A World Trading System for the Twenty-First Century

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GATT performed well for much of the 20th century
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- hosted eight rounds of multilateral negotiations beginning with the Geneva Round of 1947 and culminating in the Uruguay Round which created the WTO in 1995
- helped to dismantle a web of restrictive trade protections that had been erected in the 1920’s and 30’s, and ushered in a wave of globalization over the next 60 years that transformed the world economy
- by the time the results of the Uruguay Round had been fully implemented, average tariffs on industrial goods had been reduced to below 4% and quantitative restrictions were largely eliminated
Motivation

- But challenges to the WTO’s position at the top of the world trading system are piling up.

  - China’s 2001 accession to the WTO has challenged an approach to globalization that was designed fundamentally with market economies in mind.
  - The rise of large emerging and developing economies in the world trading system more generally has placed new demands on a system that traditionally catered to industrialized country interests.
  - And the rise of offshoring and global supply chains has changed the nature of trade itself.
  - More recently the increasing importance of digital trade makes WTO rules, crafted in a largely pre-digital world, look out of date.
  - And the increasing urgency of addressing climate change raises the question of what role the WTO should play in this effort.

Meanwhile, the shallow approach to integration pioneered by GATT has been eclipsed by deeper forms of integration with a focus on the trade effects of behind-the-border measures and increasingly on regulatory harmonization as an end in itself.

Do we need a new world trading system to meet the challenges of the 21st century?
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I consider the purpose of a trade agreement in a world stripped of the 21st century challenges enumerated above:

- I show that the fundamental design features of GATT are well-equipped to serve this purpose in such a world
- and I argue that this harmony between purpose and design can help account for the success of the GATT/WTO in the 20th century
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I then ask: Do any of these 21st century challenges change the purpose of a trade agreement?

- The answers can illuminate the nature of the challenges faced by the WTO and the world trading system
Main Findings

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- And I argue that according to this understanding the logic of GATT’s design features transcend many, though not all, of the current challenges faced by the WTO.

  - The challenges posed by China’s economic model, the rise of large emerging and developing economies in the world trading system more generally, digital trade, and accommodating efforts to address climate change can in principle all be addressed by exploiting the logic of GATT’s design.

  - The rise of offshoring and the push for regulatory harmonization as an end in itself may create the need for more fundamental changes to the GATT/WTO.
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- With this advice I am not claiming that reforms to the world trading system are not needed, or that all is well at the WTO.

- But I am claiming that the basic architecture of the GATT/WTO – and of the GATT, in particular – is well-suited to guide the design of the world trading system of the 21st century.
In a broad set of environments the purpose of a trade agreement is the same: to eliminate terms-of-trade manipulation from tariffs and expand market access to efficient levels, and thereby to provide an escape from a terms-of-trade driven Prisoner’s Dilemma.
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- Holds under a wide array of government objectives that include political economy and distributional concerns, and leads to an expansion of market access (Bagwell and Staiger, 1999, 2002).

- Holds in a many-country perfectly competitive world provided that tariffs conform to MFN (Bagwell and Staiger, 1999, 2002), and holds for general equilibrium or partial equilibrium environments (Bagwell and Staiger, 2001a).

- Holds for trade in goods and trade in services when governments have access to additional domestic regulatory/tax instruments (Bagwell and Staiger, 2001b, Staiger and Sykes, 2011, 2021).

- Holds in models of Cournot or monopolistic competition with homogeneous firms (Bagwell and Staiger, 2002 chapter 9, 2012a,b, 2015) and in models of monopolistic competition with heterogeneous firms (Bagwell and Lee, 2020, Campolmi, Fadinger and Forlati, 2020, and Costinot, Rodriguez-Clare and Werning, 2016, 2020).

- Does require a complete set of trade tax instruments, but not a complete set of policy instruments more generally (Ossa, 2011, Bagwell and Staiger, 2012, 2015, 2016).

- Does require the absence of international non-pecuniary externalities associated with policy choices.
The basic architecture of GATT, including MFN, reciprocity and a shallow approach to integration, seems well designed to serve this purpose with a minimal sacrifice of national sovereignty (Bagwell and Staiger, 1999, 2001b, 2002, 2018b)

- GATT's legitimacy as the constitution of the world trading system of the 20th century is not dependent on the case for free trade

According to the terms-of-trade theory, a tariff is the first-best instrument for manipulating the terms of trade. Nash tariffs are inefficiently high, but by an application of the targeting principle Nash non-tariff policies are efficient, conditional on Nash trade volume. A trade agreement could focus on lowering tariffs as a means of expanding market access ("conditions of competition") and trade volumes to efficient levels. And put in place various "market access preservation rules" that apply to non-tariff policies and prevent governments from using non-tariff policies to backslide on their market access commitments. Under GATT's approach, countries negotiate tariff bindings to make market access commitments, and GATT Articles provide the accompanying market access preservation rules. For example, Petersmann's (1997, p. 136) observes that "...the function of most GATT rules (such as Articles I-III and XI) is to establish conditions of competition and to protect trading opportunities...".
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The terms-of-trade theory provides a simple framework within which to interpret two of the most basic features of GATT tariff negotiations:

- Own-tariff cuts are seen as "concessions" while foreign tariff cuts are sought for their exporters.

Nash tariffs satisfy:

\[ W_p (+) dp d\tau + (+) W_e p_w (+) \partial e p_w d\tau = 0; \]

\[ W_p < 0 < W_p \]  at Nash tariff choices; own-tariff cut a concession but matched with foreign tariff cut we can both gain.
The terms-of-trade theory provides a simple framework within which to interpret two of the most basic features of GATT tariff negotiations.

1) Provides a reason why negotiators would view own-tariff cuts as “concessions” and seek foreign tariff cuts for their exporters.

- Two-good two-country competitive general equilibrium trade model
- Gov objectives $W(p(\tau, \tilde{p}^w), \tilde{p}^w)$ and $W^*(p^*(\tau^*, \tilde{p}^w), \tilde{p}^w)$ satisfying $W_{p^w} < 0 < W_{\tilde{p}^w}$
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$$W_p \frac{dp}{d\tau} + W_{p^w} \frac{dp^w}{d\tau} = 0; \quad W_{p^*} \frac{dp^*}{d\tau^*} + W_{p^w} \frac{dp^w}{d\tau^*} = 0$$
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II) Provides basis for narrow focus on tariff negotiations

- A domestic standard in each country, \( \sigma \) and \( \sigma^* \), impacts that country’s production possibilities, implying
  \[ \tilde{p}^w = \tilde{p}^w(\sigma, \sigma^*, \tau, \tau^*) \]

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Conditions for efficient policy choices

$$
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$$

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\( \Rightarrow \) Shallow integration

- expand market access to efficient levels with tariff commitments
- apply “market access preservation” rules to subsequent policy adjustments
- and achieve policy efficiency
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Each country's welfare impacted by the tariff choices of the remaining two countries through $	ilde{p}^w(\tau, \tau^1, \tau^2)$

- In general a collection of bilateral MFN tariff negotiations represents a setting of bilateral bargaining with externalities
There is evidence that GATT/WTO design features have helped governments achieve this purpose

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I start with Bagwell and Staiger (2011), who focus on 16 countries that negotiated accession to the WTO after its creation in 1995 and ask whether their agreed tariff cuts reflect the removal of market power considerations from their unilateral tariff choices

- In a linear model this tariff cut would be increasing in initial import volume $m^{BR}$, more generally it would be increasing in a measure of inverse trade elasticity $\eta^{BR}$
What Do Trade Negotiators Negotiate About?

Decile of $m_{2R}$

Decile of $\eta_{3R}$
I next describe results from Bagwell, Staiger and Yurukoglu (2020a)
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According to the terms-of-trade theory, this approach to tariff bargaining can eliminate strategic bargaining behavior (Bagwell and Staiger, 2018a).
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The absence of strategic bargaining behavior is seen by GATT practitioners and legal scholars as a hallmark of the tariff bargaining that occurred in the early GATT rounds and as distinguishing GATT tariff bargaining from the tariff bargaining that preceded it

...Their requests cannot be higher than their offers and negotiations start from this maximum position: if all requests are granted all the offers will be fulfilled. Similarly all other contracting parties are likely to make offers which match the requests they have made. As some of the requests are rejected, some of the offers are withdrawn. This procedure has been raised to a Gatt principle and is not laid down by any rule. It is a convention but one which creates a much better negotiating climate than the opposite trend which was a feature of the classical bilateral negotiations. Then, everyone put forward very low offers with the intention of increasing gradually if the bargaining proved profitable. A country never knew, however, when it had reached the maximum its partner was willing to concede. Curzon (1966, p. 74)
Curzon describes a tariff bargaining forum in which there is no point in making lowball initial offers, because governments are expecting non-strategic behavior from their bargaining partners and such offers would simply be taken at face value.
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**For GATT oldtimers**

- The initial offer made by a country ("sales") reduced tariffs to 0.808 of the existing tariff level while the final offer made reduced tariffs to 0.806 of the existing tariff level.
- The initial offer received by a country ("purchases") reduced tariffs to 0.817 of the existing tariff level while the final offer received reduced tariffs to 0.802 of the existing tariff level.

<table>
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<tr>
<th></th>
<th>Sales</th>
<th></th>
<th>Purchases</th>
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<tr>
<td>Initial request</td>
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<td>N</td>
<td>5603</td>
<td>2394</td>
<td>7997</td>
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Several newcomers to GATT unaware of this new technique and starting with low offers found that in the course of negotiations they were unable to reach the level of requests they aimed for. Their initially low offers were taken as proof of their intentions and they either had to go home with a tariff higher than expected or had to increase their offers in the course of the negotiations. Curzon (1966, p. 74)
Several newcomers to GATT unaware of this new technique and starting with low offers found that in the course of negotiations they were unable to reach the level of requests they aimed for. Their initially low offers were taken as proof of their intentions and they either had to go home with a tariff higher than expected or had to increase their offers in the course of the negotiations. Curzon (1966, p. 74)

GATT newcomers

- The initial offer made by a country ("sales") reduced tariffs to 0.855 of the existing tariff level while the final offer made reduced tariffs to 0.819 of the existing tariff level
- The initial offer received by a country ("purchases") reduced tariffs to 0.833 of the existing tariff level while the final offer received reduced tariffs to 0.820 of the existing tariff level

<table>
<thead>
<tr>
<th></th>
<th>Sales</th>
<th>Purchases</th>
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<tbody>
<tr>
<td></td>
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<td>Specific</td>
</tr>
<tr>
<td><strong>Country-Specific</strong></td>
<td></td>
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<td>Ad Val</td>
<td>Specific</td>
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<td><strong>Initial offer over existing tariff</strong></td>
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</thead>
<tbody>
<tr>
<td></td>
<td>Ad Val</td>
<td>Specific</td>
</tr>
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<td><strong>Final agreed concession over existing tariff</strong></td>
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<tr>
<td>Mean</td>
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<td>1</td>
</tr>
<tr>
<td>N</td>
<td>668</td>
<td>2271</td>
</tr>
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</table>
And finally, I consider what we know about tariff bargaining in the absence of GATT rules.
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I describe results from Bagwell, Staiger and Yurukoglu (2021) who ask: Could GATT tariff negotiations have performed better if MFN had been abandoned?

- MFN can create a free rider problem in bilateral tariff bargaining settings (a positive 3rd-party externality) that keeps countries from liberalizing all the way to the efficiency frontier.
- But in the absence of MFN and beginning from any point on the efficiency frontier, there is an incentive for each bilateral pair of countries to over-liberalize on a discriminatory basis and steal surplus from third countries (a negative 3rd-party externality).
Which 3rd-party externality is more damaging?

**TABLE VII**

**Estimated Uruguay Round and Counterfactual Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Estimated Bargaining Parameters</th>
<th>All 0.5 Bargaining Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MFN Δ% 1990</td>
<td>No MFN Δ% 1990</td>
</tr>
<tr>
<td>Δ Mean Tariff</td>
<td>-30.22%</td>
<td>-28.85%</td>
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<tr>
<td>Δ Trade Wgt’d Mean Tariff</td>
<td>-19.54%</td>
<td>-130.36%</td>
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<tr>
<td><strong>Country Welfare</strong></td>
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<tr>
<td>US</td>
<td>0.01%</td>
<td>-0.13%</td>
</tr>
<tr>
<td>EU</td>
<td>0.02%</td>
<td>0.06%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.10%</td>
<td>0.32%</td>
</tr>
<tr>
<td>South Korea</td>
<td>0.17%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Australia</td>
<td>0.06%</td>
<td>-1.71%</td>
</tr>
<tr>
<td>Canada</td>
<td>0.02%</td>
<td>-0.49%</td>
</tr>
<tr>
<td>Africa NES</td>
<td>0.03%</td>
<td>-0.08%</td>
</tr>
<tr>
<td>America NES</td>
<td>0.02%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>Asia NES</td>
<td>0.15%</td>
<td>-0.37%</td>
</tr>
<tr>
<td>Europe NES</td>
<td>0.02%</td>
<td>-0.12%</td>
</tr>
<tr>
<td>MENA NES</td>
<td>0.01%</td>
<td>-0.28%</td>
</tr>
<tr>
<td>Mean</td>
<td>0.10%</td>
<td>-0.21%</td>
</tr>
<tr>
<td>World Real Income</td>
<td>0.06%</td>
<td>-0.02%</td>
</tr>
</tbody>
</table>

*Notes: Each column represents changes in the row relative to the pre-Uruguay tariff levels. Tariff averages are computed among nonagriculture sectors for the bargaining countries. The mean across countries is weighted by population.
The design of a trade agreement should reflect its purpose, the “problem” it is supposed to “solve”
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- And I have argued that this harmony between purpose and design can help account for the success of the GATT/WTO in the 20th century
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- If so, then fundamental changes to the design of the world trading system may be needed
- If not, then the fundamental design of the GATT/WTO should be adequate to meet the challenges of the 21st century
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Below I consider:

- The rise of large emerging markets, led by China
- Accommodating efforts to address climate change
- Digital trade
- The rise of offshoring and global value chains
- The push for regulatory harmonization as an end in itself
Three interrelated challenges
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I) Non-reciprocity and the rebalancing of market access commitments with China

- China’s 2001 accession to the WTO has challenged an approach to globalization that was designed fundamentally with market economies in mind.
- But the presence of a “China, Inc.” does not change the purpose of a trade agreement.
- What it does change is the nature of the commitments that China must make to translate its tariff bindings into secure market access commitments.
- The non-violation clause provides a promising path to address the current impasse.
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II) Reconsideration by industrialized countries of the level of market access commitments they agreed to implement in 1995

- Those industrialized countries that have experienced a significant increase in income inequality over the past several decades may now want to reconsider some of their existing tariff commitments
- Article XXVIII renegotiations provide the liability-rule structure to achieve “efficient breach” of tariff commitments made in 1995
III) Solving the “latecomers problem” (Bagwell and Staiger, 2014) and better integrating the large emerging market economies into the world trading system.

Note: The content of the maps is updated in October every year, at the same time as the WTO Trade and Tariff Profiles.
III) Solving the “latecomers problem” (Bagwell and Staiger, 2014) and better integrating the large emerging market economies into the world trading system

- Countries need the negotiating flexibility to transition toward the set of tariff commitments that the current WTO membership would have chosen to negotiate were they not constrained in their negotiations by their pre-existing tariff bindings

- Article XXVIII renegotiations together with Article XXVIII bis negotiations provide countries with the flexibility to escape from their existing GATT/WTO tariff bindings in an orderly way when necessary, in order to then engage in reciprocal MFN tariff bargaining with all willing partners
The WTO is well-suited to accommodate efforts to address climate change.
Accommodating Efforts to Address Climate Change

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- But there is a key difference: according to the terms-of-trade theory, these carbon border adjustments do not depend on the carbon content of the production of one’s trading partners.

  - These adjustments moderate the market access implication of a country’s own increase in carbon taxes, and keep its market access at an efficient level as its carbon tax is raised to the efficient level.

  - And while the market access implication of a country’s carbon tax increase reflects the carbon content of its own production, it has nothing to do with carbon content in the country’s trading partners.
Second, carbon border adjustments would create additional MFN tariffs in industrialized countries that could be cut in exchange for reciprocal tariff cuts from large emerging markets.
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Where the non-pecuniary externalities associated with digital openness (related to issues such as privacy, national security and law enforcement) are purely local:

- The purpose of a trade agreement for both trade in goods and trade in services is unchanged by the advent of the digital world.
- This implies that the existing shallow-integration features of GATT can in principle be applied to digital policies impacting goods trade in such a world.
- And while GATS is a deep-integration agreement, a GATT-like shallow-integration approach to trade in services is possible along the lines suggested by Staiger and Sykes (2021), and could be applied to digital policies impacting services trade as well.
- With digital trade blurring the distinction between goods and services, the redesign of GATS to bring it closer to the design of GATT could be all the more attractive.
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- Where the non-pecuniary externalities associated with digital openness cross international borders
  - The purpose of a trade agreement is more complex
  - But even in this case there may be an approach to integration for goods and services trade in a digital world that lies somewhere between the WTO's shallow integration approach and a fully deep approach
Does offshoring create new problems of global policy cooperation whose solutions require international agreements with novel features?
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But trade in highly customized inputs may change the purpose of a trade agreement
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- if the nature of international price determination is altered, so that the tariff is no longer the first-best instrument for terms-of-trade manipulation (Antras and Staiger, 2012a, 2012b)
- In that case, GATT/WTO architecture not well-suited for achieving efficient liberalization
If buyers bargain bilaterally with their foreign suppliers over the price at which customized inputs are exchanged, more than just tariffs will be set inefficiently in the Nash equilibrium. Nash behind-the-border policies will also be distorted to achieve favorable international prices, and the logic of shallow integration is disrupted.
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The rise of offshoring could necessitate fundamental changes to the design of the WTO, but thus far the evidence for this is only suggestive and indirect.
The Push for Regulatory Harmonization

- In his 2015 Jan Tumlir Lecture, former WTO Director General Pascal Lamy emphasized the growing importance of a particular form of international externality, different from market access issues and arising instead from regulatory heterogeneity across countries.
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- Yet as Sykes (1999a, 1999b) observes, international differences in incomes, cultures, risk preferences and tastes generally justify some degree of regulatory heterogeneity, even if the added costs of satisfying a multitude of rules are also recognized.
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The terms-of-trade theory cannot take us very far in answering these questions according to that theory, harmonizing regulations would be desirable only to the extent that it is needed to secure the property rights over negotiated market access, not as an end in itself.
Here I discuss the findings of Grossman, McCalman and Staiger (2021), who propose a novel modelling framework that can provide answers to these questions

- Traditional market access/terms-of-trade manipulation concerns are put to the side
- Firms design products to appeal to local tastes, which differ across countries as Sykes emphasizes
- But the firms' fixed costs increase with the differences between versions of their products destined for different markets, and hence there are potential cost savings from regulatory harmonization as emphasized by Lamy
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Countries might negotiate selectively over standards where externality problems are present, and rely on some combination of national treatment and the non-violation clause combined with mutual recognition to achieve efficiency for standards that are not directly negotiated.
What are the sovereign rights of nations in an interdependent world, and to what extent do these rights stand in the way of achieving internationally efficient outcomes?
Elephants in the Room

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Bagwell and Staiger (2018b) propose a formal definition of sovereignty based on the Westphalian norm of non-intervention in the internal affairs of other states.

Where the terms-of-trade theory applies, an agreement that emphasizes non-discriminatory market access commitments can achieve international policy efficiency while preserving national sovereignty.

The further the WTO and the world trading system that it governs departs from this approach, the more likely will these agreements pose a (possibly avoidable) threat to national sovereignty.

Does the WTO need a hegemon to survive?

Mattoo and Staiger (2020) argue that a rules-based system is tenable only in the presence of a dominant hegemon who can reap the participation benefits from having its hands tied.

The diminished position of the United States in the world economy may help explain the erosion of US support for the WTO and bodes poorly for the future of the rules-based multilateral trading system. And China’s rise may ultimately be the world’s best hope for the return of a viable rules-based system.

What is the WTO’s role in preparing for the next pandemic?

The self-enforcement constraints (as in Bagwell and Staiger, 1990) faced by the WTO are likely to be extreme with the onset of a pandemic. This suggests that the WTO’s role in preventing export restrictions during a pandemic will be limited. And the WTO may be most effective in helping countries cooperate over measures that could reduce the probability of pandemics in the first place, perhaps partnering with the WHO in this effort.
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I have argued that the terms-of-trade theory of trade agreements provides a compelling framework for understanding the success of GATT in the twentieth century.

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More broadly, two cross-cutting themes that emerge from the terms-of-trade theory of trade agreements are worth emphasizing for the world trading system of the 21st century.

- Trade agreements that lack deep-integration provisions are not necessarily “weak” agreements; and by the same token, those trade agreements that contain the most developed deep-integration provisions should not necessarily be seen as the “gold standard.”
- Where the terms-of-trade theory applies the opposite may be closer to the truth, as with shallow-integration agreements countries might attain efficient policies without sacrificing national sovereignty.

Viewed from this perspective, the fact that the WTO lags behind various regional initiatives to deepen the negotiated commitments of its member governments may be a virtue rather than a shortcoming.

It could be argued that the primary task for the GATT/WTO has shifted, away from helping governments traverse to the efficiency frontier and toward providing them with the flexibility they need to remain on the frontier in the face of various shocks to the world trading system.

For this era the capabilities of countries to rebalance and renegotiate their commitments within the GATT/WTO framework is likely to become paramount to the WTO’s success.

In principle the WTO is as well-equipped for this second task as GATT proved to be for the first.

The best advice for designing a world trading system for the 21st century may not be “Move fast and break things,” but rather “Keep Calm and Carry On.”
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