Is the WTO passé?
The Deep Trouble with Shallow Integration

(Based loosely on Bagwell, Bown and Staiger “Is the WTO Passé?”)

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Globalization means many things
  
  • sometimes hard to pin down
  • but we know it when we see it
  • and we are seeing a lot of it
Introduction

- Globalization means many things
  - sometimes hard to pin down
  - but we know it when we see it
  - and we are seeing a lot of it

- Individuals are the ultimate drivers of globalization, but governments set the rules of the game
  - the rules can be very important to the outcome
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The rules solve problems that would arise under “law of the jungle.”
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- A focus on tariffs and other trade impediments imposed at the border.
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But the WTO’s Doha Round, begun in 2001, has disappointed.

Meanwhile, the action has moved elsewhere.
An Evolution from Shallow to Deep Integration

- With the most recent wave of globalization...
  - rise of offshoring and global supply chains
  - rise of large emerging economies

- ...the WTO seems to be stumbling
An Evolution from Shallow to Deep Integration

- With the most recent wave of globalization...
  - rise of offshoring and global supply chains
  - rise of large emerging economies

- ...the WTO seems to be stumbling

- ...we are witnessing a clear evolution from shallow to deep integration
  - The Transatlantic Trade and Investment Partnership (TTIP) between the United States and the EU
  - The Trans Pacific Partnership (TPP)
  - To some extent in the WTO

- ...and a strong backlash against at least some dimensions of globalization
  - from those who have not shared in the gains
  - from those who feel sovereignty of their governments has been eroded
What’s at Stake?

- What’s at stake?
  - the future path of globalization
  - which international institutions will set the rules of globalization
  - what trade-offs we will face in our globalized world
Now more than ever, globalization’s challenges demand a nuanced response based on a solid understanding of the problems.
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Important to understand:
- why GATT worked
- the economic environment it is best suited for
- whether changes in the economic environment imply the need for changes in design of trade agreements
Two interpretations of how we arrived here

- The rise of offshoring and BRICS has altered (deepened) the kinds of rules needed to avoid "the law of the jungle". Shallow integration is in trouble, but its problems are addressable. A trade-off between sovereignty and globalization is avoidable, but only if the WTO is supported and its approach strengthened.

- The rise of offshoring and BRICS has created major new challenges for the WTO, but the kinds of rules needed to avoid "the law of the jungle" are still the same. Shallow integration is in deep trouble, its problems not addressable.

To evaluate these possibilities, we first need to understand how GATT worked.
Two interpretations of how we arrived here

One possibility: the rise of offshoring and BRICS has altered (deepened) the kinds of rules needed to avoid “the law of the jungle”

- Shallow integration in deep trouble, its problems not fixable
- A trade-off between sovereignty and globalization now unavoidable
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A second possibility: the rise of offshoring and BRICS has created major new challenges for the WTO, but the kinds of rules needed to avoid “the law of the jungle” are still the same
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- Externalities lead to inefficient choices, and cross-border policy externalities lead to internationally inefficient policies
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- but economics ⇒ a crucial point: under the law of the jungle, only trade policies, not domestic policies, will be set inefficiently
Economists propose two methods to correct such inefficiencies:

- tax the choices that lead to (negative) externalities; or
- let the parties bargain to efficient choices

In creating GATT, countries did not create a supranational taxing authority to pursue the first method. They created a bargaining forum to pursue the second method. For bargaining to be effective, need secure property rights over (in this case) market access. Govs agreed to bargain over tariffs (shallow integration), but what about domestic policies?
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GATT’s Shallow Integration Approach

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- Responding to trade pressures by weakening domestic standards ≡ Race to the Bottom

- Shallow integration ⇒ A major race to the bottom would undermine GATT bargaining forum; possibility of race to the bottom mitigated by nondiscrimination clause and policed by nonviolation claims
A Market for Market Access

- To exchange market access, need to agree on price/terms of exchange
  - could bargain freely, but that can be cumbersome
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To minimize haggling over price, GATT adopted norm of *reciprocity*:
  - if A wants to buy $10 million worth of market access from B, then A must supply $10 million worth of its own market access
  - if B wants to buy the $10 million worth of market access that A is offering, then B must supply the $10 million worth of its own market access that A wants
The Power of Reciprocity

Under reciprocity, if tariffs of A and B are inefficiently high to the same broad degree...

- the market for market access should clear
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- But reciprocity also served a more subtle role...
To appreciate, need to realize that all GATT bargains are nondiscriminatory

- if A negotiates a tariff cut with B, exporters from C also enjoy B’s lower tariff
- how to handle free riders? several techniques, but reciprocity helps...
What You Get...

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  - if A negotiates a tariff cut with B, exporters from C also enjoy B’s lower tariff
  - how to handle free riders? several techniques, but reciprocity helps...

- If a Gov offers as much market access as it secures abroad in negotiation, its own tariff cuts boost productivity of its exporters by enough to supply the new imports demanded by its trading partner
  - ⇒ minimal free riding on GATT market access bargains
In GATT/WTO bargaining, what you get is what you give
...Is What You Give

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  - developing countries were given a “pass” from reciprocal bargaining
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So yes, GATT worked, but only for those countries who bargained their own tariffs down: industrialized countries.

- developing countries were given a “pass” from reciprocal bargaining.

- As a group developing countries experienced few trade gains from 60 years of GATT/WTO-sponsored tariff negotiations.
The central message of *Behind the Scenes at the WTO: the real world of international trade negotiations*:

“Developed countries are benefitting from the WTO, as are a handful of (mostly upper) middle-income countries. The rest, including the great majority of developing countries, are not. It is as simple as that.”

...based on interviews with WTO delegates and Secretariat staff

but this position is also supported by econometric analysis

⇒ Task of shallow integration not complete
What About The Rest?

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- Task of shallow integration not complete
  - average US tariff is 3.5%, EU is 5.2%, but...
  - India is 48.6%, Brazil is 31.4%, South Africa is 19% and China is 10%
  - And much of gain would likely go to developing/emerging countries
  - But there’s a catch...
...developed countries may have already achieved the degree of “openness” that they desire

Two “latecomer” issues then follow:

- **bargaining power** – developed countries may have little left to offer developing countries in reciprocal bargains, hence difficulty in negotiating reductions in developing country tariffs

- **globalization fatigue** – developed country tariffs may be too low for world in which developing countries fully integrated into trading system
The Challenge of the BRICS...

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But *scale* of latecomers problem in Doha is unprecedented

- still needed: a substantial reorientation of trade patterns further away from North-North and toward North-South and South-South
...And a Deeper Challenge

- A (shallow) problem with Shallow Integration: tariff asymmetries between industrialized countries and the BRICS
  - Shallow integration is in trouble, but its problems are fixable
  - A trade-off between sovereignty and globalization is avoidable, but only if the WTO is supported and its approach strengthened
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- But shallow integration may face a deeper challenge: rise of offshoring/global supply chains
Offshoring may be changing nature of international policy externalities
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Recall: for **1947-style globalization**, economics ⇒ under the law of the jungle, only trade policies, not domestic policies, will be set inefficiently

But with **offshoring**, economics ⇒ under law of the jungle, *all* policies, trade and domestic, may be set inefficiently

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∴ The rise of offshoring may have altered (deepened) the kinds of rules needed to avoid “the law of the jungle”
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$\therefore$ The rise of offshoring may have altered (deepened) the kinds of rules needed to avoid “the law of the jungle”

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\[\therefore\text{The rise of offshoring may have altered (deepened) the kinds of rules needed to avoid “the law of the jungle”}\]

- \(\Rightarrow\text{Shallow integration in deep trouble, its problems not fixable}\)
- A trade-off between sovereignty and globalization now unavoidable
So is sovereignty/globalization trade-off now unavoidable?

Maybe, but before concluding that, we need a correct diagnosis of
- the problems faced by the WTO and
- the reasons for the rise of deep integration PTAs
The Case Against Deep Integration

- It is possible that rise of offshoring has not changed the nature of international policy externalities...
  - depends on subtle features of offshoring

- or has changed the nature of the policy externalities only temporarily...
  - offshoring itself may be a transitory phenomenon, or its impact on nature of international policy externalities may be transitory

- and that the latecomers problem is key challenge for WTO, while deep integration PTAs largely reflect redirected "Social Clause" efforts
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- And even if not, substantial unrealized gains from shallow integration likely remain for emerging market countries
Concluding Thoughts

- So the GATT/WTO’s shallow integration approach is not passé
- Subject to some caveats, it receives strong support from basic economic principles
- It can be improved upon, but the effort to do so is worth it, and the stakes are high
  - which international institutions will set the rules of globalization
  - what trade-offs we will face in our globalized world
- As an international institution, the WTO provides the best hope for balance between globalization and national sovereignty
Robert E. Hudec (1990):

“...The standard trade policy rules could deal with the common types of trade policy measure governments usually employ to control trade.

“But trade can also be affected by other ‘domestic’ measures, such as product safety standards, having nothing to do with trade policy.

When GATT was created in 1947, “...governments would never have agreed to circumscribe their freedom in all these other areas for the sake of a mere trade agreement.”
Building Boeing’s 787 is a global affair

Airlines have ordered more than 600 of the 787 Dreamliners which Boeing promises will burn less fuel and cost less to maintain. Parts of the plane come from around the world.

SOURCE: Boeing
Although this chart suggests that living standards are indeed improving in developing economies, it does not accurately reflect their importance as export destinations. This is because a country's ability to purchase imports depends more on its nominal dollar income than on income at purchasing power parity. From this perspective, the share of developing and emerging economies in world output rose to 40 per cent from 23 per cent between 2000 and 2012. This is a large increase in terms of percentage points but it also means that developing economies are responsible for less than half of world income.

The figures above demonstrate that developing and emerging economies have recorded impressive GDP growth rates in the last decade or so. However, economic growth should not be seen as an end in itself. Rising incomes are arguably only important insofar as they advance more fundamental societal goals, including but not limited to improving living standards, alleviating extreme poverty, increasing access to health care and education, reducing inequality and preserving the natural environment. The relationship between economic growth and these other dimensions of development are explored below.

Figure B.10 illustrates the increasing share of developing and emerging economies in world merchandise exports since 1995 (qualitatively similar shares can be observed on the import side as well). The share of emerging economies alone in world exports increased between 1995 and 2000, but only from 13 per cent to 16 per cent. However, between 2000 and 2012 this share leapt to 28 per cent despite the global financial crisis in 2009. The share of LDCs in global exports was negligible throughout the period, but the share of Other developing economies rose from 16 per cent in 1995 to 20 per cent in 2012. Collectively, the share of developing and emerging economies increased from 33 to 48 per cent over the same period.

(d) Heterogeneity of development experiences

There are other aspects to development than simply growth alone. If rising output and higher incomes did not allow people to obtain a better standard of living, development would not be worth pursuing. As it happens, the evidence does suggest that per capita GDP growth does contribute to several dimensions of quality of life, but these gains are not uniformly distributed. In this section, we rely on
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need to maintain militarily important industries), the postwar economic crisis (especially with regard to industries that had been created or expanded during the war, and needed protection in order to survive the peace), and the formation of new countries, which not only increased the number of trade barriers, but also their magnitude, since most new states attempted to stimulate industrial development through protection (e.g., Czechoslovakia). Currency devaluations also provoked offsetting increases in tariffs. Even Britain began to impose selective import duties from 1921, until it adopted a general tariff in 1932. Table 10.1 shows some changes in tariff levels from 1913 to 1931.

Leaving aside the purely domestic reasons for higher trade barriers after the war, what is of interest here are the reasons why the relatively cooperative prewar system of international bargaining over trade barriers broke down during the 1920s. The principal explanation offered here is that the MFN norm allowed an unacceptable degree of free-riding behavior on the part of countries that refused to negotiate reductions in protection. Before examining this breakdown, and the means of privatizing trade concessions that accompanied it, one must answer the question of why the system failed.

<table>
<thead>
<tr>
<th></th>
<th>1913</th>
<th>1931</th>
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</thead>
<tbody>
<tr>
<td>Germany</td>
<td>16.7</td>
<td>40.7</td>
</tr>
<tr>
<td>France</td>
<td>23.6</td>
<td>38.0</td>
</tr>
<tr>
<td>Italy</td>
<td>24.8</td>
<td>48.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>14.2</td>
<td>17.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>10.5</td>
<td>26.4</td>
</tr>
<tr>
<td>Austria</td>
<td>22.8</td>
<td>36.0</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>22.8</td>
<td>50.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>22.8</td>
<td>45.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>27.6</td>
<td>26.8</td>
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<tr>
<td>Finland</td>
<td>35.0</td>
<td>48.2</td>
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<tr>
<td>Poland</td>
<td>72.5</td>
<td>67.3</td>
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<tr>
<td>Romania</td>
<td>30.3</td>
<td>63.0</td>
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<tr>
<td>Yugoslavia</td>
<td>22.2</td>
<td>46.0</td>
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<td>Bulgaria</td>
<td>22.8</td>
<td>96.5</td>
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<tr>
<td>Spain</td>
<td>37.0</td>
<td>68.5</td>
</tr>
<tr>
<td>United States</td>
<td>41.0</td>
<td>53.0</td>
</tr>
</tbody>
</table>

Sources: Liepman (1938:415), Humphrey (1955:74)
Table 5

incidence on a specific list of products. Although the data are not strictly comparable with those of Woytinski, they nevertheless confirm the general view of the existence of a low tariff country group (rates varying between 5 and 9 per cent, comprising the Benelux countries, Denmark and Sweden) and another group with distinctively higher tariff rates, ranging from 16 to 24 per cent (including the United States, Germany, the United Kingdom, France and Italy in ascending order). The industrial countries’ arithmetic average of applied tariff rates was still between 10 and 20 per cent (see Appendix Table 7). These estimates also include in principal the cuts made in the third round (Torquay).

These average tariff rate estimates reported in 1950 and 1952 permit a plausible guess about the tariff average prevailing before the first Round. On the assumption that the average tariff cut of the industrial countries did not exceed that of the United States (i.e. 27 per cent cumulative between 1947 and 1950 or 31 per cent cumulative between 1947 and 1952) it is most likely that in 1947 the average tariff rate was situated in a range between 20 and 30 per cent. This estimate differs sharply from the widely quoted 40 per cent tariff average for industrial countries. Although this estimate is frequently reported there is no study to the knowledge of the authors of this report which indicates the source and the method (country coverage, product coverage, type of tariff) of how this average rate was estimated.53

Table 5

<table>
<thead>
<tr>
<th>GATT/WTO – 60 years of tariff reductions</th>
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<tbody>
<tr>
<td>(MFN tariff reduction of industrial countries for industrial products (excl. petroleum))</td>
</tr>
<tr>
<td>Implementation Period</td>
</tr>
<tr>
<td>1948</td>
</tr>
<tr>
<td>1950</td>
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<td>1952</td>
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<td>1956-58</td>
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<td>1962-64</td>
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<td>1968-72</td>
</tr>
<tr>
<td>1980-87</td>
</tr>
</tbody>
</table>

Note: Tariff reductions for the first five rounds refer to the United States only. The calculation of average rates of reductions are weighted by MFN import values.

Source:
Uruguay Round (1986-94): GATT, The Results of the Uruguay Round of Multilateral Trade Negotiations, November 1994, Appendix Table 5 and own calculations. Refers to eight markets (United States, EU(12), Japan, Austria, Finland, Norway, Sweden and Switzerland).

52 Tariff average for the same products retained in the League of Nations tariff estimates for 1913 and 1925 and based on arithmetic average for these 78 commodities (corresponding to 530 items).

53 To our knowledge this pre-GATT average tariff rate was reported for the first time in the World Bank Development Report 1987 (p. 134): “successive rounds of negotiations in GATT had cut tariffs on trade in manufactures from an average level of 40 per cent in 1947 to between 6 per cent and 8 per cent for most industrial countries even before the last round of multilateral trade negotiations (the Tokyo Round, 1973-79) had taken place”. No details are provided on sources and methods used to arrive at this number of 40 per cent. Thereafter, this number was taken up by many other authors in books, articles and pamphlets, but no one gives a hint at methods or data used to arrive at this implausible estimate of 40 per cent.
Figure 1: Reciprocal MFN Tariff Cutting
Is tariff cutting done?

Trade Policy under the WTO, 2012

<table>
<thead>
<tr>
<th>Economy</th>
<th>MFN Applied rate</th>
<th>Binding rate</th>
<th>Binding coverage</th>
<th>Percent of MFN applied with tariff peaks (&gt; 15%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G20 High-income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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E. Wyndham White on the *bargaining power* issue faced in the 1950-51 Torquay Round...

“...*A number of European countries with a comparatively low level of tariff rates considered that they had entered the Torquay negotiations at a disadvantage. Having bound many of their rates of duty in 1947 and 1949, what could these low-tariff countries offer at Torquay in order to obtain further concessions from the countries with higher levels of tariffs?”*

...and on an early version of *globalization fatigue*:

“The Torquay negotiations took place under conditions of much greater stress than those which prevailed at the time of the Geneva or Annecy Conferences. Besides, ...many of the countries...felt they needed more time to digest and to assess the effects of the concessions already made before making further cuts in their tariffs.” (ICITO, 1952, pp. 9-10).
According to a recent study by Arvind

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Related topics:
- Economic crisis
- Gross Domestic Product
- Coincident Economic Indicators
- Economic indicators
- Brazil
Fragmentation of production: the example of the Boeing 787 Dreamliner

Wing box: Mitsubishi Heavy Industries (Japan)
Wing ice protection: GKN Aerospace (UK)
Centre fuselage: Alenia Aeronautica (Italy)
Forward fuselage:
  - Kawasaki Heavy Industries (Japan)
  - Spirit Aerosystems (USA)

Rear fuselage:
  - Boeing South Carolina (USA)
  - Zodiac Aerospace (USA)
  - PPG Aerospace (USA)
Lavatories:
  - Jamco (Japan)
  - Esterline (USA), Moog (USA)

Vertical Stabiliser:
  - Boeing Commercial Airplanes (USA)
  - Alenia Aeronautica (Italy)
Aux. power unit: Hamilton Sundstrand (USA)

Raked wing tips:
  - Korean Airlines Aerospace division (Korea)

Passenger doors:

Centre wing box:
  - Fuji Heavy Industries (Japan)
  - GE Engines (USA), Rolls Royce (UK)
  - Engine nacelles: Goodrich (USA)

Escape slides: Air Cruisers (USA)
Flight deck seats: Ipeco (UK)
Flight deck controls:
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Tools/Software:
  - Dassault Systemes (France)
  - Mapics (USA)
Figure 1: Ratio of Value-Added to Gross Exports for the World

Figure 2: Ratio of Value-Added to Gross Exports for the World, by Sector

(a) Agriculture, Forestry, and Fishing  
(b) Non-Manuf. Industrial Production  
(c) Manufacturing  
(d) Services
Figure 1: Reciprocal MFN Tariff Cutting
Fragmentation of production: the example of the Boeing 787 Dreamliner

- Wing box: Mitsubishi Heavy Industries (Japan)
- Wing ice protection: GKN Aerospace (UK)
- Centre fuselage: Alenia Aeronautica (Italy)
- Forward fuselage:
  - Kawasaki Heavy Industries (Japan)
  - Spirit Aerosystems (USA)
- Rear fuselage:
  - Boeing South Carolina (USA)
- Doors & windows:
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  - Navigation: Honeywell (USA)

Staiger (Dartmouth College)  Deep Trouble with Shallow Integration  March 2017  38 / 42
Figure 1: Ratio of Value-Added to Gross Exports for the World

![Graph showing the ratio of value-added to gross exports for the world from 1970 to 2010, with and without ROW.]

Figure 2: Ratio of Value-Added to Gross Exports for the World, by Sector

(a) Agriculture, Forestry, and Fishing

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![Graphs showing the ratio of value-added to gross exports for different sectors from 1970 to 2010.]
complement and extend an established literature on international trade agreements (see Bagwell and Staiger 2010, for a recent review). In suggesting a novel rationale for trade agreements, our paper also complements the recent papers of Ossa (2011) and Mrázová (2009). Second, by considering endogenous trade policy choices in this environment, we complement and extend a recent literature that has begun to study the impacts of (exogenous) tariffs on international hold-up problems. Ornelas and Turner (2008a) develop a model in which import tariffs on intermediate inputs are shown to aggravate the hold-up problem in international vertical relationships, with the implication that trade liberalization may lead to a larger increase in trade flows than in standard models. Ornelas and Turner do not, however, study optimal trade policies or the possibility of trade agreements in their framework. McLaren (1997) studies the desirability of announcing a future trade liberalization in a model where producers incur sunk costs to service foreign markets, but his framework emphasizes commitment problems from which we completely abstract.

Finally, while the broad conclusions we emphasize above do not require that bilateral bargaining over price necessarily leads to a hold-up problem, we choose to derive our results in a setting where the international hold-up problem would arise in the absence of government intervention. In this regard there is a large literature proposing

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7 The independent paper of Ornelas and Turner (2008b) does begin to explore the welfare implications of tariffs in this kind of environment, but they do not consider the role of trade agreements.

8 Similarly, Antràs and Helpman (2004) and Díez (2008) study the effect of trade frictions on the choice of organizational form of firms contemplating offshoring, but they also treat trade frictions as exogenous.

9 Yarbrough and Yarbrough (1992) also emphasize commitment problems associated with trade relationships that involve substantial relationship- (or market-) specific investments, but they focus on how these issues affect the choice between unilateral liberalization, bilateral agreements, and multilateral agreements.
Finally, we examine whether the impact of production networks trade on the likelihood of signing deeper agreements is more pronounced for countries belonging to the Asia region. Papers such as Ando and Kimura (2005), Kimura et al. (2007) and Athukorala and Menon (2010) show that production networks are an extremely important phenomenon for this region. In addition, one feature that makes Asian production networks distinctive is that they take place between countries of different income levels. In the region, the growth of production sharing first took place through *de facto* economic integration. However, deep integration is necessary for production networks to continue to prosper.

Results show that higher levels of trade in production networks increase the likelihood of signing deeper agreements containing provisions of regulatory nature such as TRIPS, intellectual property rights and movement of capital. This effect is still significant after taking into account other PTA determinants, such as the economic similarity between countries and their differences in relative factor endowments. As expected, the probability of signing deeper agreements is higher for country pairs involved in North–South production networks or belonging to the Asia region.

The paper is organised as follows. Section 2 discusses the definition and measurement of deep integration, presents the data sources and shows some descriptive evidence. Section 3 analyses the effect of deep integration on production networks trade. Section 4 investigates the impact of production networks on the likelihood of signing deeper agreements. Section 5 concludes.

### 2. DATA SOURCES AND VARIABLE DEFINITIONS

For our investigations, we use WTO data on the content of preferential trade agreements based on a comprehensive mapping and coding of 96 PTAs signed during the time interval 1958–2010. The agreements included in this mapping represent almost 90 per cent of world trade and cover most regions from around the world. Due to the availability of trade data,

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5. This data set has been created by the Research division of the WTO for the World Trade Report (2011) (available at http://www.wto.org/english/res_e/publications_e/wtr11_dataset_e.htm).

6. The regions covered are North America, the EU, South, East and West Africa, Middle East, Oceania, Asia, Central and South America.
Table 1. World trade in intermediates

<table>
<thead>
<tr>
<th>Values (billion US$)</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-North</td>
<td>780.7</td>
</tr>
<tr>
<td>North-South</td>
<td>254.5</td>
</tr>
<tr>
<td>South-North</td>
<td>191.3</td>
</tr>
<tr>
<td>South-South</td>
<td>125.8</td>
</tr>
</tbody>
</table>

The integration of developing countries into GSCs is not uniform and largely depends on their income level (table 2). Upper middle-income countries’ exports of intermediate products take more than half of total exports of intermediate products from developing countries. At the regional level, the East and South-East Asian region accounts for almost two-thirds of developing countries’ exports of intermediate products. Latin America and East Europe (including economies in transition) represent another 30 per cent. The remainder is shared among South Asia, West Asia and North Africa, and sub-Saharan Africa. For countries in these regions, participation in GSCs although increasing is still rather limited.

Table 2. Exports of intermediate products for developing/transition country income groups and regions

<table>
<thead>
<tr>
<th>Income group / Region</th>
<th>Value of intermediate export, in billion US$</th>
<th>Annual growth rate, 1993-2008 (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-income countries</td>
<td>1 035.2</td>
<td>3 609.5</td>
</tr>
<tr>
<td>Middle upper-income countries</td>
<td>223.9</td>
<td>1 173.8</td>
</tr>
<tr>
<td>Middle lower-income countries</td>
<td>65.2</td>
<td>798.2</td>
</tr>
<tr>
<td>Low-income countries</td>
<td>28.1</td>
<td>200.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 352.4</strong></td>
<td><strong>5 782.2</strong></td>
</tr>
</tbody>
</table>

**Developing countries region**

| East and South-East Asia                       | 192.0                                       | 1 343.1                                 | 1 075.2                  | 13.8                                  |
| East Europe                                   | 40.8                                        | 372.3                                   | 231.1                    | 15.9                                  |
| Latin America                                 | 58.3                                        | 279.0                                   | 220.5                    | 11.0                                  |
| Middle East and North Africa                  | 4.1                                         | 37.2                                    | 24.9                     | 15.8                                  |
| South Asia                                    | 9.7                                         | 74.2                                    | 49.3                     | 14.5                                  |
| Sub-Saharan Africa                            | 12.2                                        | 67.0                                    | 45.0                     | 12.0                                  |

Developing country participation in GSCs is still mostly related to supplying developed countries’ markets. Although on the rise, South-South production networks are relatively less developed and mainly limited to East and South-East Asia. Trade in intermediate products within the East and South-East Asia region in 2009 accounted for about 9.6 per cent of world trade in intermediate products (up from about 6.1 per cent in 1993). Similar figures for the East European and Latin American regions are much lower (about 1.9 per cent and 1.1 per cent respectively). Other regions are lagging behind as their regional trade accounts for less than 0.2 per cent of world trade in intermediate products. South-South chains that span across regions appear to be still quite underdeveloped, even those based in the East and South-East Asia region (table 3).