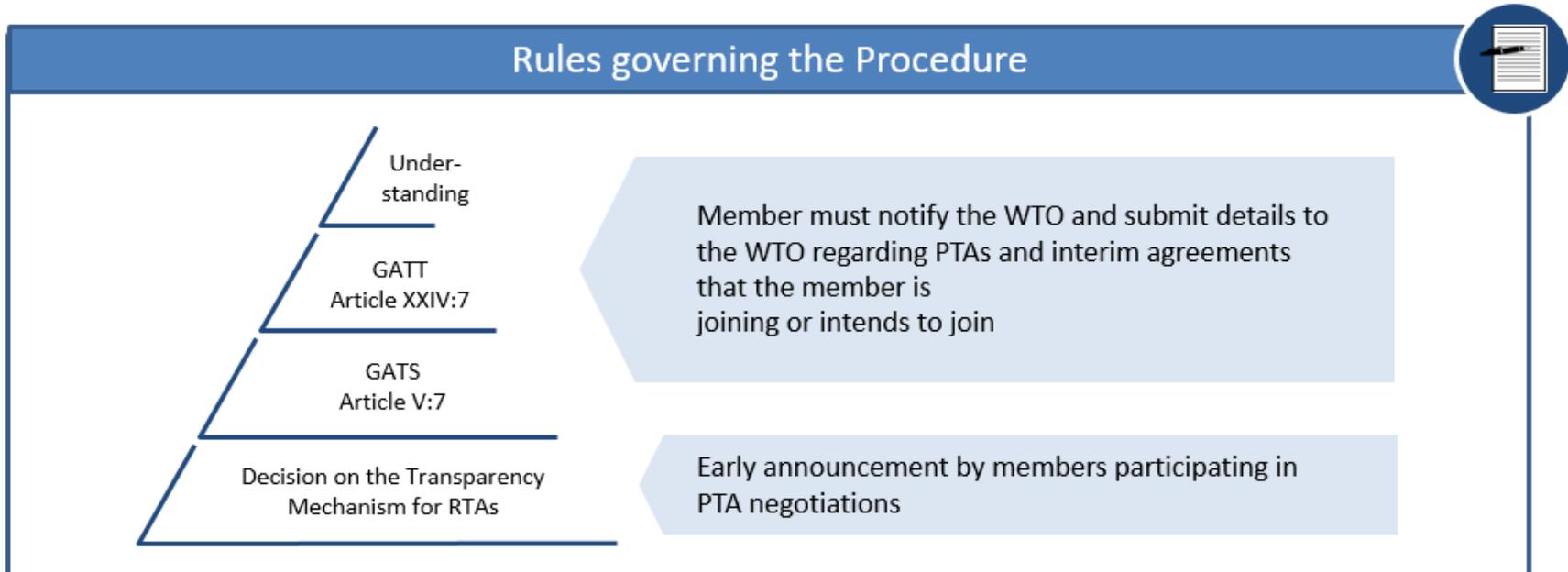- Ratification by the legislature
- Treaty Approval

1. Steps Towards Implementation – WTO Notification

Notification Procedure:

Early Announcement	Formal Notification	Factual Presentation	Review by WTO Members	Notification of Change

Source: World Trade Organization (WTO)

Rules governing the Procedure

- Under-standing
- GATT Article XXIV:7
- GATS Article V:7
- Decision on the Transparency Mechanism for RTAs

Member must notify the WTO and submit details to the WTO regarding PTAs and interim agreements that the member is joining or intends to join

Early announcement by members participating in PTA negotiations

1. Steps Towards Implementation - Enforcement

Commitments

Implementation Process

PTA in force

| 1 | Legislative Enactments and Amendments |

- Necessary for PTAs to be effective as domestic laws; to fill gaps left by general provisions and implementation arrangements provided in PTA
- The laws to be passed/amended are those covered by PTAs that affect the rights and obligations of the citizens of the PTA member country
- Procedure and voting requirement may be different from ratification

| 2 | Directives, Issuances, and Regulations |

- Even after a PTA takes effect, some administrative procedures still need to be carried out to fulfill the requirements of the PTA
- Some PTAs draw out uniform operational guidelines in implementing the customs procedure and rules of origin mechanism (e.g. by finance ministry, customs bureau etc.)

2. WTO Process - Myanmar's Trade Agreements –Transparency Mechanism

2. WTO Process - Myanmar's Trade Agreements –Transparency Mechanism

ASEAN - Australia - New Zealand

| Basic Information | WTO Consideration Process | Main topics covered by the RTA | Trade-related data |

Goods & Services   **Download document in: E F S**

Anti-dumping measures

Balance-of-payments measures

Competition

Countervailing measures

Customs-related procedures

Denial of benefits

Dispute settlement

Domestic regulation

Exceptions, general or for security

Export restrictions

Intellectual property rights

Investment

Mutual recognition (services)

Rules of origin

Safeguard measures

Sanitary and phyto-sanitary measures

Subsidies

Tariff-rate quotas

Technical regulations, standards, technical barriers to trade

> For details on these topics, please consult the Factual Presentation / Abstract available which has been drafted by the WTO Secreteriat, in full consultation with the Parties to the Agreement.
> Most of these topics can be found by referring to the Table of Contents or by searching through the document and / or consulting the official text of the Agreement provided under Basic Information.

2. Evaluation of the PTAs - Impact assessment

	1 Monitoring and Enforcement	**2** Assessment and Evaluation
What?	▪ Compliance monitoring: how are the agreements that have been negotiated being implemented?	▪ Review clauses to analyze the impact or progress of PTA implementation (e.g. whether tariff cuts have been made or whether PTA has resulted in an increase in trade)
Who?	▪ In most countries, monitoring is lodged with the implementing agencies ▪ Coordination among agencies is essential	▪ Some countries designate a specialized body, in others trade-related institutes or other organizations conduct studies ▪ Often Ministry of Foreign Affairs
How?	▪ Collect data on actual utilization of PTA ▪ Regular consultation with the private sector; use of technology to gather comments from other sectors (incl. consumers)	▪ Most countries use general indicators ▪ Example: macroeconomic indicators (Republic of Korea), industry utilization indicators (Singapore)

! The use of indicators should be approached with caution (correlation ≠ causality)

2. Evaluation of the PTAs - The role of evidence

3) How to minimize the cost?

The role of evidence

1) Is the PTA worth?

2) How to do the negotiation?
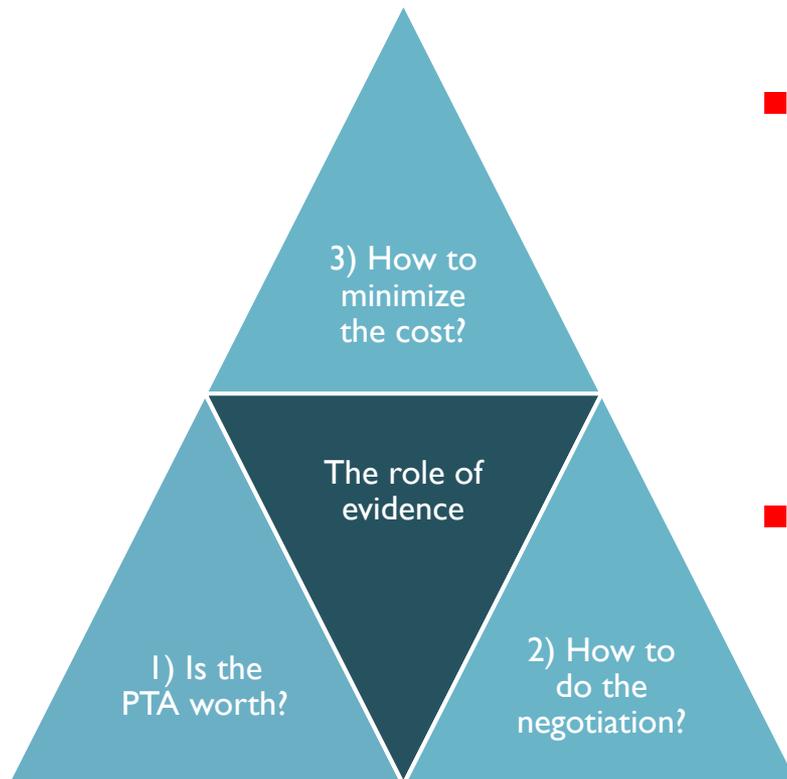
- Policy decisions should based on "evidence"
- **Ex-ante evidence** helps the pre-negotiation process
  - What are the potential impacts?
  - How to minimize the potential cost?
- **Ex-post evidence** helps monitoring and amendment (it includes data on utilization)

❖ A look back: How do 'governments' decide?

▶ Common decision factors

  ▸ Foreign policy goals

  ▸ A minister's 'hunch'

  ▸ Industry anecdotes ('opportunities')

  ▸ Concerns about being 'left behind

▶ Like any broad-based change in trade measures PTAs have potential impacts throughout the economy

  ▸ On employment, investment, technology, "specialization", productivity

▶ They should be evaluated in light of their economy-wide impacts

1. What is Evidence-based Policymaking?

▸ Politics can often be ideological or interest driven—as in the political economy of trade policy.

▸ There are analytical concepts that can help policymakers and analysts navigate the terrain and identify what is in the national interest, taking into account the effects on various groups.

▸ Evidence-based policymaking is the idea that policy design should be influenced by data, in addition to interests and ideas.

▸ How can PTA design use empirical evidence from economists and others?

1. What is Evidence-based Policymaking?

▸ Two main points of view for evidence-based policymaking regarding PTAs:

  ▸ Ex ante ("before"): Modeling of the likely effects of the agreement on trade flows, GDP, income distribution, wages, etc.

  ▸ Ex post ("after"): Modeling the observed effects of the agreement, typically focusing on trade flows, but also potentially other variables like wages, income distribution, etc.

▸ Policymaking is not a tidy or well ordered process, so few countries manage to implement the ideal combination of these two approaches.

1. What is Evidence-based Policymaking?

‣ The objective of combining ex ante and ex post approaches is twofold:

  ‣ Understand the potential implications of the agreement for the national economy, as well as the welfare of particular groups, so that it can be designed in a way that has the maximum possible benefits, and any negative effects can be dealt with.

  ‣ Look at the reality on the ground following implementation of the agreement, to see if practice meets with expectations, or whether there are factors impeding the flow of benefits, or increasing the size of any losses.

‣ Ex ante and ex post models can both be very complex, so it is important to involve experienced, well-qualified economists at an early stage.

❖ A look back: questions at different stages of policymaking

▸ Before negotiation of an FTA: An analysis of potential costs and benefits (ex-ante)

  ▸ What a country can supply to its FTA partners? What it can source from the partners?

  ▸ What are expected impacts on production and employment level and composition, welfare, fiscal balance, etc.

  ▸ What are the costs of necessary adjustment policies for the adversely affected sectors?

▸ After its implementation: An impact assessment (ex-post)

  ▸ Whether the impacts are within the expected range?

  ▸ Whether the expected benefits are fully materialized?

  ▸ Whether further adjustment policies are necessary?

The value of trade models

- It would be naive to imagine that there is an "answer" (unique, correct) to the questions posed by complex policy decisions

- Trade models are not intended to provide *an answer* but help to 'discipline the thinking' about possible answers

    - Mostly by representing the complex interactions within an economy in a framework that has no more detail than necessary

Modelling gains and losses from a PTA

‣ Economic models help policy makers to foresee where the gains and losses in a PTA will come from
  ‣ Revenue losses such as tariff revenues transferred to partners in the PTA
  ‣ Costs of (temporary) unemployment of labor, capital
  ‣ Other transfers such as increased IP royalties, fees
  ‣ Gains from trade (we'll look more closely at these)
    ‣ Static gains such as consumer welfare (surplus) gains
    ‣ Dynamic gains such as productivity improvements
‣ The precise results are less important than the scale and origin of the changes

‣

Choices for modelling PTAs

▸ Static equilibrium analysis

  ▸ The simplest, instantaneous, periodic analysis. Typically many limiting assumptions that may not be explicit

▸ General equilibrium analysis

  ▸ Complex (input-output matrix), dynamic, multi-period, 'feedback'-driven; arbitrary closure conditions

  ▸ Data intensive, sensitive to assumptions in behavioral functions

▸ "Gravity" modeling

  ▸ Seeks to associate ('explain') departures from "expected" trade trends; vulnerable to implausible assumptions

▸

Role of evidence

▸ Collect good data and understand what it means

  ▸ Data requirements for modeling (especially CGE) are onerous, high-level, global, trade-data sets such as GTAP have modest value in PTA projections.

▸ Pay careful attention to the 'counterfactual' when making/evaluating projections

▸ Develop alternative options at every level

  ▸ Never pick the 'winner' and then look for support in the data (that's the high-road to policy disaster)

▸ Always provide for a review against expected outcomes

  ▸ Be prepared to adjust or even change direction

▸

Some tips

▸ Policy-makers should pay attention to

  ▸ The choices modeled: sequence, breadth, depth, speed of tariff + NTB cuts, investment, services

  ▸ The 'null hypothesis': is the impact robustly non-zero (sensitivity tests?)

  ▸ The main drivers of the results (sectors, trade/investment, access barriers at home and abroad)

▸ The "acid test" --- replicate

  ▸ Ask PTA partners to model the same changes from the other side

  ▸ Different answers don't matter if the main drivers of the results are the same/similar

▸

Conclusion

▸ Evidence-based policymaking relies heavily on processes and institutions, in addition to the mechanics of using models and data.

▸ Policymakers often do not have the analytical background to understand the details of ex ante and ex post models, so there is an important role for researchers and policy advisers in "translating" results correctly.

▸ Analysis should start at an early point in the PTA process, and should ideally continue after the PTA is concluded.

▸ Key touchstones include independence, economy-wide nature, and inclusivity.

Conclusion

▸ Tools of evidence-based policymaking range from simple data analysis and comparison of trends, to complex theoretical and empirical models.

▸ It is important to choose the right set of tools for the job at hand, taking into account country capacity and available expertise.

▸ Whether the analysis is ex ante or ex post, the most important prerequisite for promoting national welfare and inclusivity is to ask the right questions, and interpret results strictly.

Annex

- More details on ex-ante and ex-post analysis

2. Ex Ante Analysis of PTAs

▸ Simple data analysis can be a low cost way of bringing empirical evidence into the PTA process.

▸ Relevant considerations include:
  ▸ Current tariff levels of and with prospective partners, with sectoral variations.
  ▸ Possible scenarios for post-agreement tariffs.
  ▸ Applied policies in services, investment, and trade facilitation, and likely changes.
  ▸ Bilateral trade flows with potential partners, and also with similar excluded countries.

▸ The idea of this kind of simple analysis is to confirm the choice of potential partners, and identify key issues for the negotiations to address.

▸ But basic data analysis on its own cannot say whether a PTA will be good or bad from a national welfare perspective, or from the perspective of different groups.

2. Ex Ante Analysis of PTAs

▸ The main tool for ex ante analysis of PTAs is the Computable General Equilibrium (CGE) model.

▸ CGE models are complex combinations of theoretical equations and real data.

▸ They do not make forecasts, but instead compare the current state of the world with a counterfactual.

▸ CGE models produce dollar estimates for items like trade flows and GDP, but most analysts prefer to look at relative effects across different scenarios.

2. Ex Ante Analysis of PTAs

- The most commonly used CGE framework in international trade is the Global Trade Analysis Project (GTAP):
  - 140 countries and regions
  - 57 sectors

- Information is highly aggregated compared with trade data, which identify many thousands of products.

- The framework needs to be adapted to the particular circumstances of each agreement, and requires substantial expert input.

- GTAP is primarily a database, but also a standard model—however, policy-relevant analysis typically needs to make substantial alterations to the standard framework, so it is not wise to simply "point and click" to design simulations.

2. Ex Ante Analysis of PTAs

▸ CGE models rely on a host of theoretical assumptions, but sophisticated modelers often present scenarios with different assumptions so that the effects of particular mechanisms can be made clear.

▸ Key issues include:
  ▸ Behavioral parameters, such as consumers' willingness to substitute one product for another.
  ▸ Market clearing assumptions.
  ▸ Full employment, or labor market slack.

▸ Model outputs depend to some extent on what is included as inputs. Core variables usually include:
  ▸ Bilateral trade flows.
  ▸ Various measures of economic welfare and GDP.
  ▸ Wages (potentially disaggregated by skill level).
  ▸ Domestic production and consumption.

2. Ex Ante Analysis of PTAs

▶ The most straightforward task for a CGE model is to analyze the implications of tariff-only PTA. The theory is relatively simple, and the empirics are well developed.

▶ But that scenario is not relevant to most modern PTAs.

▶ Applications in other areas are much more subject to uncertainty, due to data limitations and needed theoretical developments.
  ▶ Services.
  ▶ Investment.
  ▶ Trade Facilitation.

▶ In these "new" areas, modeling assumptions often do a lot to drive results.

2. Ex Ante Analysis of PTAs

▸ The simplest CGE models are static: they compare the current state of the world with a counterfactual, holding all other factors constant.

▸ More complex models are dynamic: they calculate a counterfactual pathway covering multiple years.

▸ Dynamic CGE models still do not produce forecasts! They are counterfactuals—this point is almost always lost on policymakers.

▸ Modeling assumptions again play a crucial role in how CGE models produce dynamic results, so they are perhaps most informative in terms of relative impacts rather than single dollar amounts.

2. Ex Ante Analysis of PTAs

- The data core of a CGE model is a set of input-output relationships across sectors: each sector uses products from a range of other sectors in making its own product or service.

- Compiling and harmonizing these kinds of tables is a major achievement of the GTAP consortium.

- Input-output relationships are important not just from an economic perspective, but also for political economy reasons: they help identify industries that gain or lose from liberalization, taking into account cumulative effects.

2. Ex Ante Analysis of PTAs

▶ Standard CGE models can disaggregate results for producers and consumers, distinguishing among different sectors, and can look at government revenue effects.

▶ Extensions deal with labor market disaggregation (for instance by skill level).

▶ An innovative application by the World Bank at the beginning of the Doha round linked CGE models with household survey data, to assess the likely effects of liberalization on poverty.
   ▶ Takes into account household production and consumption patterns.
   ▶ Can be adapted to consider inequality in addition to poverty.
   ▶ Subject to data constraints, could conceivably be extended to look at gender issues.

2. Ex Ante Analysis of PTAs

- Ex ante analysis of PTAs is an important input into the policymaking process, but the strengths and weaknesses of the approach are often misunderstood.

- Perhaps the least appreciated fact is that standard CGE models do not produce forecasts, but counterfactuals: scenarios keeping all other factors constant.

- At a political level, there is a tendency to attach great importance to the dollar numbers that come from CGE models. But many analysts prefer to look at relative impacts in different scenarios.

3. Ex Post Analysis of PTAs

▶ Many policymaking processes stop at the point when a PTA is implemented.

▶ But it is important to establish a feedback loop in policymaking, where actual experience with implementation informs subsequent government action.

▶ For example, the Australian Productivity Commission found that businesses were generally lukewarm towards Australia's PTAs—an important piece of information for governments keen to increase utilization.

▶ The devil is often with the details in PTAs—such as rules of origin. Conducting an ex post analysis can highlight successes and failures, and identify areas for further work.

3. Ex Post Analysis of PTAs

▸ As with ex ante analysis, it is possible to start with simple data analysis and presentation techniques.

▸ The econometric idea of "differences in differences" can be used intuitively to provide some rough information on the effectiveness of a PTA in promoting trade:

   ▸ Calculate trade growth with PTA partners.
   ▸ Calculate trade growth with "similar" countries not in the PTA.
   ▸ Compare the growth rates: within agreement growth should be substantially higher if it is doing its job.

▸ Note the major limitation of this approach: it says nothing about welfare or trade diversion, and is only a raw indicator of an agreement's effectiveness in promoting bilateral trade among members.

3. Ex Post Analysis of PTAs

▸ An analogous approach is the use the UNESCAP-World Bank Trade Costs Database, which measures bilateral trade costs in ad valorem equivalent terms.

  ▸ All factors that drive a wedge between producer and consumer prices.

  ▸ Covers a wide range of issues addressed in PTAs beyond tariffs, including "behind the border issues".

▸ Again, an intuitive approach based on the idea of "differences in differences" can be informative:

  ▸ Calculate the change in trade costs with countries within the PTA.

  ▸ Calculate the change in trade costs with "similar countries" outside the PTA.

  ▸ If the PTA is doing its job, within agreement trade costs should fall much further and faster than trade costs outside the agreement.

3. Ex Post Analysis of PTAs

▸ A higher cost, but also relatively simple, approach is to use surveys to elicit information from potentially affected parties, including businesses and consumers.

▸ Information obtained can cover utilization, persistence of informal trade barriers, and changes in consumption and income patterns over time.

▸ Surveys are also useful from an inclusiveness point of view, as they provide an avenue for affected parties to express their points of view and experiences.

▸ They are part of a broader institutional process of consultation, continuing from the pre-PTA stage through implementation and experience.

3. Ex Post Analysis of PTAs

▶ Econometrics—applied statistics in the realm of economics—is the primary tool for conducting rigorous ex post analysis of PTAs.

▶ As with CGE models, econometric models combine theory and data.

▶ The fundamental difference is that econometric models produce estimates of key parameters based on observed patterns in the data, rather than simulated effects based on possible scenarios.

  ▶ Econometric models can also be used for counterfactuals under some circumstances, but their structure is generally much simpler than that of CGEs, particularly when it comes to accounting for input-output linkages.

3. Ex Post Analysis of PTAs

‣ In some ways, econometrics is a more flexible toolbox than CGE modeling: the range of feasible exercises is wider, limited in effect only by the available data.

‣ The main disadvantage of econometric modeling is that it is based on observed relationships, and therefore is typically not very informative on unobservables, like economic welfare.

‣ Common models can be modified to provide welfare effects, but theory then plays a very strong role compared with the data.

3. Ex Post Analysis of PTAs

‣ The simplest approach to econometric modeling is to use an "off the shelf" model like gravity.

   ‣ Relatively easy to implement.
   ‣ But relatively limited in what it can be informative about.

‣ Gravity was originally based on an analogy with physics:

   ‣ Countries that are larger trade more.
   ‣ Countries that are further away trade less.

‣ It now has strong theoretical underpinnings, and can be derived from a variety of standard microeconomic assumptions.

3. Ex Post Analysis of PTAs

▸ Gravity requires data on bilateral trade (dependent variable), and data on trade costs (independent variables), as well as potentially other factors that influence trade, like GDP (control variables).

▸ A simple application of gravity modeling to PTAs would be to include a dummy variable for PTA membership among the trade costs variables.

▸ Gravity can potentially identify differences in trade effects between members and non-members, although the interpretation is not directly in terms of trade creation and trade diversion.

3. Ex Post Analysis of PTAs

▸ Of course, effective and robust gravity modeling requires sophisticated approaches.

▸ A low cost entry point is UNESCAP's Gravity Modeling Tool: a simple online interface that allows estimation of basic models.

▸ More advanced techniques are covered in UNESCAP's Gravity Model Handbook, as well as specialist publications in journals and working papers.

▸ Sophisticated gravity applications require high level econometric knowledge and experience.

3. Ex Post Analysis of PTAs

▸ Although gravity is a widely used framework, it is by no means the only way of using econometrics in applied trade policy work.

▸ Many other types of data can be set up as the dependent variable:
  ▸ Employment
  ▸ Wages
  ▸ Productivity
  ▸ Inequality
  ▸ Poverty

▸ The list is only limited by the available data.

▸ Of course, going outside an OTS framework requires a bespoke model—so this is the domain of experts experienced in applied econometrics.

3. Ex Post Analysis of PTAs

‣ Perhaps the most important aspect of using econometrics for ex post analysis of PTAs is asking the right set of questions:

   ‣ Questions econometrics can answer.

   ‣ Relationship between theory and data.

   ‣ Important from a policy perspective.

   ‣ Not over-interpreting simple models like gravity.