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Enhancing Global Trade Intelligence

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ABSTRACT

International trade flows based on information. Is the foreign market open? What are the conditions for entry? Are there customs duties to be paid and other regulations that need to be satisfied? Businesses thrive on getting as much certainty as they can find, and this requires reliable information. Is the competition subsidized? Are the competitors favored state-owned companies? During the pandemic, governments needed to know if food and medical supplies were going to be available from foreign sources and, most importantly, how available vaccines would be as most of the world's countries could not produce any. Effective public policy cannot be made in the dark. The World Trade Organization, and the General Agreement on Tariffs and Trade before it, were founded with the idea of providing transparency. But more is needed to understand why trade is taking place, and even more important, when it is not, why not?

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INTRODUCTION

The need for current intelligence about trade has been of importance to international commerce for centuries. For nearly two millennia for a large part of the world, a key question for world trade was “Is the Silk Road open and safe?” For Spain, it was of enormous importance to know that the treasure ships from the New World were safely *en route* to Spain. Lloyds of London became a key source of maritime news in the early 18th century, establishing its own information gathering channels and means of communication. Current information was essential to its functioning.

Intelligence played an essential role in winning World War II. When the war concluded, the allies set about establishing a world trading system. One of the key elements of the new order was transparency. Most of what was needed was relatively basic, requiring the contracting parties to the new General Agreement on Tariffs and Trade (GATT) to publish government measures affecting trade. The requirement was clear and the obligation unambiguous:

No measure of general application taken by any contracting party effecting an advance in a rate of duty or other charge on imports under an established and uniform practice, or imposing a new or more burdensome requirement, restriction or prohibition on imports, or on the transfer of payments therefor, shall be enforced before such measure has been officially published.¹

The requirement applied in a simpler world. At the end of World War II, much of the world’s productive industrial capacity outside the United States was in smoldering ruins or, in the non-industrialized world, it was still grossly underdeveloped from colonial times. Considering a framework for international trade was in many respects a straightforward matter. Franklin D. Roosevelt and Winston Churchill at Placentia Bay in the summer of 1941 had already set the goal—equal access to markets and equal access to raw materials. There was so much overt protection, discrimination, and trade-distorting conduct that the priority targets for application of the rules of the new multilateral trading system were relatively clear. Trade negotiators knew that they had to progressively eliminate quantitative restrictions and tariffs, eliminate discrimination against imports at the border, imposed through national regulations or implemented through state trading. The spillover effects of more nuanced, more deeply imbedded national policies were of secondary concern.

Globalization rebounded after the war. This was not obvious at first, as global exports grew by only 50 percent (by value in constant dollars) by 1950 from a depressed level.² But by 2014, the gain was close to 5,000 percent. The term “global value chains” was not yet in vogue during the war, but interdependence of economies was in a number of instances obvious. In the 1930s, Japan knew it was dependent on oil imports, which the United States through trade restrictions sought to use as leverage to slow Japan’s imperial expansion. The allies in World War II were very much aware of being cut off from natural rubber when

1 “The General Agreement on Tariffs and Trade (GATT 1947)—Article X: Publication and Administration of Trade Regulations.” World Trade Organization. https://www.wto.org/english/docs_e/legal_e/gatt47_01_e.htm#articleX.

2 Esteban Ortiz-Ospina and Diana Beltekian. “Trade and Globalization.” Our World in Data. 2014. <https://ourworldindata.org/trade-and-globalization>.

Malaya was invaded by Japan. The two oil embargoes of the 1970s made energy dependency a key topic for American policymakers and caused a quick review of vulnerabilities to loss of access to other commodities. In more recent years, export restrictions placed on rare earths caused a re-examination of sources of supply and measures that interfered with them. In each of these cases, government intervention was so obvious that any informed reader of the world press could describe that it existed and the form that it had taken.

The COVID-19 pandemic presented a very different profile. Suddenly, demand for respirators, personal protective equipment and pharmaceuticals, and even antiseptics shot up. Where were these products made, and in what quantities? Was the trade free or impeded? It was physically impossible in the short term for all countries to be self-sufficient in all essential products. In the medium term, there could be some diversification of foreign supplies. Trade would still have to play a vital role. When the first vaccines were produced, concerns over access multiplied. Once sources of production were identified, could their output leave their home countries, and could they cross borders? It was more difficult to assess exactly what government measures existed.

Government planning, if it were to have a chance at being well-constructed, needed information. Appropriate trade policies, among other policy decisions, could not be formulated without more knowledge about government interventions, about national measures that affected trade.

In recent times, international institutions—the Organization for Economic Cooperation and Development (OECD), the World Bank, the International Monetary Fund (IMF), and the World Trade Organization (WTO)—as well as the Global Trade Alert,³ provide data concerning measures affecting trade and investment. All the world's contractually bound tariffs can be found on the WTO's website, along with regular reports to the Group of Twenty (G20) on government measures, both trade-restricting and trade-facilitating. Much less is known about other measures, such as government subsidies. Some measures are ambiguous in their intent. Is a product standard more trade restrictive than is necessary for its legitimate purpose?

Government policies that affect trade are also often opaque. The US government concluded that semiconductor sales by non-Japanese companies in the 1970s and 1980s into the Japanese market were depressed by relationships among vertically integrated Japanese electronics manufacturers, an oligopsony. It took about five years of research to document what the causes were of the market not functioning. With respect to steel, the US industry documented cartelization among Japanese and European steel companies during that era (as American steel had been a cartel a century earlier). In these two instances, the problem was not government intervention, but the lack of it, as competition laws were not enforced.

In the first decade of this century, American, European, and Indian wind turbine sales in China dropped precipitously due to non-public purchasing practices of state-owned provincial utilities. No overt trade measures would explain the disappearance of the market for foreign producers. In modern times,

3 Global Trade Alert. <https://www.globaltradealert.org/>. This is the publication from the University of St. Gallen, Switzerland, collecting and publishing trade data under the skilled eye of Professor Simon Evenett.

it has become more difficult to identify the hand of government distorting trade. It is imperative to track and understand anomalies that occur in trade flows. Sellers know when their sales have dried up but may not always know why.

It is also true that sometimes measures are openly acknowledged that dramatically restrict trade but are attributed to otherwise generally acceptable policy objectives. Graduated Japanese taxes based on automobile engine size, imposed ostensibly as environmental regulations, had a heavier impact on American cars than on domestic cars. More recently, WTO Members increasingly claim instances of economic coercion imposed under the guise of standards or other regulatory requirements. In 2013, Russia cut off imports of wine, fruits, and vegetables from Moldova, reportedly because Moldova was seeking association with the European Union.⁴

Trade sanctions have a long and varied history. It is relatively easy to catalogue sanctions that are published as such, with a political justification. For example, sanctions against Russia for invading Ukraine are listed on the Peterson Institute for International Economics (PIIE) website as well as by the Global Trade Alert (GTA).⁵ The PIIE sanctions timeline has up-to-date information listing the country that is the target (Russia), the reason for the measure (the invasion into Ukraine), the country imposing the measure (G7 and a number of others), and a description of its coverage.⁶ The GTA has its own sanctions tracker containing information on Russia sanctions (978 against Russia and 13 countermeasures by Russia at this writing),⁷ as well as a state intervention monitor that lists sequentially nearly 4,000 measures in a searchable database dating back to 2007, with the most recent entries mostly concerning the growing list of sanctions against Russia.

More insidious and more difficult to collect and categorize are instances where the measure is not officially published, or where it is masquerading as something else. The European Union has asked for consultations with China over threats reportedly made against German firms doing business with Lithuania, and for Lithuanian exports more directly.⁸ This was not the first instance of trade coercion raised with respect to China, often less formally and not necessarily in the WTO. Claims of economic coercion were made with respect to Chinese actions affecting imports of Norwegian salmon, rare earth exports to Japan, imports from Australia of coal, barley, beef, copper, cotton, timber, wine, lobsters, sugar, wheat, wool, and beer, and Canadian canola.⁹ South Korea claimed that

4 "Rogozin Threatens Moldova with Sanctions over Association Agreement with the European Union." Refworld. September 4, 2013. <https://www.refworld.org/docid/523058ab4.html>.

5 "Latest State Acts." Global Trade Alert. <https://www.globaltradealert.org/latest/state-acts>.

6 "Russia's War on Ukraine: A Sanctions Timeline." Peterson Institute of International Economics. April 12, 2022. <https://www.piie.com/blogs/realtime-economic-issues-watch/russias-war-ukraine-sanctions-timeline>.

7 "Latest State Acts." Global Trade Alert. https://www.globaltradealert.org/latest/state-acts/affected-jurisdictions_173/announcement-from_20220222 (accessed on April 6, 2022).

8 "Lithuania Tests the EU's Resolve on Chinese Economic Coercion." *Financial Times*. February 12, 2022. <https://www.ft.com/content/77adb343-6196-4d66-af84-995c05db7b6c>.

9 Bonnie S. Glaser. "Time for Collective Pushback against China's Economic Coercion." Center for Strategic and International Studies. January 13, 2021. <https://www.csis.org/analysis/time-collective-pushback-against-chinas-economic-coercion>.

China had retaliated against its trade due to its deployment of the THAAD missile defense system.¹⁰ The Philippines complained about retaliation on bananas and other products by China during their dispute over Scarborough Shoal in 2012.¹¹ Countries hosting visits by the Dalai Lama reportedly experience a temporary reduction in exports to China.¹² Retaliatory measures labeled as antidumping cases are cited by my PIIE colleague Chad P. Bown in a January 2022 PIIE paper.¹³ Trade coercion as a serious threat to the global trading system is the subject of an Asia Foundation Report released in December 2021.¹⁴ Three recommendations contained in the report are directly relevant to the WTO: share information, bring the issue up in relevant WTO committees, and bring WTO dispute settlement cases. (The last poses difficulties where motive is what is being questioned, at least in part).

The GTA has collected a database of over 43,000 “commerce-relevant” policy interventions. The GTA estimates that the WTO has over 10,000 entries and the United Nations has 40,000.¹⁵ These databases have differing criteria for their collection activities with respect to the measures that they track.¹⁶ None state that they are all-encompassing. The GTA recently issued a study on the massive and growing presence of subsidies, not all of them necessarily to be condemned as they may serve valid social purposes.¹⁷ It also released a background paper prepared for the World Bank that compares the findings of different monitoring initiatives on trade policy changes affecting medical goods.¹⁸

These sources form one basis on which to inform the process of trade policy formulation. The aggregation of data can point to where further efforts are needed to obtain information, and where reforms may be needed to extend the coverage of global trading rules. That said, nothing short of taking a “core sample,” examining in a specific national market how imports fare in competition

10 “Chinese Economic Coercion during the THAAD Dispute.” The Asan Forum. December 28, 2019. <https://theasanforum.org/chinese-economic-coercion-during-the-thaad-dispute/>.

11 “PH Slams China for Retaliation Threat.” Inquirer.Net. June 29, 2013. https://globalnation.inquirer.net/79041/ph-slams-china-for-counterstrike-threathttps://www.washingtonpost.com/world/asia_pacific/in-philippines-banana-growers-feel-effect-of-south-china-sea-dispute/2012/06/10/gJQA47WVTV_story.html.

12 Andreas Fuchs and Nils-Hendrik Klann. 2013. “Paying a Visit: The Dalai Lama Effect on International Trade.” *Journal of International Economics* 91(1): 164-177.

13 Chad P. Bown. “Trump Ended WTO Dispute Settlement. Trade Remedies are Needed to Fix It.” Peterson Institute for International Economics. January 2022. <https://www.piie.com/publications/working-papers/trump-ended-wto-dispute-settlement-trade-remedies-are-needed-fix-it>.

14 “Responding to Trade Coercion: A Growing Threat to the Global Trading System.” Perth US-Asia Centre. November 25, 2021. <https://perthusasia.edu.au/our-work/responding-to-trade-coercion-a-growing-threat-to>.

15 The Global Trade Alert (GTA) was launched in June 2009 when it was feared that the global financial crisis would lead governments to adopt widespread 1930s-style beggar-thy-neighbor policies. The International Monetary Fund noted in 2016 that the GTA “has the most comprehensive coverage of all types of trade-discriminatory and trade liberalizing measures.”

16 “Subsidies and Market Access: Towards an Inventory of Subsidies by China, The EU & The USA: The 28th Global Trade Alert Report.” Global Trade Alert. <https://www.globaltradealert.org/reports/gta-28-report>.

17 Ibid.

18 “Form, Frequency, Duration & Scale: COVID-Era Trade Policy Interventions Affecting Medical Goods.” Global Trade Alert. March 23, 2022. <https://www.globaltradealert.org/reports/88>.

with domestic products, can reveal fully why sales do or do not take place. Deep forensic research is necessary to determine whether competitive outcomes are being determined by market forces, undistorted by government interventions.

TRADE INTELLIGENCE AND WTO REFORM

In each of the last four years, the G20 leaders have committed themselves to WTO reform—to improve the functioning of the organization. An essential function of the multilateral trading system from its inception has been to provide transparency.^{19,20} International trade thrives on certainty. Without transparency, all that exists is uncertainty. Not knowing a standard or tariff or other regulation that might prevent a good or service from crossing a border would make every export or import a gamble with unknown odds.

Six years before the creation of the WTO itself, the parties negotiating in the Uruguay Round put into place a Trade Policy Review Mechanism (TPRM). The reason, they said, was

*to contribute to improved adherence by all Members to rules, disciplines and commitments made under the Multilateral Trade Agreements and, where applicable, the Plurilateral Trade Agreements, and hence to the smoother functioning of the multilateral trading system, by achieving greater transparency in, and understanding of, the trade policies and practices of Members.*²¹
(emphasis supplied).

Transparency is a first principle of the multilateral trading system. It is also, strikingly, as noted, a precondition for taking any trade action (GATT Article X.2). On paper, at least, this is a very powerful proviso. In the area of product standards, the WTO Agreement on Technical Barriers to Trade (TBT) has a similar approach. It requires that a Member notify the WTO before putting a standards measure in place where either a relevant international standard does not exist, or the technical content of a proposed technical regulation is not in accordance with the technical content of relevant international standards:

2.9 . . .if the technical regulation may have a significant effect on trade of other Members, Members shall:

19 **Transparency**—A World Trade Organization principle stipulating that a country's policies and regulations affecting foreign trade should be clearly communicated to its trading partners. For example, out of recognition that sanitary and phytosanitary measures may (sometimes deliberately) be unclear, arbitrary, or capricious, recent international trading agreements have provisions calling on countries to notify others, in advance, about any measures that could affect trade, to fully explain them, and to provide a means for commenting on them. . . . State trading enterprises with monopoly control over marketing agricultural exports are sometimes alleged to cross subsidize, but lack of transparency in their operations makes it difficult if not impossible to determine if that is the case. See "A Glossary of Terms." Congressional Research Service.

20 **Transparency:** [The] Degree to which trade policies and practices, and the process by which they are established, are open and predictable. See WTO Glossary. https://www.wto.org/english/thewto_e/glossary_e/transparency_e.htm. "Glossary of Terms." World Trade Organization. https://www.wto.org/english/thewto_e/minist_e/min99_e/english/about_e/23glos_e.htm.

21 "Trade Policy Review Mechanism as Amended by the General Council (Revision, effective as of 1 Jan. 2019)." World Trade Organization. https://www.wto.org/english/docs_e/legal_e/29-tpm_e.htm.

2.9.1 publish a notice in a publication at an early appropriate stage, in such a manner as to enable interested parties in other Members to become acquainted with it, that they propose to introduce a particular technical regulation;

2.9.2 notify other Members through the Secretariat of the products to be covered by the proposed technical regulation, together with a brief indication of its objective and rationale. Such notifications shall take place at an early appropriate stage, when amendments can still be introduced and comments taken into account;²²

Although, the net cast by these provisions is not perfect (it is a matter of self-judgment by a government as to whether its measure fits the criteria for notification), this is nevertheless an amazingly creative initiative to promote international cooperation, and it works. Members do notify in draft, without compulsion, a vast array of standards, and they benefit from the fact that other Members do so as well. How complete is the data thus gathered? It is impossible to tell. But for the filing of “specific trade concerns” by other WTO Members, highlighting a measure that might not have been notified, there is no effort to identify what has not been notified.

Broad transparency is also required with respect to services in accordance with the General Agreement on Trade in Services (GATS) and intellectual property under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).^{23,24} For services and intellectual property, the notification is to follow, and need not precede, the imposition of a measure.

This is just the topmost layer of the multitude of WTO provisions aimed at providing transparency. Seeded throughout the WTO agreements are a multiplicity of notification requirements. There are so many that the WTO Secretariat has published a WTO notification handbook divided by 22 subject areas of the WTO *acquis* where notification requirements are to be found.²⁵ The extensiveness and intensiveness of what must be reported are remarkable. For a new preferential trading arrangement, there are five general areas of information

22 “Agreement on Technical Barriers to Trade.” World Trade Organization. https://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm.

23 Article III.3 of the General Agreement on Trade in Services provides: *Each Member shall promptly and at least annually inform the Council for Trade in Services of the introduction of any new, or any changes to existing, laws, regulations or administrative guidelines which significantly affect trade in services covered by its specific commitments under this Agreement.*

24 Article 63.1 of the Agreement on Trade-Related Aspects of Intellectual Property Rights provides: *Laws and regulations, and final judicial decisions and administrative rulings of general application, made effective by a Member pertaining to the subject matter of this Agreement (the availability, scope, acquisition, enforcement and prevention of the abuse of intellectual property rights) shall be published, or where such publication is not practicable made publicly available, in a national language, in such a manner as to enable governments and right holders to become acquainted with them.*

25 “Technical Cooperation Handbook on Notification Requirements.” World Trade Organization. https://www.wto.org/english/tratop_e/handbook_on_notifications_complete_e.pdf.

that must be supplied, and within each heading, there are subparagraphs of detailed data requests.²⁶

TRADE INTELLIGENCE IS EVEN MORE IMPORTANT DURING A CRISIS

Chad P. Bown, now at PIIE, in the introduction to a book he edited for the World Bank entitled *The Great Recession and Import Protection: The Role of Temporary Trade Barriers*, traces some of the history of the collection of data on restrictive trade measures. The 2008 financial crisis sparked an immediate interest on the part of governments to understand whether the incidence of protection would be likely to cause the world economy to retreat from openness, sinking to a level resembling the Great Depression of the 1930s. Bown had created a data series, the Temporary Trade Barriers Database,²⁷ first published in 2005 and still available currently from the World Bank. It provides historical data for purposes of comparison. Bernard Hoekman, then at the World Bank, secured emergency funding to update that data series and to help fund the GTA at St. Gallen University.²⁸

In reaction to the financial crisis in 2008, the WTO Secretariat went further than relying solely on the extensive notification requirements that populate the WTO's agreements. Under the leadership of Pascal Lamy, the Director-General at the time, the Secretariat engaged on its own in deeper monitoring of trade measures, based on which it initiated the filing of reports to the G20.²⁹ This

26 "Transparency Mechanism for Preferential Trade Arrangements WT/L/806." World Trade Organization. December 16, 2010. <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/L/806.pdf&Open=True>.

For example, according to Annex I on Initial Notification of PTAs by Notifying Members, where there is a new Preferential Trade Arrangement (PTA):

2. The Member notifying a PTA shall submit the following data, at the tariff-line level:
 - (a) A full listing of preferential duties under the PTA per beneficiary partner.
 - (b) A full tariff listing of the notifying Member's MFN duty rates applied on the year of the PTA's implementation and on the year preceding it.
 - (c) Other data, where applicable (e.g., tariff-rate quotas, seasonal restrictions, special safeguards and, if available, ad valorem equivalents for non-ad valorem duties).
 - (d) Product-specific preferential rules of origin as defined in the PTA.
 - (e) Import data for the most recent three years preceding the notification from each of the beneficiary partners, in value for total imports, imports entered under MFN and imports entered under PTA benefits.

This listing just scratches the surface of what must be notified with respect to these agreements.

27 "Temporary Trade Barriers Database." World Bank. <https://www.worldbank.org/en/data/interactive/2021/03/02/temporary-trade-barriers-database/>.

28 The GTA was also financed by the UK government, the Canadian government, and the German Marshall Fund of the United States.

29 *The regular monitoring reports covering the entire membership are the only horizontal regular transparency exercise within the multilateral trading system. Every six months, they provide a substantive snapshot of the state of world trade, with comprehensive accounts of activities cutting across the spectrum of issues addressed by WTO rules: tariffs, SPS, TBT and agriculture to trade remedies, services, intellectual property and a host of other areas. I am optimistic about improving transparency at the WTO.* "DDG Wolff: I Am Optimistic About Improving Transparency at the WTO." World Trade Organization. October 1, 2020. https://www.wto.org/english/news_e/news20_e/ddgaw_01oct20_e.htm.

practice has remained in place ever since that time,³⁰ as has the Global Trade Alert, which has collected a broad set of data on government measures that affect trade. Bown in a study in 2009 described how at that time the WTO illuminated trade restrictions but argued that more was needed for surveillance and ultimately for enforcement of the WTO agreements (and beyond to measures that distort trade but may not be WTO inconsistent).³¹ He noted that WTO Members impose political limitations on monitoring efforts. The conclusion is as pertinent today: any public institution needs to guard against political pressures skewing data that is collected.³²

An even more serious crisis faced the world during the COVID-19 pandemic. The WTO's first practical reaction to the health crisis was a call by the WTO Director-General Roberto Azevêdo for Members to provide the Secretariat with information about their COVID-19 policies with trade implications.³³ The pandemic caused immediate shortages of personal protective equipment, pharmaceuticals, and hospital equipment. It became apparent that no country was self-sufficient to meet its current needs. Trade was essential to meeting the public health crisis. Vitally important global value chains were discovered to exist as governments moved to secure supplies for domestic consumption. Reliable current information was needed.

A task force of experts was set up from across the Secretariat "to monitor the impact of COVID-19 on trade flows and the overall global economy." The Secretariat issued information notes. The fear of scarcity of agricultural commodities (which caused hardship during the financial crisis) had given rise to some national export restrictions during the early stages of the pandemic. Due no doubt in part to the availability of current and accurate information about supplies and trade measures, through the Agricultural Market Information

30 There were precedents: the GATT Secretariat on its own initiative conducted extensive documentation of trade policy interventions during the sharp global downturn of the early 1980s. The Secretariat reported by country and by measure, notified and unnotified. They are models of conciseness and independent reportage. "Review of Developments in the Trading System: Special Council Meeting on Notification, Consultation, Dispute Settlement and Surveillance—Note by the Secretariat C/W/420/Rev.1." General Agreement on Tariffs and Trade. October 20, 1983. <https://docs.wto.org/gattdocs/q/GG/C/W420R1.PDF>. "Protective Actions by Developed Countries Against Imports from Developing Countries, Note by the Secretariat." GATT Digital Library 1947-1994. June 20, 1980. <https://exhibits.stanford.edu/gatt/catalog/fn855rf9468>.

31 Chad P. Bown. *Self-Enforcing Trade: Developing Countries and WTO Dispute Settlement* (Brookings Institution Press: Washington D.C., 2009). <https://www.chadpbown.com/bown-set-2009/>.

32 "World Bank Aims to Replace Canceled 'Doing Business' Report in Two Years." Reuters. November 10, 2021. <https://www.reuters.com/business/world-bank-aims-replace-canceled-doing-business-report-two-years-2021-11-10/>.

33 "DG Azevêdo Requests WTO Members to Share Information on Trade Measures Related to COVID-19." World Trade Organization. March 25, 2020. https://www.wto.org/english/news_e/news20_e/dgra_24mar20_e.htm. This is the message of the Director-General nine days after the WTO headquarters buildings entered lockdown due to the pandemic.

System (AMIS) and the WTO Secretariat reports,³⁴ many of the trade-restrictive agricultural measures were rolled back. An important part of the WTO's reporting also consisted of listing trade facilitation measures. Information regarding good practices—pledges to avoid export restrictions and the use of import liberalizing measures—could and did lead to emulation in the form of trade facilitation measures. Aided by transparency, nations were working for the common good. This did not mean that there was no resistance. Initially the Members did not wish to allow the Secretariat to report on general support measures to the G20.

There was still a gap between measures reported and measures in existence, but on the whole, while compliance with making notifications was still far from perfect during the pandemic, it was better than it had been.

Most recently, there is keen widespread interest, not confined to those engaged in trade but essential to them, in the incidence of trade sanctions against Russia due to its invasion of Ukraine. As mentioned earlier, PIIE has put online an up-to-date tracking mechanism,³⁵ as has the Global Trade Alert.³⁶

DAY-TO-DAY, THE WORLD TRADING SYSTEM FUNCTIONS BEST WITH TRANSPARENCY

In the normal course, the extent to which Members adhere to the WTO's transparency requirements varies by Member and by subject. A Member with great bureaucratic capacity and a desire to be compliant may still miss a deadline, or mis-file its data. But the problem is deeper than inattention. At the Meeting of the Committee on Subsidies and Countervailing Measures on April 27, 2021, the Chair noted that:

... despite reminders to members to submit their notifications in time, 80 members have still not submitted their 2019 notifications. In addition, 67 members still have not submitted their 2017 subsidy notifications, and 57 have still failed to submit their 2015 notifications. ...

34 The Agricultural Market Information System (AMIS) is an inter-agency platform to enhance food market transparency and policy response for food security. It was launched in 2011 by the G20 Ministers of Agriculture following the global food price hikes in 2007-08 and 2010. Bringing together the principal trading countries of agricultural commodities, AMIS assesses global food supplies (focusing on wheat, maize, rice, and soybeans) and provides a platform to coordinate policy action in times of market uncertainty. AMIS is composed of G20 members plus Spain and seven additional major exporting and importing countries of agricultural commodities. By enhancing transparency and policy coordination in international food markets, AMIS has helped to prevent unexpected price hikes and strengthen global food security. The AMIS Secretariat is formed by the following international organizations and entities: FAO, GEOGLAM, IFPRI, IFAD, IGC, OECD, UNCTAD, the World Bank Group, WFP, and WTO.

In remarks to Agricultural Ministers gathered at the Global Forum for Food and Agriculture in Berlin on January 22, 2021, I stressed the importance of assuring transparency: *Agricultural markets have shown remarkable resilience, but markets work even better with good quality, timely information including with respect to policy measures adopted by governments around the globe. Initiatives such as the Agricultural Market Information System (AMIS) are crucial for well-informed policy responses.* "DDG Wolff Stresses Need to Make Progress in WTO Negotiations to Enhance Resilience of Farm Sector." World Trade Organization. January 22, 2021. https://www.wto.org/english/news_e/news21_e/ddgaw_22jan21_e.htm.

35 "Russia's War on Ukraine: A Sanctions Timeline." Peterson Institute of International Economics. April 12, 2022. <https://www.piie.com/blogs/realtime-economic-issues-watch/russias-war-ukraine-sanctions-timeline>.

36 "Latest State Acts." Global Trade Alert. https://www.globaltradealert.org/latest/state-acts/affected-jurisdictions_173/announcement-from_20220222.

In reaction to this constant shortcoming, in Buenos Aires in December 2017, as one of three major complaints about the operation of the WTO, the United States Trade Representative declared:

...[I]t is impossible to negotiate new rules when many of the current ones are not being followed. This is why the United States is leading a discussion on the need to correct the sad performance of many Members in notifications and transparency. Some Members are intentionally circumventing these obligations, and addressing these lapses will remain a top U.S. priority.³⁷

On May 4, 2018, the United States submitted its first “counter-notification” in the WTO Committee on Agriculture. Although provided for in the Agreement on Subsidies and Countervailing Measures,³⁸ counter-notification is not a common practice outside of that agreement. In this case, the United States was reacting to its belief that India was not officially notifying data on its market price support for wheat and rice. Using publicly available information, the United States stated that the measure would be of commercial concern to its trading partners.³⁹

This was just the beginning of a trend toward pressing for more compliance. On March 29, 2019, a group of major exporting WTO Members—Argentina, Australia, Canada, Costa Rica, the European Union, Japan, New Zealand, Chinese Taipei, and the United States—circulated a draft proposal to enforce the WTO’s notification requirements.⁴⁰ The attention-grabbing element of the proposal was the inclusion of sanctions for a Member failing to live up to its obligations. If a Member failed to notify and did not request technical assistance for capacity-building after a deadline had elapsed, it would be subject to “administrative measures.” These included being barred from chairmanships, having its questions of other Members in Trade Policy Reviews go unanswered, and being subject to financial penalties (the funds to be applied to technical assistance to obtain compliance). If these steps did not bring about compliance, a year later, the non-notifying Member would be shamed with a recitation of its non-compliance every time its representative sought to take the floor.

Four months later, on July 10, 2019, the African Group, Cuba, and India responded. They held that due to resource constraints, no additional obligations with respect to transparency would be acceptable to developing countries, nor would they accept the introduction into the rules of any punitive measures. They suggested exploring simplifying notification formats, prolonging timeframes for responses, increasing technical assistance, and giving more flexibility to

37 “Opening Plenary Statement of USTR Robert Lighthizer at the WTO Ministerial Conference.” Office of the United States Trade Representative. December 11, 2017. <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/december/opening-plenary-statement-ustr>.

38 Article 25.10 of the Agreement on Subsidies and Countervailing Measures provides: Any Member which considers that any measure of another Member *having the effects of a subsidy has not been notified in accordance with the provisions of paragraph 1 of Article XVI of GATT 1994 and this Article may bring the matter to the attention of such other Member. If the alleged subsidy is not thereafter notified promptly, such Member may itself bring the alleged subsidy in question to the notice of the Committee.*

39 “United States Issues First-Ever WTO Counter Notification Against India’s Market Price Support.” Office of the United States Trade Representative. May 9, 2018. <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/may/united-states-issues-first-ever-wto>.

40 “Procedures to Enhance Transparency and Strengthen Notification Requirements Under WTO Agreements JOB/GC/204/Rev.1.” World Trade Organization. April 1, 2019. <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:Jobs/GC/204R1.pdf&Open=True>.

developing countries. They would also ban counter-notifications and admonished the Secretariat to maintain its “international character” by taking no position on these issues. The proposal went further to point out the need for developed countries to remedy deficiencies in their own notifications.⁴¹

There has been no resolution in the WTO to the opposing positions taken on the issue of more stringent requirements for notification compliance.

Where notifications are made, a strength of the WTO monitoring process conducted by the Secretariat is that each measure reported by its committees is individually verified with the Member administering a measure. Among the defects of this data collection system is that the accumulation of information can be slow and incomplete, and the data are not regularly updated when a previously notified measure has been modified. WTO monitoring provides a very large amount of transparency, but the system does not capture everything. The Global Trade Alert produced by St. Gallen University under the watchful and entrepreneurial eye of Professor Simon Evenett collects far more information, using web-scrapers and engaging in cross-checking with official statements and press reports to increase reliability, although the reported measures are not verified with governments.⁴² GTA data, being comprehensive, are broadly indicative of trade-distorting measures and their trends. The GTA also seeks to track behind-the-border measures, such as subsidies and domestic regulations, to a greater extent than WTO monitoring. In the pandemic recovery period, a major strength of the GTA was including broad measures of economic support, which the WTO could not do due to Member opposition.⁴³ For a forensic analysis comparing GTA and WTO reporting on pandemic-era trade policy responses, see the charts developed by Bernard Hoekman in a book of recommendations to a new WTO Director-General published on November 10, 2020.⁴⁴

PEER REVIEW: PEOPLE WHO LIVE IN GLASS HOUSES ARE RELUCTANT TO THROW STONES

Peer review is considered the single most prominent tool for obtaining transparency. There are now over three decades of history of the WTO’s Trade Policy Reviews (TPRs). The intention of the process is not to pass judgment on a Member’s degree of conformity with its WTO obligations, as it is generally felt that this would promote reticence rather than openness to examination. The proceedings are conducted with diplomatic courtesy. One participant told

41 “An Inclusive Approach to Transparency and Notification Requirements in the WTO.” World Trade Organization. July 10, 2019. https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S009-DP.aspx?language=E&CatalogueIdList=261912,258694,255927,255538,255263,255258,255243,255030,253153,252866&CurrentCatalogueIdIndex=3&FullTextHash=&HasEnglishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True.

42 According to a discussion with Simon Evenett, founder of the GTA, on February 12, 2022: *The GTA database currently has over 43,000 entries (each relating to a policy intervention). We checked and 97.8% of those entries are supported by either (a) an official document or (b) a legal document issued by a firm that is mandated to report subsidies.*

43 “Report on G-20 Trade Measures (Mid-May 2014 to Mid-October 2014).” World Trade Organization. November 5, 2014. https://www.wto.org/english/news_e/news14_e/g20_wto_report_oct14_e.pdf.

44 *Revitalising Multilateralism: Pragmatic Ideas for the New WTO Director-General*. Vox EU/CEPR. November 10, 2020. <https://voxeu.org/content/revitalising-multilateralism-pragmatic-ideas-new-wto-director-general>. Page 67.

me that “the lions in the arena do not bite because their turn will come to play the part of the martyred,”—that is, their turns will come to be the subject of a TPR. While much is made transparent in a TPR, sometimes the information is diplomatically veiled. For example, to extract from the opening paragraph of the 2018 TPR of the United States what was actually happening, one would have to be very knowledgeable about the highlights of US trade policy at that time. It reads, “Since the last Review in 2016, the focus of US trade policy has shifted to adopting policies that are intended to support its national security and strengthen its economy.” It is not until paragraph 20 that the US-China exchanges of high additional tariffs on hundreds of millions of dollars in trade are mentioned.⁴⁵ The Chair’s summation states that “Members were of the view that the trade and investment regime of the United States remained overall open and liberal.” Perhaps so, but there were US trade measures that dominated the discussion if not the summation.

In the 2021 TPR of China, while the Chair’s summary praised China’s participation in the WTO, it cited a substantial list of Member concerns that were more pointed. Listed were lack of transparency, an opaque subsidy regime, lack of timely notifications, support to state-owned enterprises, sanitary and phytosanitary (SPS) restrictions without scientific justification, non-transparent and discriminatory measures and practices sometimes in response to political disagreements, insufficient protection of intellectual property rights, steel overcapacity, and the use of forced labor.⁴⁶

A valid question is whether the exercise accomplishes as much as it theoretically could. There is no official evaluation of the Trade Policy Review Mechanism’s effectiveness. The observation of those who are familiar with the process over time is that there is a more likely impact on smaller WTO Member countries, who may not have been aware of the common view on the part of WTO Members generally of the shortcomings of some of their governments’ measures, than on the largest trading Members, who appear more impervious to criticism.

Members should be more enthusiastic about full transparency as it applies to themselves, not just to others. Some Members are very good about this. They do not shy away from looking in the mirror. Others, well, not so much. And in this regard, there is not a developed/developing-country divide.

IMPROVING GLOBAL TRADE INTELLIGENCE GATHERING

Years ago, I said to my friend, then GATT Director-General Arthur Dunkel, that he should subscribe to the *Financial Times* and then he would know what was going on in the world. He replied, “I do subscribe, but the Members will not let me read it.” There is still substantial room for improvement in achieving greater transparency throughout the mechanisms that the WTO employs.

45 “Trade Policy Review—Report by the Secretariat: United States WT/TPR/S/382/Rev.1.” World Trade Organization. March 27, 2019. <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/TPR/S382R1.pdf&Open=True>.

46 “U.S. Statement at the Trade Policy Review of the People’s Republic of China.” U.S. Mission to International Organizations in Geneva. July 11, 2018. <https://geneva.usmission.gov/2018/07/11/u-s-statement-at-the-trade-policy-review-of-the-peoples-republic-of-china/>.

When I was growing up, my father made his living by understanding what was being produced in one place that might find demand in another, the essence of trade. Our vacations were largely spent in plant tours, seeing how things were made, and in his sales trips. One newspaper that was always present in our home was the *Journal of Commerce*. Two-thirds of the front page was taken up by ship arrivals, listing the kinds and quantities of their cargoes. In the rest of the paper, which I would later come to rely on when I became a trade negotiator, was some of the best trade policy reporting of that era, at a time when every major publication had dedicated trade reporting.⁴⁷ My father had an insatiable curiosity about where things were made. A visit to a store would see him looking at “items” for their prospective value if they were produced or marketed differently. When he entered a warehouse, his was on the docks in East Boston, he would be interested in what was on hand. If talking to a truck driver he would ask what the truck was carrying, where it came from, and where it was going.

Fabrice Boudou, the Director of the WTO’s Information Technology Services Division, who kept us connected to the web and made our work possible in this information technology age, shares the vision that I am suggesting in this paper. He notes that many countries, including developing countries, make bills of lading publicly available, that a growing number of companies have developed the big data and artificial intelligence (AI) capability to create a precise view on a current basis of which goods are being shipped from which country to which country, which shipper to which shipper. Private firms can use this information to manage their supply chain risks. Government regulation is designed to assure privacy, and technology exists to keep certain data confidential on a disaggregated basis. His view is of Members sharing data with the WTO, which would use its privileges and immunities (and technology) to guarantee that information remains confidential and use its access to technical capability in AI and big data to respect confidentiality. He concludes that this would be extremely valuable for Members. I agree fully with that sentiment.

Data should be regarded as a public good. This paper suggests that not only should WTO Members wish to share trade data for better managing their own economies and trade policies but also that the system should tap into all potential sources for trade and production information, enabling a much better understanding of trade for the purpose of crafting and administering the rules of the multilateral trading system. The need is greater than having “transparency” in a traditional sense, a founding purpose of the WTO, and the GATT before it, which concentrated on knowing about trade measures. It is to know about trade itself.

Moving to improve the WTO will be a laborious and time-consuming process, and the will to do so in a fundamental way has not yet manifested itself. WTO 2.0 should emerge by 2025, with every positive incremental step taken in the interim to adopt useful changes as quickly as possible. Not all WTO Members will welcome an expansion of WTO data collection, dissemination, and analysis. Complementary data collection efforts of the Global Trade Alert, as well as the efforts of the

47 “Veteran International Trade Journalist Richard A. Lawrence Dies at 82.” Cision - PR Newswire. December 3, 2010. <https://www.prnewswire.com/news-releases/veteran-international-trade-journalist-richard-a-lawrence-dies-at-82-111282919.html>. **About The Journal of Commerce—** *Since 1827, The Journal of Commerce has been the most trusted source of intelligence for international logistics executives, helping them plan global supply chains and better manage day-to-day transportation of goods and commodities in the United States and internationally.* Keith Rockwell, later to become the WTO’s Director of Public Affairs for the Organization’s first 26+ years, was one of the star reporters of the paper, as was Richard Lawrence.

OECD, IMF, World Bank, and other public international organizations to support transparency will be necessary, should continue, and be financially supported.

What can be done with respect to WTO reform? Some steps can be taken immediately, while others require more time and more capacity-building to bring about necessary change.

RECOMMENDED REFORMS

Overall goal

- 1 The WTO should move in the direction of becoming a central access point for global trade information relevant to the WTO *acquis* (as it stands at present and encompassing likely future subjects for negotiation), including to the extent practical, all government measures that have a substantial effect on trade. It does not and need not duplicate existing databases but should provide ready access to them.
- 2 With available technology, a global online system of trade measures ought to be always up to date. Summary reports should be updated often, including notifications that come in late and changes in reported measures. Counter-notifications and specific trade concerns databases, among others, should be both utilized and cross-referenced. A major effort should be made to capture data on subsidies, recognizing that these measures are more difficult to identify and classify. Measures of general support should be included. Every effort should be made to make the system useful not just to governments but to all those engaged in commerce.
- 3 It is physically impossible and not even desirable for there to be one central node where all data are stored, but there can be a centrally located gateway that identifies locations of more complete information on the flows and sources of trade and the vulnerabilities that may exist. The gateway would be available daily for information essential for those engaged in commerce to better understand government interventions, but it would also have an emergency response capability to identify trade vulnerabilities, tapping into distributed resources when calamities occur, whether wars, natural disasters, or slower moving calamities such as would occur with climate change.
- 4 What is called for is not just access to raw data—numbers of measures—but an evaluation of trends and analysis of impact of measures and events.

An improved monitoring system

- 5 A priority for the Director-General (DG) should be to create space for the Secretariat to fill policy data gaps and to analyze the magnitude and incidence of policies affecting competitive conditions on markets—including in areas where WTO rules are weak or missing altogether.⁴⁸

48 In his contribution to *Revitalising Multilateralism: Pragmatic Ideas for the New WTO Director-General*, Bernard Hoekman sums up the role that the WTO Secretariat must assume with respect to monitoring, transparency, and analysis in the language quoted above. This is his formulation. *Revitalising Multilateralism: Pragmatic Ideas for the New WTO Director-General*. Vox EU/CEPR. November 10, 2020. <https://voxeu.org/content/revitalising-multilateralism-pragmatic-ideas-new-wto-director-general>.

- 6 The Secretariat should consult with experts such as Simon Evenett, Bernard Hoekman, and Robert Wolfe, as well as experts within the Secretariat, on an official and public basis, on how to design a comprehensive data collection and reporting system that is state-of-the-art.
- 7 The independence of the process and of the Secretariat must be fully respected. It must be clear that Members are prohibited from interfering with the monitoring work product.
- 8 The Secretariat, while striving for objectivity and completeness, should not be deterred by political considerations (Member sensitivities) in collecting and reporting on measures affecting trade, including in Trade Policy Reviews.
- 9 Members should cooperate with and support the monitoring process in full accordance with their notification obligations.⁴⁹
- 10 Members should provide the WTO Secretariat with adequate resources to provide more complete transparency in aid of the above-stated objectives. The efforts of the Monitoring and Economic Research Divisions for these functions should be financially self-supporting and independent of the annual WTO budgeting process.

Improving Trade Policy Reviews

- 11 There should be a biennial review in the Trade Policy Review Body with recommendations of any improvements that should be made in the collection and dissemination of information.

For these purposes, the Secretariat should provide a comparison of all Member reporting, Secretariat reporting, and other sources of reports, including the Global Trade Alert, the OECD, the Bank, and the Fund, or contract with an outside source to do so.
- 12 The Trade Policy Review Mechanism itself should assure a more hard-eyed view to provide a greater degree of qualitative and quantitative analysis. What is the degree of contribution—positive and negative—to the trading system, of each Member subject to review? What trends are discerned? What is the likely impact of trade measures currently in effect and those that are planned? Sugar coating should be avoided, while avoiding being caustic to the extent possible. The nature of trade developments should come through clearly, not just from a summary of Members' views but in the report from the Secretariat.
- 13 Horizontal TPRs: Additional specific subjects could be addressed in horizontal TPRs (beyond the current single-country approach), focusing on topics such as food security, vaccine availability, agricultural support, industrial subsidies, effects on trade of inadequate enforcement of competition policy, the gap between bound and applied tariff rates, etc.

49 "The 16th Global Trade Alert Report: The Global Trade Disorder." Global Trade Alert. November 12, 2014. <https://www.globaltradealert.org/reports/24>. Page 98: *However, just as turkeys don't vote for Christmas, what is the incentive for the monitored to bolster the monitor?* The final section of this report (pages 87-98) contains a comparison of the methodologies employed by the WTO and the GTA in identifying trade measures following the 2008 financial crisis.

Member notification requirements

- 14 Members should, as a new normal practice, provide with respect to any instruction to customs officials who impose or change any trade measure at the border, automatically, simultaneously, and electronically, a copy of the instruction to the WTO, with any necessary explanatory material. (The WTO would be added as a “cc:” to every e-mailed instruction. Data would be complete and up to date.)
- 15 WTO notification requirements should be designed to the extent feasible to include incentives that make compliance more likely through self-interest on the part of Members.

Comment: The standards notification process works very well because there is mutual benefit to notifying standards in draft for comment by others, as well as a system of filing specific trade concerns. The process diffuses likely conflicts, heads off potential litigation, and is a very useful tool for regulators applying standards. As important, it often gives government agencies with regulatory responsibility a participatory role. Information provided can be more complete and timelier if the agencies with responsibility as administrators are directly engaged in the process.⁵⁰

- 16 Incentives should be provided aimed at reducing non-compliance.
 - a The Secretariat should list by Member and by agreement all those in non-compliance.
 - b The non-compliant should not share in all of the benefits of the system, such as access to online refined data provided by the WTO. Other forms of sanctions can be devised for penalizing those with the capacity to comply, who do not apply for technical assistance, but continue to fail to comply.
 - c To the extent possible, the Secretariat should make efforts to publish information on measures employed by Members who under-report. For Members who fail to verify information, the Secretariat should publish the best information available.
- 17 All WTO Committees responsible for the oversight of compliance should welcome counter-notifications, as well as less confrontational statements of specific trade concerns (STCs), as in the TBT Committee. The Secretariat should keep Committees currently informed of relevant information collected in the monitoring process.
- 18 Developing countries should be encouraged to self-identify as such, based on objective criteria and capacity-building needs, as they do under the Trade

50 Robert Wolfe. “Is World Trade Organization Information Good Enough? How a Systematic Reflection by Members on Transparency Could Promote Institutional Learning.” Bertelsmann Stiftung High-Level Board of Experts on the Future of Global Trade Governance. 2018. http://aei.pitt.edu/102529/1/MT_Is_World_Trade_Organization_Information_Good_Enough.pdf.

Facilitation Agreement, in order to obtain sufficient technical assistance.⁵¹ Self-identification shall be taken into account in non-compliance proceedings. As with other Uruguay Round Agreements, new notification requirements can be phased in for the Least Developed Countries. Every effort should be expended with the help of international financial institutions to assure that there is full technical support to achieve full compliance.

- 19 WTO reports on measures should include a notation indicating information that has been verified by the Member imposing a measure and that has not been verified (but in which there is a high degree of confidence as to its accuracy).

Proactive reporting by the Secretariat

- 20 Watch list: When there is a headline in the press of a “trade war” or other act of trade aggression, or of a measure very likely to distort trade substantially, the Secretariat should immediately, after seeking an immediate comment from the country imposing the measure, publish the measure on a watch list while awaiting verification.
- 21 Detecting and tracking trade anomalies: The Economic Research and Statistics Division should track seismic events (trade flow anomalies), such as acts of economic coercion, and inform the Monitoring Division so that it can research the probable causes if these are not apparent. A special trade monitoring mechanism, similar to that which was established under Article 18 of the Protocol on the Accession of the People’s Republic of China, could be established with respect to any problem area that warrants heightened and sustained attention.⁵²
- 22 Private sector input: Where there are allegations from the private sector of market distortions, preventing market forces from determining competitive outcomes, Secretariat resources should be devoted to forensic analysis. The Monitoring and Economic Research Divisions should pay special attention to opaque practices that have not been notified and that have the equivalent trade-distorting effect of notified and officially reported measures.
- 23 Economic impact assessments: The Monitoring Division of the WTO should supply its data to the Economic Research and Statistics Division, which should assess the economic impact of WTO-reported measures, trade-restricting and trade-facilitating, to the extent possible. Reports of the Economic Research and Statistics Division should not include judgments as to the WTO-consistency of any trade measure.

51 William Alan Reinsch. “Transparency at the WTO: Why Does Transparency Matter, and Are Members Meeting Their Obligations?” Center for Strategic and International Studies. <https://www.csis.org/analysis/transparency-wto-why-does-transparency-matter-and-are-members-meeting-their-obligations>. Reinsch also suggests that counter-notification provisions be inserted throughout the WTO agreements, wherever applicable.

52 “Accession of the People’s Republic of China WT/L/432.” World Trade Organization. November 23, 2001. <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/L/432.pdf&Open=True>.

Crisis management

- 24 In response to a crisis, any group of Members or Committee Chairs can ask the Secretariat to recommend all the possible responses—including improvements in monitoring.⁵³ Cross-divisional Secretariat task forces can be formed to monitor and assess trade measures, as was done in the case of the pandemic.
- 25 Special horizontal Trade Policy Reviews should be conducted for matters of great consequence, such as Members' measures to deal with the pandemic, trade-facilitating, trade-restricting, or otherwise trade-distorting measures. Emphasis could be given to heightened monitoring of trade facilitation efforts in the poorest countries to spur the distribution of vaccines, for example.⁵⁴ A horizontal review of climate policies and measures should be undertaken.

CONCLUSION

As with all trade rules, and this applies to requirements for notifications as well, the impetus to comply comes in the first instance not from the threat of sanctions but from a view of enlightened self-interest. Robert Wolfe writes:

Providers of information must see how doing so helps them meet their own objectives. Do they believe that the information they provide will be analysed, aggregated and disseminated in a way that is helpful to them or crucial for the trading system? If countries do not think they are learning about themselves in preparing a notification, or responding to a TPR questionnaire, and if they do not see the public good aspect of such information, then notification is indeed merely a burden.⁵⁵

Working together, the WTO's Members and the Secretariat can bring much greater clarity to the conditions under which world trade is conducted. For governments, facing policy choices when creating new rules or in administering existing ones, working from inadequate information is an unacceptable risk.⁵⁶ Perhaps more important for the multilateral trading system than any other improvement to the system is assuring that the WTO rules are based on solid intelligence that is as complete as possible. A trading system operating even partially in the dark cannot deliver fairness.

53 "DDG Wolff: Q&A on the COVID-19 Pandemic and Trade." World Trade Organization. October 2, 2020. https://www.wto.org/english/news_e/news20_e/ddgaw_05oct20_e.htm.

54 "DDG Wolff Urges G20 Leaders to Back WTO Action to Support Economic Rebound, Pandemic Response and WTO Reform." World Trade Organization. November 21, 2020. https://www.wto.org/english/news_e/news20_e/ddgaw_21nov20_e.htm.

55 Robert Wolfe. "Is World Trade Organization Information Good Enough? How a Systematic Reflection by Members on Transparency Could Promote Institutional Learning." Bertelsmann Stiftung High-Level Board of Experts on the Future of Global Trade Governance. 2018. http://aei.pitt.edu/102529/1/MT_Is_World_Trade_Organization_Information_Good_Enough.pdf.

56 Simon J. Evenett. 2019. "Protectionism, State Discrimination, and International Business Since the Onset of the Global Financial Crisis." *Journal of International Business Policy* 2: 9-36.

ADDENDUM: UNDERSTANDING THE FACTORS SHAPING TRADE

My PIIIE colleague, Chad P. Bown, commenting on the foregoing reminded me that missing from the analysis was attention to the factors giving rise to and shaping trade.⁵⁷ I should have thought of this myself, as the first chapter in my book, now in draft, is on the history of trade.

Tens of thousands of years before the internet and AI existed, our remote ancestors knew where the obsidian was located that they needed for making some of their first tools, and this, it is theorized, gave rise to trade in the first place. Those living in the Bronze Age had a fair idea of the location of tin deposits. Writing is said to have been generated in part in ancient Sumer to be a means of communication over distance to accompany traded goods. In the Iron Age, the search was for iron ore. In the 10th century B.C.E., Arab traders waited for the monsoon winds to take their cargoes of frankincense and myrrh from Oman across the Indian Ocean and bring back cargoes of silk. The Ancient Greeks looked to the Black Sea and Egypt for grain. Later, in the dash for colonies, there was a desire bordering on compulsion in Spain to know where gold might be in the Americas, and later in England and France to find and control the best sugar growing areas in the Caribbean for rum. And where would Britain have been without tea from India? In the 19th century, Alexandre von Humboldt popularized the use of guano as fertilizer, and ships carried to Europe that more pungent cargo mined from mountains of the countless years of bird droppings along the coasts of Chile and Peru—until German chemists later in the century developed technology to synthesize nitrogen, allowing the onshoring of fertilizer.

The opening of the plains in the United States during the 19th century transformed the location of global agricultural production, with a knock-on effect that helped make possible the Industrial Revolution in Europe through freeing up farm workers. Transfers of technology (sometimes involuntary) such as the Arkwright loom moved textile production from England to America.

In the run-up to World War II, Germany concentrated on where its iron ore came from and Japan on where it sourced its oil. During that war, the loss of access to Malaya prompted the US government to send intrepid explorers like my father's friend and neighbor Harvard Professor Dr. Richard Evans Schultes to the Amazon Basin to seek alternative sources of natural rubber, a search later rendered unnecessary through the scientific breakthrough of making synthetic rubber.

During the second oil embargo in 1979, demonstrating for a second time the power of the Organization of Petroleum Exporting Countries (OPEC), it occurred to me that there might be American vulnerabilities in other basic commodities. Consumers standing in lines at gas stations in the United States had no doubt in their minds of the relationship of trade to the location of foreign supplies. As chair of the Trade Policy Review Group, I had overall responsibility

57 Chad P. Bown. 2022. "How COVID-19 Medical Supply Shortages Led to Extraordinary Trade and Industrial Policy." *Asian Economic Policy Review* 17: 114-135. Bown's paper examines a few factors, including price, domestic consumption at the place of manufacture, as well as domestic and trade-related government measures that led to supply and the dearth of it in meeting the demand generated by the pandemic.

for coordinating US trade policy at the time,⁵⁸ I called an interagency meeting to learn if other raw materials might be subject to cartelization. The conclusion of a rapid study led by the US Department of the Interior was that this kind of threat did not exist for other commodities.

A decade ago, when China decided to limit exports of rare earths, tungsten and molybdenum, for what it said were environmental reasons,⁵⁹ dependency on these basic materials needed for electronics in the information technology age received a renewed focus. Concerns were heightened in February 2022 as China began a new study of limiting exports of key minerals necessary to manufacture the F-35 fighter jets and other sophisticated weapons. Reportedly, four-fifths of the refining capacity for rare earths exists in China, and the United States needs to send its own rare earth minerals to China for refining as it has no refining capacity of its own.⁶⁰

The countries of the WTO became aware of South Korea's vulnerability to high technology inputs from Japan due to repercussions from the Fukushima fish case.⁶¹ With a seesawing of results in WTO litigation, political differences between the two countries interfered with the smooth administration of export controls by Japan for critical materials needed to manufacture electronics in Korea.⁶²

A high dependency on two locations in Asia (Taiwan and South Korea) for semiconductors (computer chips) has ignited a subsidy race in Europe, the United States, and Japan to build cutting edge fabs (fabrication facilities), in part to offset the subsidies to China's domestic industry.⁶³ Other important technologies have shifted demand for raw materials. Articles began to appear in the press about China seeking to buy up sources of lithium, lying in great and beautiful swaths on the surface in areas of the Altiplano in Latin America and elsewhere.⁶⁴

The COVID-19 pandemic taught many more people about logistics. Express delivery was hampered when passenger jets were not flying. Factories going offline all at once and then onstream all at once caused backlogs at ports on the US West Coast of 60 to 100 ships waiting to offload, while containerization

58 I was Chairman of the Trade Policy Review Group, a subcommittee that functioned under the Trade Policy Committee, which rarely met.

59 "DS431: China - Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum." World Trade Organization. https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds431_e.htm.

60 "China Targets Rare Earth Export Curbs to Hobble US Defence Industry." *Financial Times*. February 15, 2021. <https://www.ft.com/content/d3ed83f4-19bc-4d16-b510-415749c032c1>.

61 "DS495: Korea-Import Bans, and Testing and Certification Requirements for Radionuclides." World Trade Organization. https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds495_e.htm.

62 "Why South Korea is No Longer on Japan's Approved Export List." Aljazeera. August 28, 2019. <https://www.aljazeera.com/economy/2019/8/28/why-south-korea-is-no-longer-on-japans-approved-export-list>.

63 "2 Charts Show How Much the World Depends on Taiwan for Semiconductors." CNBC. March 15, 2021. <https://www.cnbc.com/2021/03/16/2-charts-show-how-much-the-world-depends-on-taiwan-for-semiconductors.html>.

64 "How The U.S. Is Losing The Lithium Industry To China." *Forbes*. January 11, 2022. <https://www.forbes.com/sites/rpapier/2022/01/11/the-us-is-losing-the-lithium-industry-to-china/>. I don't know how healthy it is to do so, but my wife and I have walked through fields of desiccated lithium brine in Chile. For a stock photo, see <https://www.istockphoto.com/photo/lascar-the-volcano-gm908356948-250238105>.

facilities were under stress and truckers were not present in adequate numbers. The pandemic taught us the difficulties of manufacturing mRNA vaccines in sufficient quantities and getting them to where they are needed.

Then came the Russian invasion of Ukraine, and the same concerns that troubled the Ancient Greeks returned, when the world awakened to the fact that 30 percent of wheat exports came from Russia and Ukraine, and the Black Sea had become a war zone. At the same time, both Russia and the EU Member States, for different reasons, began calculating exactly how much natural gas and oil flowed between them, and the US administration and European governments began scrutinizing the capacity to ship liquified natural gas (LNG) across the Atlantic. Most of us were unaware that Ukraine produces some 50 percent of the global supply of neon used in semiconductor manufacturing. EU fuel cell and hydrogen technology development require important minerals from Russia such as platinum (13 percent of world trade), titanium (23 percent), and vanadium (34 percent).⁶⁵ News articles recorded that about a million containers needed to find a way from coastal China to Europe without passing through Russia or Belarus, that route disrupted by the risk of economic sanctions and the continued hostilities in the region.⁶⁶ Containers shipped by rail take half as long but cost twice as much as shipping by sea, and a quarter as much as shipping by air.⁶⁷

There is a story in the *Financial Times* of March 26, 2022,⁶⁸ about private corporations seeking more secure supply lines, about onshoring, part of the numerous recent pieces written about suspected deglobalization. Adam Smith and David Ricardo ushered in the intellectual construct for specialization that ultimately did not respect borders. Businesses applied their economic logic. Aluminum was produced in Canada because that was where there was an abundance of hydropower, lower cost energy, with no risk to the product being exported—that is until the national security restrictions imposed by the United States four years ago, on March 23, 2018.⁶⁹ Economic efficiency was the rule. Software programming gravitated to India and chip design to Romania, places where there was an abundance of relevant engineers.

Much is known but still unknown about the global distribution of natural, man-made, and human resources. Political risk, a less precise field of study, provides an overlay to whatever can be known about the physical world. Another dimension is time and advances in technology. More information on the location of mineral nodules on the ocean floor needs to be collected. Organizations from seven nations have agreements with the International Seabed Authority (ISA) to

65 "Putin's Critical Raw Materials are a Threat to EU Economic Security." Egmont Royal Institute for International Relations. March 15, 2022. <https://www.egmontinstitute.be/putins-critical-raw-materials-are-a-threat-to-eu-economic-security/>.

66 "Charting the Global Economy: Factory Costs Surge From Russia War." Bloomberg. March 26, 2022. <https://www.bloomberg.com/news/articles/2022-03-26/charting-the-global-economy-factory-costs-surge-from-russia-war>.

67 "China-Europe Rail Lines Become Supply Chain's Latest Problem." Bloomberg. March 22, 2022. <https://www.bloomberg.com/news/articles/2022-03-23/china-europe-rail-routes-become-supply-chain-s-latest-problem>.

68 Harriet Agnew. "Investors Bet Ukraine War Will Prompt Companies to Bring Production Onshore." *Financial Times*. March 26, 2022. <https://www.ft.com/content/07faf1be-88a5-4133-92c5-c38f117692e6>.

69 "Section 232 Investigations: Overview and Issues for Congress." Congressional Research Service. May 18, 2021. <https://sgp.fas.org/crs/misc/R45249.pdf>.

explore vast regions of the ocean, all but one in the Clarion-Clipperton Fracture Zone, an area larger than the United States located in the North Pacific Ocean. Economic feasibility depends on technological progress. There was a similar story for the extraction of oil and gas due to fracking, and that investment has paid economic and national security dividends.

What is needed is sophisticated multidimensional mapping, combined with sophisticated analysis, including foresight exercises examining contingencies. The problems today are not so very different than those our early ancestors faced travelling a few kilometers to barter for or to take obsidian. Would the streams en route be swollen, the saber-toothed tigers or tribes along the way menacing? They worried about logistics, as did Queen Isabella as she awaited news of treasure ships due back from the Americas. Complex logistical problems were dealt with successfully without AI or even computers as recently as the D-day landings at Normandy. Understanding trade to a far greater degree than we do today is not an insuperable challenge.

While we have not advanced from our forebears as far as we should have, there are elements of a solution. What exists today is distributed knowledge, linkable through blockchain technology but still unlinked. Different agencies have data on various factors influencing trade. Specialized agencies are tracking particular aspects of production—the IAEA (for atomic energy) and the IEA (for energy more generally), the Society of Petroleum Engineers, and AMIS (for crop and agricultural market information), to name a few. The Peterson Institute for International Economics has a very accessible tracker for sanctions related to the Russian invasion of Ukraine.⁷⁰ The Global Trade Alert has current data on trade measures and more generally has begun to track subsidies in greater detail, as these measures dramatically affect trade flows, plus it has its own Essential Goods Inventory (ESI).⁷¹ The GTA also prepared a study for the World Bank on March 23, 2022, comparing current data collection systems, at the WTO, GTA, ITC, and the Bank.⁷² Nodes of trade, production, and natural resources intelligence can be part of the blockchain to form a more coherent picture of the whole.

What is the institutional capacity of the WTO or any other organization to generate that picture not only of current trade measures but also the factors that affect and will affect trade? What are the needs of the WTO Members? Experts need to explore this topic. The WTO has the ability to convene experts and should do so to better understand international trade and the forces that shape it.

What is needed at the WTO is not duplication of specialized nodes of analysis and data, but the ability to reach into resources quickly especially when responses need to be immediate. The United States government is in the process of identifying supply chain resilience (another way of saying, identifying

70 "Russia's War on Ukraine: A Sanctions Timeline." Peterson Institute for International Economics. <https://www.piie.com/blogs/realtime-economic-issues-watch/russias-war-ukraine-sanctions-timeline>.

71 "Essential Goods Initiative: April 2022 Data Release." Essential Goods Monitoring Initiative. April 2022. https://mcusercontent.com/4d3c72e64f71605940b148af0/files/c4cc3e7e-b540-bd50-6e5d-b746b30e43de/EGI_Summary_April_2022_release.pdf.

72 "Form, Frequency, Duration & Scale: COVID-Era Trade Policy Interventions Affecting Medical Goods." Global Trade Alert. March 23, 2022. <https://www.globaltradealert.org/reports/88>.

vulnerabilities). This can be looked at more globally. Net food-importing countries may have a clear understanding of their needs, but this information may not be adequately shared with food-exporting countries. The WTO might be a good candidate for identifying potential problem areas, whether disruptions might come from war, climate, natural disasters, or threats to global health. Was the misallocation of containers and super cargo vessels avoidable with strategic foresight and policy planning? Perhaps. Does the WTO Secretariat have adequate resources at present to undertake this task? It does not. Expansion of the Secretariat is a subject that warrants attention and is covered in a separate paper.

The science of trade is in its infancy in many respects. Trade measures are put into place, whether for freer trade or to restrict trade, without sufficient analysis of likely and actual effects. To this must be added calculations related to health, climate, and geopolitical crises, where other institutions have capabilities that would not be expected to be found at the WTO nor in a single location. During the pandemic, a WTO crisis team with broader capabilities could have identified sources of supply as well as trade and trade anomalies—looking for trade that should have been taking place but was not, much the way the astronomical bodies that cannot be seen by telescopes and sub-atomic particles not visible to electron microscopes can be identified by their effects on what is visible. It should have been possible to look beyond trade measures, restricting and facilitating, to understand the factors affecting the availability of components of ventilators, as well as materials for the production and delivery of vaccines. It may be that the World Health Organization (WHO) had the information. The trade expertise of the WTO is directly relevant to removing obstacles to cross-border supply. During the pandemic, the WTO Secretariat rallied to provide information notes and far better reporting of trade measures than had been the norm. Further trade intelligence gathering and analysis would have been very useful. The process needed to be more organized and more supported by the WTO's Members. There should be better preparation for the next crisis, whatever the cause. Patterns of consumption as well as production need to be better understood, as well as the effects of physical shortages and price spikes.

How will governments and corporations react to having access to greatly improved global trade intelligence? Will individual decisions be in the direction of self-sufficiency and autarky or aimed at more trade, not less, at diversification leavened with some degree of redundancy, nearshoring, onshoring, or "friend-shoring"? The answers will differ by commodity, by capabilities, by policy preferences, factoring in risks but also costs, and assessments in line with individual interests.

Ignorance is not an option, however. Lack of knowledge would pose even greater risks. We have eaten of the fruit of the tree of knowledge, and now need more than a first taste.



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