

Jaw Jaw not War War Prioritising WTO Reform Options

The 24th Global Trade Alert Report by Simon J. Evenett and Johannes Fritz







CEPR Press

Centre for Economic Policy Research 33 Great Sutton Street London EC1V 0DX

Tel: +44 (0) 20 7183 8801 Fax: +44 (0)20 7183 8820 Email: cepr@cepr.org Web: www.cepr.org

Jaw Jaw not War War: Prioritising WTO Reform Options. The 24th Global Trade Alert Report.

© CEPR Press, 2019

TABLE OF CONTENTS

Executive summary	6	HOLD THEIR FEET TO THE FIRE: THE TRACK RECORD O EACH G20 MEMBER	F
CHAPTER 1 Prioritising WTO reforms—but how?	8	Argentina	64
		Australia	68
SECTION 1: FACE THE FACTS ABOUT TODAY'S TRADE POLICY LANDSCAPE		Brazil	72
CHAPTER 2		Canada	76
New trade distortions mushroomed since the last G Leaders' Summit	20 11	China	80
CHAPTER 3		France	84
Sizing up the Sino-US tariff war	17	Germany	88
CHAPTER 4		India	92
Covert jumbo protectionism is the norm	22	Indonesia	96
SECTION 2: DEEPER FLAWS IN THE WORLD TRADING		Italy	100
CHAPTER 5		Japan	104
Fundamentals explain less and less trade growth	28	Mexico	108
CHAPTER 6		Russia	112
Waning resort to WTO Dispute Settlement	32	Saudi Arabia	116
SECTION 3: IDENTIFYING WTO REFORM OPTIONS—		South Africa	120
INSIDE THE WTO SANDBOX		South Korea	124
CHAPTER 7 Needed: A systematic approach to identifying WTO reform options		Turkey	128
	40	United Kingdom	132
CHAPTER 8		United States	136
Can crisis-era discrimination be reversed through single-sector critical mass deals?	45		
CHAPTER 9			
Reviving WTO negotiations through well-chosen multi-sector deals	50		
CHAPTER 10			
Mustering support for a subsidy accord could be difficult	56		
CHAPTER 11 What's new in the GTA database?	60		
What is the Global Trade Alert?	62		
Acknowledgements			
Acknowledgements	62		

THE ROT SET IN BEFORE THE SINO-US TRADE WAR





Discrimination that singles out one exporter



All trade discrimination

- Import tariff increases
- Export-related measures (including export subsidies) Subsidies (excluding export subsidies)

RECENT EXAMPLES OF G20 TILTING THE PLAYING FIELD IN FAVOUR OF LOCAL FIRMS

Not to be outdone by the arbitrary United States trade policy, on 16 February 2019 India immediately raised tariffs on all imported goods from Pakistan by 200%. In doing so, India unilaterally revoked Pakistan's Most Favoured Nation status.

On December 18, 2018 Canada's ministers of Natural Resources and International Trade Diversification announced more than Can.\$1.6 billion to support jobs and workers in Canada's oil and gas sector "as Canada seeks to diversify export markets for its resources beyond the United States." The largest component of this package is Can.\$1 billion (U.S.\$755 million) in financial support from Export Development Canada to be made available to exporters of all sizes to assist companies looking to invest in innovative technologies, address working capital needs or explore new markets. This measure has the potential to distort Canada's trade with 122 nations.

Despite its much-vaunted state aids regime, the European Union has form on subsidies too. On 18 December 2018, the European Commission approved a microelectronics research and innovation project jointly notified by France, Germany, Italy and the United Kingdom. The countries will respectively support the project with EUR 355 million in direct grants or loans/ repayable advances (France), EUR 820 million in direct grants (Germany), EUR 524 million in direct grants (Italy) and EUR 48 million in direct grants and repayable advances/interest rate subsidy loans (the United Kingdom). The project support has a total value of EUR 1.75 billion (approx. USD 2 billion). The project is approved under the "Important Project of Common European Interest" (IPCEI) state aid rules.

Brazil isn't shy either about offering subsidies to local firms. On 1 January 2019, a new scheme (Rota 2030) came into effect that allows firms in the automotive sector to write off against their taxes 30% of their research and development expenditures. This subsidy will last five years. Thirty-eight trading partners are disadvantaged by this scheme. Protecting car producers is increasing in Latin America. On 30 January 2019 Argentina took steps that effectively limited import competition from foreign car producing nations.

More than one G20 President has put substantial extra taxes on imports. On 10 December 2018 by Presidential Decree Turkey imposed additional import tariffs of between 10-30% on a wide range of consumer and products and materials used in construction.

EXECUTIVE SUMMARY

G20 Leaders are due to discuss options to revive the moribund WTO at the upcoming Osaka Summit. The purpose of this Global Trade Alert report is to identify WTO reform options that directly address the first-order problems that have built up over the past decade. Our approach ties prescription to diagnosis.

Since the last WTO Ministerial Conference in December 2017, trade officials have been struggling to take forward a number of unrelated, incremental initiatives. There is no apparent organising logic, nor any systemic perspective. Worse, the Sino-US trade war has absorbed bandwidth that could have been usefully deployed elsewhere.

Our evidence-driven approach identifies initiatives that, if taken forward, would reform substantial amounts of world trade. While these initiatives would not require each WTO member's participation, a data-driven approach that picks the right sectors to reform delivers benefits to dozens of WTO members, drawn from every continent and across levels of development.

A meaningful reset for the WTO requires a new work programme that reverses the build-up in discrimination against foreign commercial interests witnessed since the global financial crisis began. With this in mind, this report first diagnoses the current woes of the world trading system and then identifies which initiatives could elicit critical mass among the WTO membership.

Unravelling trade cooperation puts the spotlight on deficiencies of current trade rules

Going from the more recent to the deeper-seated structural problems facing the WTO, this report shows that:

- Since G20 Leaders last met in Argentina, their governments have imposed trade distortions affecting over \$1.15 trillion of trade. This is over \$250 billion more than in the comparable period last year and double the amount of trade harmed in the three preceding years. What is more, this finding relates to G20 measures taken between 1 December 2018 and 15 April 2019, before the Sino-US trade war intensified in May 2019.
- A total of 288 G20 trade distortions accounted for the trillion dollars-plus in affected trade. Only a sixth of those trade distortions were implemented by China and the United States. Subsidies to farmers and local manufacturers accounted for 118 of those

trade distortions. The Sino-US trade war may give the impression that free trade is principally under threat from tariff hikes by two behemoths of the trading system. That misses so much of the damage being done to the level commercial playing field worldwide.

- Non-G20 governments more than doubled their resort to protectionism over the same period. After the G20 abandoned its pledge to eschew protectionism whatever restraint there was left has weakened.
- While headlines of multi-billion tariff hikes on Chinese exports abound, in fact since November 2008 a total of 348 trade distortions have been carried out by 36 governments that each affected over \$10 billion of trade. In fact, 14 governments are responsible for imposing 5 or more instances of such jumbo protectionism. Only 6 of these 348 jumbo protectionist measures have been implemented by the Trump Administration. The rot started well before the Sino-US trade war.
- Subsidies to import-competing manufacturers and to farmers and state-provided export incentives are responsible for the biggest distortions to global trade. Over the past decade more than 90% of the trade distortions affecting \$100 billion+ of trade involved subsidies of different forms. Reversing tariff hikes should not be the only priority.
- By 2013 seventy percent of world goods exports competed against trade distortions not present when the global financial crisis began. That percentage has, if anything, risen in the six years since.
- Taking a longer-term perspective, G20 trade costs stopped falling at the turn of the century.
 Fundamentals now account for 20% less of G20 trade growth. Bad policy accounts for more and more.
- The gradual build-up of trade distortions has compromised the WTO's Dispute Settlement System. Many G20 countries have hit each other's commercial interests so often that they dare not bring many cases against protectionism by other trading powers. People who live in glass houses do not throw stones. In the first five years of the WTO on average every \$85 billion of intra-G20 trade triggered a WTO dispute. Now, it takes over half-a-trillion dollars. This problem won't go away if a full bench of judges were appointed to the Appellate Body, the focus on which has been a distraction from the deeper-seated challenges to resolving trade disputes at the WTO.

Build a WTO work programme around inclusive multi-sector deals

Following the failure of the Doha Round, there is no appetite for a WTO work programme that requires every nation to reform. Right now there is little desire to liberalise on the part of many governments. For better or for worse, any new work programme for the WTO cannot be based on far-reaching opening of markets. Surprising as this may seem that still leaves plenty of reform options on the table. Nothing stops coalitions of willing WTO members forging ahead so long as they do not impair the interests of others. In return, those governments that stand aside should not veto progress.

Rather than putting liberalisation at the core of any WTO initiative, the focus should be on rolling back the crisisera discrimination that remains. Given the scale of such discrimination noted above, restoring the world trade system to its pre-crisis state would deliver real benefits. Now that the emergency is over restoring normal conditions for trade is a natural objective.

Using detailed data on crisis-era discrimination, including the countries, products, policy instruments, and trade implicated, a systematic examination of each goods sector revealed:

- Special-purpose machinery is the only sector that can support a stand-alone agreement where the net beneficiaries account for a critical mass of WTO members, taken to be 80% of global trade in that sector. This accord would reform \$142 billion of trade.
- Much more trade could be reformed by the smart bundling of sectors in a reform package.
- A deal to remove crisis-era discrimination in the large general-purpose machinery and transport equipment sectors would create 38 winners among the WTO membership that together are responsible for 86% of these sectors' trade. The winners would include China, the European Union, India, the United States, South Africa, and Turkey.
- A three-sector deal that rolled back crisis-era discrimination in the base metals, man-made fibres, and transport equipment sectors would create 76 winners among the WTO membership and reform \$1.5 trillion of trade. Winners are well represented in each continent and among every level of development.
- There are 67 multiple sector deals where China, the European Union, Japan, and the United States are winners. Some of these WTO reform options would reform over \$2.5 trillion of trade with very little freeriding by non-members.

Mustering support for a new subsidies accord won't be easy

Fearful of the harm they perceive from Chinese subsidies, Japan, the European Commission, and the United States formed a trilateral initiative that, among other goals, seeks new global rules on subsidies. According to press reports in May 2019, this trilateral group has made progress agreeing text on what these new rules could involve. Could a subsidy accord that rolled back crisis-era state support for manufacturers be part of a new WTO work programme?

The pervasiveness of crisis-era subsidies is both a blessing and a curse. The blessing is that a roll back accord would offer benefits for large shares of Chinese, European, Japanese, and American exporters. The curse is that the scale of their own subsidies that would also be reformed is such that a neo-mercantilist policymaker is likely to blanch at the resulting import increases.

Subsidy reform is a two-way street. The findings in chapter 10 of this report cast doubt on whether the Trilateral initiative to craft new subsidy rules can be both comprehensive in scope and tenable at home let alone in China, the intended target.

Jaw Jaw is the alternative to War War

This century has not been kind to the WTO. Inaugurated in 1995 with such high hopes, outcomes have routinely disappointed. Failure to systematically consider reform options in an evidence-driven way has been a recurring flaw—all too often the urgent superseded the important. The result has been initiatives that do not command broad-based support among the WTO membership and which founder, sometimes quickly and sometimes when the blindingly obvious can no longer be denied.

While many factors can sink a trade negotiation, evidence-driven work programme design is surely a necessary condition for success. This report has devised a replicable, data-driven approach that looks beyond any one WTO member's interests, beyond one sector, and beyond any one commercial lobby, enabling initiatives to be systematically compared. The reform options highlighted here demonstrate that governments working together through the WTO can still accomplish a lot more than going it alone.

The G20's longstanding goal of promoting economic growth would receive a further boost if Leaders in Osaka kickstart the design of an inclusive WTO work programme that restored the world trading system to its pre-crisis state. Doing so would follow Winston Churchill's famous dictum: Meeting jaw to jaw is better than war.

CHAPTER 1 PRIORITISING WTO REFORMS— BUT HOW?

In their last summit communiqué, having acknowledged the many contributions of international trade to living standards and the like, G20 Leaders argued the world trading system "is currently falling short of its objectives and there is room for improvement." They went on to call for reform of the WTO and promised to review progress at their next summit, which will take place in late June in Osaka, Japan.

The imperative of WTO reform has been evident to others¹, arguably for a number of years. Moreover, there has been an uptick of diplomatic activity, stimulated in part by the sense that the WTO is losing its central role in a world where more nations are unilaterally pursuing protectionism and to a lesser degree liberalisation, where two of the largest trading powers are engaged in a tariff war affecting hundreds of billions of US dollars of trade, and after almost 25 years of extensive rule-making in regional trade agreements.

Seen from the perspective of the WTO's three major functions, the glass is better viewed as half empty than half full. The WTO's legislative function has not recovered from the body blow represented by the failure to conclude the Doha Development Agenda. The much heralded benefits of the Agreement on Trade Facilitation pale in comparison to opportunities forgone as a result of the stalemate during the latest multilateral trade round.

Meanwhile, a dispute over appointing new members of the Appellate Body threatens to weaken the WTO's role in settling disputes between its members. Furthermore, with so many WTO members failing to fulfil their obligations to make complete and timely notifications of their policies, the transparency function of the WTO is being undermined. A careful read of the WTO's monitoring reports on protectionism reveals that its surveillance function has been compromised by a lack of cooperation from some G20 governments.

Even so, the pessimism about the WTO should not be overdone. Governments still seek to join this international organisation and no government has walked out, a claim that cannot be made by every multilateral agency these

days. World trade in goods has not collapsed and according to some estimates it is booming in services. Still, there is a sense that the WTO has not moved forward, which really means that the governments that are members of the WTO have not been able to agree on how this organisation should evolve.

Deliberations, such as they are, continue among trade diplomats in Geneva. Moreover, the so-called Ottawa group of WTO members has met at ministerial level thrice. Their communiqués are stronger on ends than on means and give little sense of prioritisation and specifics. Still, there may well have been substantive reflection behind the scenes and there is the opportunity for further deliberation in the months to come.

The Ottawa group stated it was open to new negotiating approaches at the WTO. If this is code for launching negotiations of new plurilateral accords among subsets of WTO members, then which sectors or policy instruments should be prioritised (a matter taken up in the third section of this report)? The Ottawa group's specific mention of the importance of negotiating new disciplines on subsidies accords with the findings in part one of this report as well.

What is unclear in recent deliberations and recommendations, however, are the methods by which priorities for reforms to the WTO are being identified. All too often it appears like a free for fall with little sense of strategic or, for that matter, historical perspective.

Perhaps unsurprisingly, if one brings together a group of trade lawyers interested (say) in WTO dispute settlement then conversation almost certainly turns to the difficulties in appointing new members to the Appellate Body, to the exclusion of almost everything else. There is too much thinking within professional silos and, to be fair, that applies to international trade economists as well.

Moreover, the Sino-US tariff war has frequently sucked much of the oxygen out of the room of discussions on reforming the multilateral trading system. All too often China-bashing and Trump-bashing have displaced meaningful analysis of the root causes of the WTO's current malaise. Our 22nd report, which demonstrated

¹ See, for example, the July 2018 report supported by the Bertelsmann Foundation.

that the case that Chinese excess capacity is a systemic threat to the world trading system was hollow, convinced us that those who advise senior trade officials haven't been doing their homework or aren't being listened to.

In other interventions, experts on the newer forms of international commerce—such as electronic commerce—advance the case for new rules in those domains. Pressing claims to make the WTO relevant for 21st century, they overlook the awkward fact that for many countries merchandise associated with the 19th and 20th century still dominates their engagement with the global economy. Somehow a sense of global perspective has been lost.

In an era when evidence-based policymaking is supposed to be in vogue, and when data and information is more readily available than ever before, our starting point is that deliberations on reforming the multilateral trading system ought to be informed by

- broad-based assessments of the developments on the ground in government commercial policy making (much of which states are not particularly keen on advertising).
- evaluations of the key outcomes that the multilateral trading system is expected to engender (such as raising the growth of global trade and eliciting participation of governments in its councils).
- explicit comparison of reform options, ideally in terms of their potential effects but at a minimum in terms of the commerce and trading nations implicated.

Better diagnosis is more likely lead to more promising treatment, in this case, to proposals for reforming the trading system likely to garner more support among WTO members.

How this report is organised

Our evidence-driven assessment of what ails the WTO and how to move forward is organised into three sections. The first section takes commercial developments over the past 10 years seriously and puts prominent events—such as the Sino-US tariff war—in perspective. In contrast to the fire-fighting approach that drives some deliberations at the WTO, the goal here is to provide policymakers and analysts with an appreciation of the scale and form of developments in the world trading system since the onset of the global economic crisis.

The second section of this report presents troubling evidence of deep-seated underperformance of the world trading system. The market outcomes and state engagement thought likely at the time of the WTO's creation in the mid-1990s have not come to pass. That these findings relate to years before the Sino-US tariff war,

the ongoing dispute concerning seating new Appellate Body judges, and even the onset of the global economic crisis ought to encourage deeper reflection on the root causes of the malaise in today's multilateral trading system.

Appetite for another far-reaching global trade negotiation is, it seems, limited. Consequently, in the third section of this report, we use data on underlying export patterns and the trade distortions implemented by governments over the past 10 years to identify which coalitions of WTO members have sufficiently aligned interests to take forward reforms on a sectoral critical mass basis.

Much as organisations often create sandboxes to foster innovation, our data-driven approach highlights how a fresh look at the evidence can identify new initiatives at the WTO. In an era where vast amounts of trade data and information on policy change is available, analysts both inside and outside government ought to be contributing to a sandbox devoted to WTO reform.

While we don't expect everyone to agree with every aspect of our approach, we hope to stimulate further data-driven inputs into policy processes that identify and prioritise reforms at the WTO. There will always be a role for qualitative insights, inter-personal negotiating dynamics, and the like in trade negotiations. We do not deny that. Rather, in this report we seek to strengthen the method by which reforms to the WTO are prioritised.

As has become something of a tradition in our reports, especially those presented before G20 Leaders' Summits, an annex has been prepared for each G20 member. These annexes summarise the latest information on the liberalising and discriminatory policy intervention undertaken by a G20 member, thereby providing a counter-point to the official monitoring of G20 protectionism. Each annex also reveals the frequency with which a G20 member's commercial interests have been hit by protectionism undertaken elsewhere.

Moreover, fine-grained trade data has been used to prepare estimates for each G20 member of the percentage of their nation's goods exports that currently compete against policy-induced trade distortions. Since the range of state-imposed foreign trade distortions considered here is broader (and we would argue much more realistic) than those found in the official reports of international organisations on G20 protectionism, the degree of export exposure to foreign protectionism is considerably higher. Such evidence indicates just how much is at stake, especially as export performance is a potentially important contributor to national economic growth and boosting such growth is supposed to be a leading objective of the work programme of the G20.

SECTION 1 FACE THE FACTS ABOUT TODAY'S TRADE POLICY LANDSCAPE

CHAPTER 2 NEW TRADE DISTORTIONS MUSHROOMED SINCE THE LAST G20 LEADERS' SUMMIT

As far as international trade matters were concerned, deliberations at the last G20 Leaders' Summit were overshadowed by the subsequent Trump-Xi dinner, which led to a welcome truce of sorts in the Sino-US tariff war. Much less commented upon at the time—largely because it had been trailed earlier in leaks to the press—was the abandonment of the G20's pledge to eschew protectionism.

While this non-binding pledge had many flaws—it was full of holes, toothless, and subject to enervated official monitoring—naturally the question arises whether resort to protectionism by governments of the world's largest economies changed following the pledge's demise?

The purpose of this chapter is to layout the factual record on the G20's resort to trade distortions from 1 December 2018 to 15 April 2019, a four-and-a-half month period since the last G20 Leaders' Summit. However, to facilitate meaningful comparisons we compare the track record of the G20 members during this period with their resort to trade discrimination during comparable periods in the four previous years.² Plus we report similar data for the non-G20 countries, against which we can benchmark the trade policy choices of the G20 trading powers.

To address these matters we extracted the relevant entries from the Global Trade Alert (GTA) database on those implemented³ policy interventions that tilt the commercial playing field in favour of local firms, workers, investors, and owners of intellectual property. Approximately 95% of the entries used to compile the statistics in this chapter were documented using official government sources.⁴ Systematic routines, including daily crawling of government websites, are used by the

GTA team to identify relevant trade policy changes, both liberalising and those that discriminate against foreign commercial interests.

A key difference between the approach taken by the GTA team and the official monitors of protectionism is that the latter confine themselves to tracking a limited number of policy instruments, typically the more transparent trade distortions such as tariffs. Reporting on subsidies, for example, has been set aside in official reports on G20 trade distortions, a lacuna whose importance will become evident in what follows.

To be fair, official monitoring of G20 protectionism has been hampered by a lack of cooperation from governments in verifying their policy intervention. For this reason, an independent assessment of G20 trade policy choice is necessary, not least because it contributes to greater transparency in the world trading system.

After abandoning the pledge, G20 resort to protectionism nearly doubled

Figure 2.1 plots the total number of new trade distortions implemented by G20 governments from 1 December 2018 to 15 April 2019 and the comparable time period in the four preceding years. Since the last G20 Leaders' Summit the G20 has implemented a total of 288 policy interventions that tilted the playing field in favour of local firms. During the same period in the four preceding years the total number of G20 protectionist policy interventions ranged from 125 to 175. In particular, the period 1 December 2017 to 15 April 2018 saw 159 harmful measures implemented by G20 governments, implying that in the comparable period a year later 88% more protectionism was implemented after G20 members dropped their pledge on protectionism.

² Given that for any given timeframe the number of measures found by the GTA team tends to rise over time, to undertake a fair comparison between policy developments since the last G20 Leaders' summit and earlier years, we identified those policy interventions that were documented and implemented between 1 December of a given year and 15 April of the next year. Therefore, the relevant implementation period and reporting interval were identical in length across the five years reported in the figures in this chapter.

³ The statistics presented in this chapter refer only to government actions that have taken effect. Threatened actions or investigations under way that have not resulted in discrimination against foreign commercial interests do not inflate the totals presented here.

⁴ For a detailed account of the procedures used by the GTA team to collect and document evidence see Evenett (2019).

Some readers may wonder whether the ongoing US-Sino trade tensions accounted for the jump witnessed recently in the totals for G20 protectionism. In fact, China and the United States are responsible for 17% of the G20 protectionism documented since the last Leaders' Summit, implementing a total of 51 trade distortions. This percentage is in line with that found in the four-and-a-half

months following 1 December 2014, 1 December 2015, and 1 December 2016.

Only in the period 1 December 2017 to 15 April 2018 were the Chinese and American governments responsible for a much larger percentage of G20 protectionism (42%). The proliferation of trade distortions implemented by G20 members since their leaders last met is broad-based and not exclusively a Sino-US affair.

FIGURE 2.1Since the last Leaders' Summit resort to new protectionism by the G20 has doubled

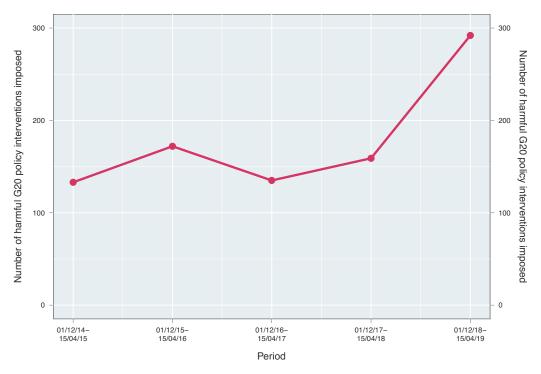
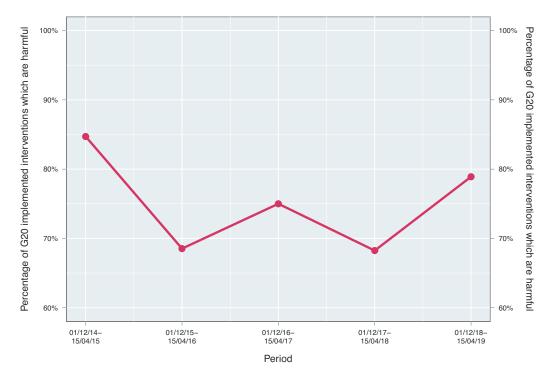


FIGURE 2.2Since the start of December 2018 four-fifths of G20 policy changes harmed foreign commercial interests



The percentage of G20 commercial policy measures that harm foreign interests did rise since the last Leaders' Summit, to just under 80%. However, as is made clear in Figure 2.2, that percentage is within the range set by the previous four years. In fact, further analysis reveals that G20 governments implemented 77 liberalising or transparency-improving measures since the last Leaders' summit, a total in line with that witnessed after the previous Leaders' Summits in 2015 and 2017.

Resort to subsidies and exporter support has risen markedly

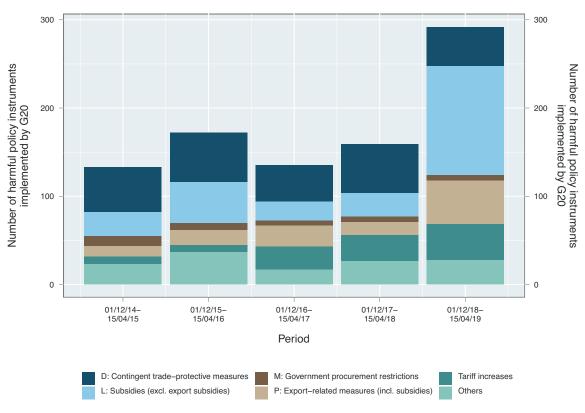
President Trump's threats of new tariffs on Chinese imports on 5 May 2019 notwithstanding, by and large this year to date has seen few wide-ranging new tariff increases of the sort witnessed last year. There is, of course, no room for complacency here. However, this should not be taken to mean that all is well in the world trading system. As our previous reports have shown, governments resort to a wide range of policy instruments that favour local interests over foreign rivals and many

of those instruments garner far less attention, probably because they are harder to spot or because few make the connection between their implementation and the harm done to foreign commercial interests.

Resort to murkier trade distortions has been a key feature of G20 protectionism since their last Leaders' Summit. Figure 2.3 breaks down the total number of trade distortions implemented since the last G20 Leaders' summit into the five most used policy instruments that favour local firms. Data for the previous four years is presented as well. There are some clear similarities across the years, especially in the resort to contingent protection measures (as the United Nations calls tariffs placed on dumped products, on subsidised products, and on import surges). Between 40 and 60 such measures have been implemented in each of the periods reported in Figure 2.3.

Compared to earlier years there are significant differences in the number of subsidies and tariff increases implemented by the G20 governments since their last Leaders' Summit. The number of tariff increases implemented from 1 December 2018 to 15 April 2019 was

FIGURE 2.3Resort to trade-distorting subsidies and tariff increases rose sharply since the last G20 Leaders' Summit



Note: The letter before a policy instrument in the legend refers to the chapter in the United Nations' MAST classification of non-tariff measures.

The letters in the legend in Figure 2.3 refer to the chapters of the UN MAST classification of non-tariff measures affecting trade. So as to make our analysis comparable with others that use the MAST classification, for the purposes of this chapter we organised the large number of reports on policy instruments in the GTA database into their respective MAST chapter. For more details on the UN MAST classification see the documentation here.

41, as compared to a range of 8-30 in the preceding four years. On 48 occasions since the Leaders last met have G20 governments offered financial support to locally-based exporters, at least twice the rate of the previous four years.

The largest jump, however, was seen in the government largesse given to domestic firms for non-export related reasons. Very few of the 118 subsidies or bailouts given since 1 December 2018 were to banks or financial institutions—most went to farmers and manufacturers. Compared to the average for the previous four years, resort to subsidies by G20 governments nearly quadrupled since the Leaders' summit in Argentina.

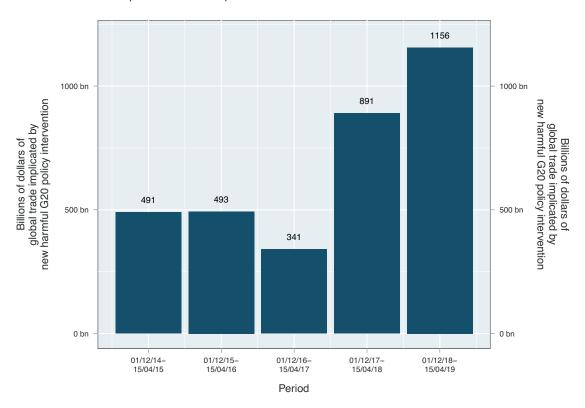
Taken together, these results imply that relaxing the financial pressures faced by domestic farmers, firms, and exporters have been ramped up since the G20 abandoned its pledge to eschew protectionism. The imposition of new taxes on imports continues unabated but the emphasis has shifted towards more frequent use of typically underthe-radar-screen state largesse.

New G20 trade distortions implicated over a trillion US dollars of trade before the Sino-US trade war intensified in May 2019

The greater resort to subsidies, in particular financial support for exporters, has increased the trade distorted by the G20. For example, consider a tax break for exporters of Indian textiles. This favouritism affects the conditions of competition in every overseas market where Indian textiles are sold, implicating the commercial interests of not just the importing nations but also the states whose exporters sell textiles to buyers in those importing nations.

Using very detailed trade data about the products⁶ that receive state inducements to exports and information on which other nations' exports compete in the same markets as the subsidised suppliers, it is possible to prepare conservative estimates of the amount of trade at risk from state inducements to export. Likewise, the GTA team has devised methods to identify the total value of trade at risk from the implementation of other trade distortions.⁷

FIGURE 2.4Recent G20 protectionism implicates over a trillion US dollars of international trade



The following analysis is confined to merchandise products. Once more detailed service sector trade flow data becomes available it will be possible to supplement the estimates presented here and in the annexes of this Report (those annexes report the exposure of each G20 member's exports to trade distortions in the overseas markets that they compete in.)

⁷ These methods are probably too conservative that the reported estimates likely understate the value of international trade in goods at risk.

These methods were used to calculate the total amount of exports affected by new trade distortions imposed by G20 governments since their Leaders last met in Argentina. Over \$1.15 trillion of global commerce are in products and sold to destinations affected by G20 trade distortions introduced between 1 December 2018 and 15 April 2019 (see Figure 2.4). This is twice the trade implicated by G20 protectionism during indentical timeframes in the years before 2018.

These findings are an important reminder that not only imports get distorted by government trade policies. Trade diplomats from agricultural exporters are all too aware of the harm done by export subsidies and other state incentives to sell abroad. As we have shown in previous reports8, the crisis era has witnessed a significant expansion in state support for exported manufactured goods, WTO rules and OECD accords on trade finance notwithstanding.

More generally, as the country annexes of this Report show, the sustained resort to subsidies that favour domestic firms (including exporting firms) over foreign rivals has become a system-wide problem.9 While the economics and trade diplomacy of subsidies differ from that of import tariffs, the point remains that the former can distort cross-border commerce just like the latter.

Given the recent surge in G20 protectionism, did its pledge on protectionism work?

The sharp increase in resort to trade distortions by G20 governments since the last Leaders' Summit begs questions about the bite of the pledge on protectionism that G20 governments promised to abide by since the first Leaders' Summit in Washington DC in late 2008. Some may be tempted to conclude that, notwithstanding its faults, the pledge worked, at least in so far as it limited resort to protectionism by the largest trading nations.

We will put our cards on the table. We have been sceptical that the pledge had much impact, finding in the past little to differentiate G20 resort to protectionism from middle-sized trading nations that aren't members of the G20 and that, on account of the pledge, should feel less or no obligation to refrain from beggar-thy-neighbour behaviour.¹⁰ Still, the question is a valid one and here we make two observations.

First, it is probably to soon to tell whether the pledge "worked," at least as evidenced by a jump in G20 protectionism after its demise. The evidence presented in this chapter certainly suggests a further breakdown in international cooperation on trade policy following the last G20 Leaders' Summit. And that finding alone may induce copycat behaviour by other governments.

Second, examining the recent commercial policy choices of non-G20 members might shed light on the impact of the G20 pledge. Since that pledge applied only to G20 members, then if it had bite surely its demise should relax constraints on G20 governments more than non-G20 governments. Figure 2.5 reproduces Figure 2.3 for the non-G20 governments and the comparison between the two figures is instructive.

Since the last G20 summit, non-G20 members have exactly tripled their resort to protectionism, implementing 105 trade distortions between 1 December 2018 and 15 April 2019. In the previous year "only" 35 trade distortions were implemented. In the four years the before the last G20 Leaders' summit, during the same reporting timeframe between 35 and 50 trade distortions were implemented by non-G20 governments. Therefore, the increased resort to protectionism since 1 December 2018 represents a sharp break with the recent past for non-G20 governments. Notice also that the non-G20 governments sharply increased their resort to trade-distorting subsidies since G20 Leaders met in Argentina.

Three conclusions can be drawn from these statistics on resort to beggar-thy-neighbour actions by governments. The first is that, compared to earlier years, there has been a marked increase in protectionism worldwide in the aftermath of the last G20 Leaders' Summit. While many have focused on the Sino-US trade war—and it is important—developments elsewhere have received much less attention. Cognizant of limited bandwidth to follow trade policy developments, perhaps some governments and those that lobby them have concluded that they can tilt the commercial playing field with greater impunity? Sustained system-wide vigilance is needed.

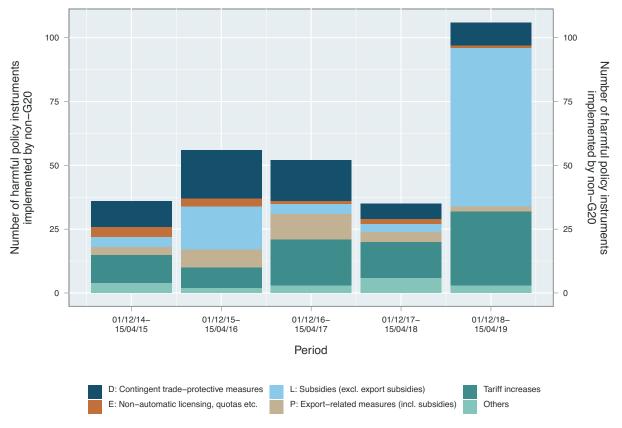
Second, that the non-G20 governments have markedly increased their resort to new protectionism, indeed by more than the G20 members, should influence our assessment of the bite of the G20's non-binding pledge on protectionism. With the necessary caveat that it is probably too soon to come to a definitive assessment about the effect of the end of that pledge, it will be difficult to sustain the argument that the pledge's demise relaxed

See Evenett and Fritz (2015), Evenett and Fritz (2017) and Evenett et al (2018).

It is not obvious that a nation's subsidies must favour locally-based firms. A government may introduce a consumption subsidy to encourage the purchase of a particular good or service and need not exclude suppliers abroad selling to domestic consumers who then claim the subsidy.

See, for example, figure 1.2 in Evenett (2013).

FIGURE 2.5
Resort to new protectionism by non-G20 governments surged after the G20 abandoned its pledge on protectionism



Note: The letter before a policy instrument in the legend refers to the chapter in the United Nations' MAST classification of non-tariff measures.

constraints more on the G20 members than others, if the latter governments increased their resort to protection by even more.

Third, in the absence of the G20 pledge on protectionism, or on any meaningful initiative to tackle protectionism, we are entitled to ask where the restraint on beggarthy-neighbour behaviour will come from? Certainly not from the trade work programme of the Japanese G20 presidency, alas. Given the stalemate over the WTO's

Dispute Settlement Understanding (DSU), looking to Geneva for vigorous enforcement of trading norms is optimistic in the near to medium term. Worse, there are legitimate fears that any reform of the DSU is likely to weaken it, not the reverse. The case for openness to trade, investment, expertise, ideas, and data needs to be won at home. As the statistics presented in this chapter show, for better or for worse, unilateral trade policy is where the action is.

CHAPTER 3 SIZING UP THE SINO-US TARIFF WAR

While resort to trade distortions mount worldwide, it is the potential resolution of the Sino-US tariff war that has absorbed the lion's share of attention since the last G20 Leaders' Summit. A truce of sorts was agreed at a post-summit dinner between Presidents Trump and Xi and negotiations began. At this writing, despite a March 2019 deadline being agreed in Buenos Aires, no deal has been struck between the governments in Beijing and Washington DC to remove the tariffs put in place last year and to disavow further US tariff hikes. Consequently, considerable uncertainty remains over the future course of American and Chinese trade policy.

The purpose of this chapter is to size up the Sino-US tariff war, facilitating a comparison between its scale and that of other recent protectionist actions as well as putting this so-called trade war in the context of prior impediments to trade between China and the United States. Just how much bilateral trade between these trading behemoths was impeded for the first time when far-reaching tariffs were imposed in 2018? Plus, the potential for exported goods hit by tariff hikes to be deflected to third markets¹¹, in turn potentially inducing protectionist responses there, adds to the reasons why the Sino-US tariff war is of systemic importance.

Sino-US bilateral trade affected by trade distortions: Evidence from the Second Obama Administration on

Governments have plenty of tools to curtail exports from a particular trading partner including:

- Tariff increases that single out the trading partner in question.
- Tariff increases that harm multiple trading partners, including the trading partner in question.
- Imposing non-tariff measures that single out the trading partner in question.

 Imposing non-tariff barriers on exports from multiple trading partners.

Most coverage of the Sino-US trade war focused on the first item on this list. Seen from the perspective of a potential exporter, however, a trade barrier is a trade barrier—profitability from selling abroad is cut whether a tariff or non-tariff barrier or whether it singles out the economy where they are located or not.

We extracted information from the Global Trade Alert (GTA) database on all of the American and Chinese policy interventions that harmed the commercial interests of exporters of the other from 2013 on. To contrast the commercial policy decisions taken in 2018, we collected comparable information on those taken in the first year of the Trump Administration (2017), the four years of the Second Obama Administration (2013-2016 referred to below as Obama II), and actions taken to date this year (specifically until 15 April 2019).¹²

Following the practice in many newspaper reports, to estimate the total amount of exports facing new trade barriers in a given year we used detailed¹³ trade data for the entire previous year. That is, unlike in the rest of this report, to facilitate comparison with estimates readers may have seen elsewhere, we do not correct for the length of time a new trade barrier is in effect.

Therefore, a tariff hike by the US imposed on 1 January 2018 is treated the same as if it was imposed on 31 December 2018 even though the trade affected by the latter would be smaller. Clearly duration-corrected estimates of the trade affected by the 2018 tariff hikes by China and the United States would produce smaller estimates of the scale of the Sino-US tariff war.

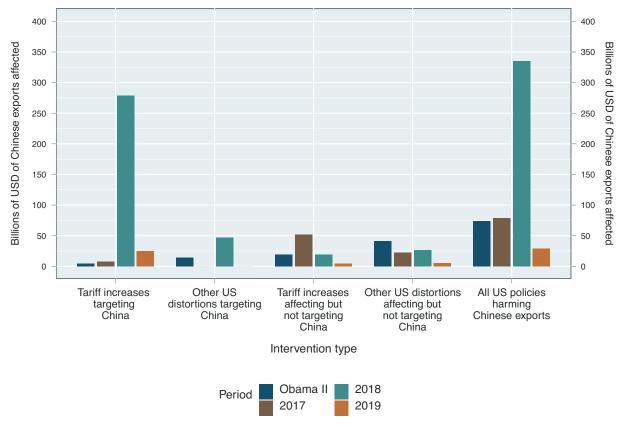
In the calculations reported here, steps were also taken to avoid double counting the exports affected. Consequently, if a particular Chinese good was hit by two US tariff increases in 2018, then the associated value of exports in 2017 would count only once towards the totals presented here for tariff hikes. Likewise, if a particular US export to

¹¹ The first evidence of such deflection was provided by Bown and Crowley (2007) but in the context of enforcement against so-called unfairly traded goods.

¹² Therefore the charts and statistics presented in this chapter do not take into account any tariff increases on Chinese exports following the threats issued by President Trump on 9

¹³ The international trade data used here was at the six digit level of disaggregation found in the United Nations' COMTRADE database.

FIGURE 3.1 Counting targeted tariff hikes alone understates the scale of US steps against Chinese exporters in 2018



Note: Data for 2019 refers to U.S. interventions implemented, not just threatened, by 15 April 2019.

China was hit by a Chinese tariff increase in 2018 and by a Chinese non-tariff barrier in 2018 then the total amount of US exports affected by both policy changes would be counted once.14

With our most recent update of the GTA database, which involved adding over 2,000 new reports on policy interventions worldwide, the latest totals of the amount of Chinese exports affected by US commercial policy changes since the second Obama Administration can be found in Figure 3.1. That figure reveals that \$278 billion of Chinese exports were targeted for US tariff increases in 2018. A total of \$93 billion of Chinese exports faced other US trade distortions implemented in 2018, bringing the total value of Chinese exports affected to \$335 billion.15

This total represented a four-fold increase in the Chinese exports facing new American trade impediments over the first year of the Trump Administration and the second Obama Administration. Still, it is worth noting that the latter two periods each saw approximately \$75 billion of Chinese exports face worse trading conditions in US markets as a result of American policy intervention.

Moreover, as of 15 April 2019, just under \$25 billion of Chinese exports have already been targeted by new tariffs this year.

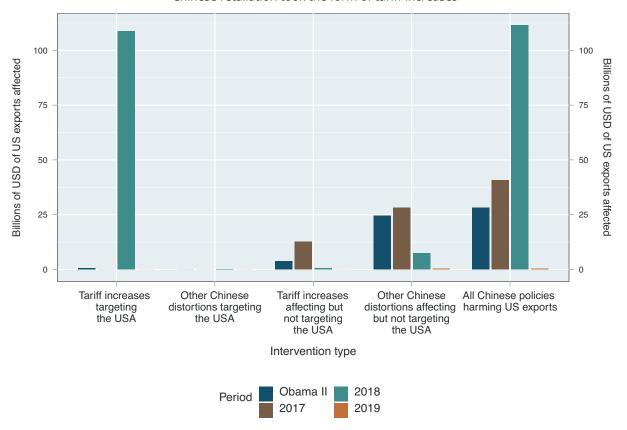
Similar calculations were performed to estimate the amount of American exports facing policy-induced impairments in access to the Chinese market. Figure 3.2 summarises our calculations and it is worth bearing in mind that the US exports far less to China than China exports to the United States, partly accounting for the differences in the scale of exports implicated.

Before 2018 China rarely singled out American exports for tariff increases or other non-tariff barriers. Instead, American exports tended to get caught up in Chinese policy intervention that affected multiple countries. This, of course, changed in 2018 when just under \$109 billion of US exports were hit (initially at least) with Chinese tariff increases. The amount of US exports hit by new Chinese trade measures rose from on average \$28 billion per year during the second Obama Administration, to \$40 billion in the first year of the Trump Administration, and then to \$111 billion in 2018. Until 15 April 2019, China's trade policies have affected less than half a billion US dollars of American exports.

It is for this reason that the data on the total amounts of exports affected presented in the right most columns of Figures 3.1 and 3.2 are not the sum of the relevant columns to the 14

This implies that \$46 billion of Chinese exports to the United States in 2018 were hit by both targeted tariff increases and some other form of US trade barrier imposed that year.

FIGURE 3.2Chinese retaliation took the form of tariff increases



Note: Data for 2019 refers to Chinese interventions implemented, not just threatened, by 15 April 2019.

Overall, the total amount of bilateral trade affected during 2018 by actions taken in Washington DC and Beijing amounted to just under \$447 billion. Of that, \$387 billion was associated with the bilateral tariff hikes imposed last year. A total of \$101 billion of Sino-US trade was affected by other trade impediments implemented by Beijing and Washington DC. The targeted bilateral tariff hikes were not the only game in town last year.¹⁶

The total amount of Sino-US trade facing new trade barriers in the other's markets rose from \$119 billion in 2017 to \$447 billion in 2018, representing a 273% increase in the value of trade affected by steps taken in Beijing and Washington DC last year to tilt the commercial playing field in favour of domestic firms.

The bilateral tariff war compared to the installed base of trade distortions affecting Sino-US trade

That the Chinese and American governments took steps before 2018 which harmed each other's exporters begs the question: by how much did the 2018 bilateral tariff war reduce the amount of unimpeded trade between China and

the United States? If the installed base of protectionism facing Chinese exporters was already extensive, what was the incremental impact of the tariff hikes imposed last year by the Trump Administration? Likewise, if American market access to China was impaired as much as some in the Trump Administration contend, then how many US exporters faced trade impediments for the first time after China's tariff retaliation in 2018?

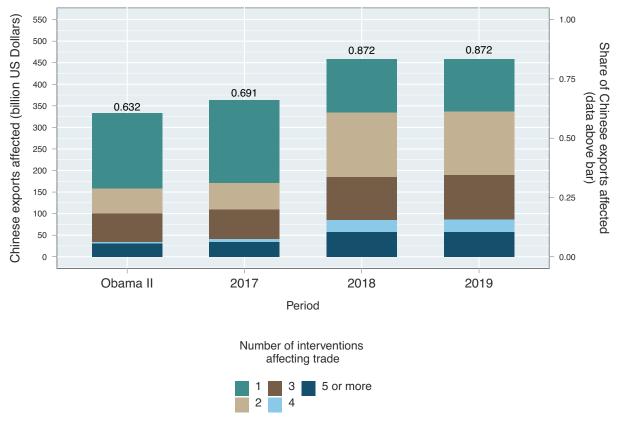
Knowing the scale of the stock of trade impediments in place before the Sino-US trade war is also important for gauging how much bilateral trade will be freed up should the tariffs imposed in 2018 ever be negotiated away. Likewise, knowing the pre-existing scale of Chinese trade impediments to US trade could be useful in assessing the generosity of what might be termed the "Chinese reprieve," namely, the decision of 14 December 2018 to suspend some of the tariffs imposed on US exports earlier in 2018.¹⁷

Using information in the Global Trade Alert database on Chinese and US policy interventions that were still in effect at each point in time, it is possible to calculate the share of US exports that faced trade distortions imposed

¹⁶ Put differently, most newspaper accounts of the Sino-US trade tensions during 2018 understated the trade implicated by more than \$100 billion.

¹⁷ For details of that decision see https://www.globaltradealert.org/intervention/69501.

FIGURE 3.3Before the tariff war only 30% of Chinese exports entered the United States unimpeded



Note: Data for 2019 refers to U.S. interventions implemented, not just threatened, by 15 April 2019.

by Beijing in the Chinese market that disadvantaged them during the second Obama Administration¹⁸ and during 2017, 2018, and 2019.

Moreover, it is possible to calculate the share of US exports to China in any given year that faced a single, two, three, four, or five or more trade distortions in the Chinese market. In this regard it is worth noting that the imposition of new trade restrictions may increase the total share of exports affected by trade distortions as well as reshuffling the exporter shares affected by one or more trade distortions.

Figure 3.3 summarises from the second Obama Administration on the findings for the shares of Chinese goods exported to US that faced trade distortions imposed by some American government agency. On average between 2013 and 2016 63% of Chinese exports to the US faced trade distortions imposed by organs of the American state. That rises to 69% in 2017, the first year of the Trump Administration. With the bilateral tariff war, the percentage rose further to 87% where it has

remained. At this time of writing, we estimate that less than 13% of Chinese exports to the United States do not face American trade distortions.¹⁹

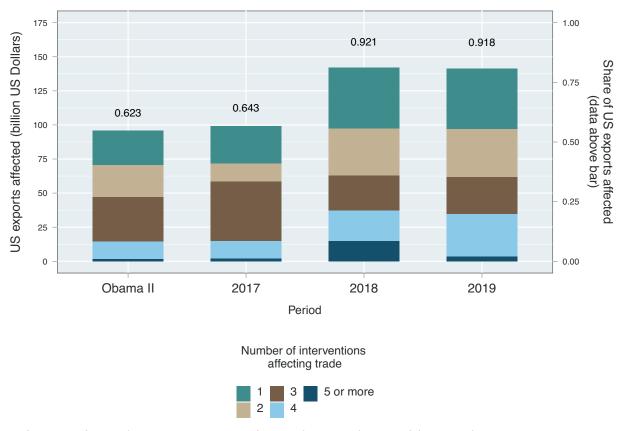
In addition to reducing the unimpeded Chinese trade to the United States, the tariff hikes imposed by the Trump Administration targeted many Chinese products already confronting American trade distortions. The shares of Chinese exports hit by two, three or five or more American trade distortions increased considerably in 2018.

For example, the cumulative effect of the many US government bodies that imposed trade distortions in 2018 was to raise the percentage of Chinese exports facing two such distortions from 16.8% in 2017 to 32.7% in 2018. By 2018 one eighth of Chinese exports to the United States competed against five or more trade distortions imposed by the various organs of the US Federal government and by state governments.

¹⁸ Again, the average for the four years 2013 to 2016 is presented.

¹⁹ Should the United States government implement all the threats made by President Trump in early 2019 then the percentage of Chinese exports not facing American trade restrictions will fall.

FIGURE 3.4Due to the trade war the share of US exports entering China unimpeded fell from a third to a twelfth



Note: Data for 2019 refers to Chinese interventions implemented, not just threatened, by 15 April 2019.

The share of American exports entering China unimpeded fell sharply in 2018, as shown in Figure 3.4. Before the Sino-US tariff war approximately a third of US exports shipped to China faced no trade distortions. Now less than a tenth of US exports are so lucky.

Figure 3.4 also reveals that the Chinese tariff retaliation of 2018 targeted many US exports that had been either not been hit by any Chinese trade distortions before or by only one trade distortion. After that tariff retaliation, the combined share of US exports hit by three or more trade distortions increased, but only slightly.

The Chinese tariff reprieve of December 2018 can also be interpreted in light of the statistics presented in Figure 3.4. That reprieve came into effect on 1 January 2019 and so it is instructive to compare the last two columns of that figure. The reprieve resulted in a tiny fall in the share of US exports facing trade distortions, from 92.1% in 2018 to 91.8% now. The biggest change is that the share of US

exports facing five or more trade distortions in the Chinese markets fell sharply (from 10.7% to 2.4%) and the share affected by four trade distortions rose correspondingly.

It would seem that the Chinese reprieve, which was part of the truce negotiated after last year's G20 Leaders' summit, was not quite as generous as it may have seemed when it was announced in December 2018.²⁰ This reprieve targeted US exports that still face multiple policy-induced disadvantages when competing for customers in the Chinese market. Trade talks and trade deals have their fair share of chicanery and in this case the optics outpaced the substantive change experienced by exporters on the ground.

More importantly, the evidence summarised in Figures 3.3 and 3.4 imply that, while reversing the bilateral tariff hikes of 2018 would be valuable, it will put only a dent in the accumulated silt that retards trade between China and the United States.

For press reports of that Chinese announcement see those from CNBC, the South China Morning Post, the Wall Street Journal, CNN, Reuters (quoting President Trump as tweeting "They have just suspended U.S. Tariff Hikes..", Bloomberg (quoting another tweet from President Trump, namely, "Very productive conversations going on with China! Watch for some important announcements!," and the Financial Times.

CHAPTER 4 COVERT JUMBO PROTECTIONISM IS THE NORM

In this chapter we challenge the view that the world trading system kept protectionism under control until last year's Sino-US tariff hikes. In what follows we will demonstrate that, seen from the perspective of the past 10 years, such "jumbo protectionism" is not new. What is new is the brazen nature of last year's wide-ranging tariff increases. Before that most far-reaching trade distortions were covert.

The evidence on the frequency and form of crisis-era jumbo protectionism reveals much about what ails the world trading system and ought to inform priority setting by the G20 and other governments. Later in this report we will explore in which sectors governments could form coalitions at the WTO to negotiate accords that reverse the protectionism that has accumulated over the past 10 years.

This chapter draws upon the reports in the Global Trade Alert database on over 14,000 policy interventions taken by governments since November 2008 that discriminated against some form of foreign commercial interest.²¹ For the purposes of this chapter, we restricted our analysis to those discriminatory government interventions that affected trade in goods. Using conservative methods we computed the total value of trade implicated by each discriminatory measure in the year in which it came into force (see Box 4.1).

We took a probably overly-restrictive approach to identifying the jumbo protection ist measures implemented over the past 10 years. Such measures were taken to be those in the Global Trade Alert database that:

- were implemented by a national or supra-national public authority from 1 November 2008, thereby excluding all measures implemented by sub-national governments.²²
- deemed almost certainly to discriminate against foreign exporters or likely discriminate against foreign exporters.²³
- did not favour single firms.²⁴
- affected trade in goods worth more than 10 billion US dollars.²⁵

348 jumbo protectionist measures have been imposed since November 2008

Since the G20 Leaders first met in crisis-mode in November 2008 a total of 348 instances of jumbo protectionism have been imposed by governments worldwide. Figure 4.2 presents data on the number of new jumbo protectionist measures implemented each year. Given the information available to the GTA team in mid-April 2019, resort to new jumbo protectionism peaked in 2009 (in the darkest days of the global financial crisis) and in 2015 (when fears about the global trade slowdown were foremost.) In both years approximately 50 new jumbo protectionist measures were introduced. Resort to jumbo protectionism predated the flare up of trade tensions between China and the United States in 2018.

²¹ Evenett (2019) contains a detailed account of which public policy interventions are and are not included in the Global Trade Alert database. In short, the large number of discriminatory policy interventions mentioned in the main text do not include regular health and safety (SPS) measures, technical standards (TBTs) or the implementation of regional trade agreements (RTAs), all of which some have argued can discriminate against foreign suppliers.

²² Tax breaks by US cities and states to particular firms or industries thus do not inflate the numbers that follow.

²³ In the GTA database the former measures outnumber the latter by over 15-to-one.

Thus, firm-specific bailouts or state aid are excluded from these calculations. A total of 189 firm-specific subsidies awarded to companies where the total trade affected exceeded \$10 billion were thereby excluded from the calculations that follow. Likewise, for 23 firm-specific grants for exportation.

Any jumbo protectionism affecting service sector trade is, therefore, in addition to the totals presented here. Likewise, for far-reaching government measures affecting foreign direct investment flows. We accept that the \$10 billion threshold is somewhat arbitrary but one has to draw the line somewhere. Later in this chapter we present some statistics on the jumbo protectionist measures affecting more than \$100 billion of trade.

Box 4.1: Identifying the exports affected by a discriminatory policy intervention

Discriminatory policy interventions differ in the amount of international trade that they affect. Some trade policy actions are surgical in nature, targeting imports of a particular type of product from a single trading partner.

Other policies, such as a subsidy to local firms facing import competition, affect the conditions of competition in the domestic market faced by foreign rivals from all trading partners shipping the product in question.

Policies to incentivise exports affect the conditions of competition in third markets and potentially affect all of the exports from other nations that sell the same goods in the affected third markets.

Calculations of the total value of exports potentially affected by a discriminatory policy intervention must therefore take account of whether any trading partners were singled out for discrimination, the location of the market(s) directly affected, as well as the form of the policy intervention.

Routines have been designed by the Global Trade Alert team to compute the total value of exports affected using United Nations' COMTRADE data at the six-digit level of disaggregation, the most fine-grained international trade data available globally.

The cumulative density function of the value of trade affected by the discriminatory policy interventions in the entire Global Trade Alert database is shown in Figure 4.1. This figure reveals that a quarter of harmful interventions in the GTA database affect one billion or more US dollars of trade in goods. Less than one-eighth of the discriminatory policy interventions in the GTA database affect 10 billion USD or more of trade, a necessary condition to be deemed a jumbo protectionist measure in this chapter.

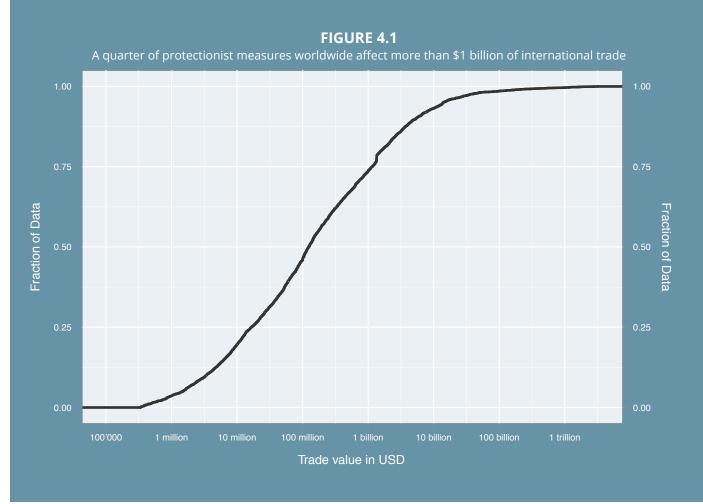
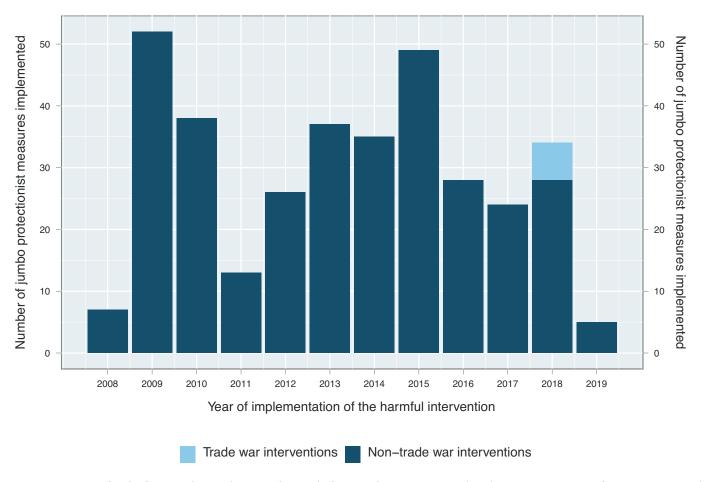


FIGURE 4.2Jumbo protectionism started well before the Sino-US bilateral tariff war of 2018



Note: See main text for the four conditions that must be met before a policy intervention that discriminates against foreign commercial interests is deemed a jumbo measure.

The evidence presented in Figure 4.2 puts the Sino-US tariff war in further perspective. A total of four of the 35 jumbo protectionist measures implemented last year can be attributed to the Sino-US tariff war.²⁶ This implies that the overwhelming majority of jumbo protectionist measures introduced in 2018 were not directly related to the trade war, although we cannot discount the possibility that a government may have been tempted to engage in such protectionism while attention was focused on trade tensions between China and the United States. Still, the total number of jumbo protectionist measures introduced in 2018 is almost exactly in line with the average for the years for which we have data for the entire year (2009-2018).

The scale of the Sino-US trade war pales in contrast to some jumbo protectionism

Even if resort to far-reaching protectionism preceded the Sino-US tariff war, some may be tempted to argue that the latter implicates more trade. This is not the case as the (kernel) distribution of the amount of international trade implicated by protectionist measures in Figure 4.3 shows. In fact, there are 57 jumbo protectionist measures that exceed the size of the largest tariff hike imposed by the United States last year on Chinese exports. Moreover, a total of 31 jumbo protectionist measures implemented since November 2008 affect more than half a trillion US dollars of trade. This fact is worth bearing in mind should President Trump follow through on his 5 May 2019 threats to hit all Chinese exports to the United States with tariffs.²⁷

²⁶ The other two "trade war" jumbo measures indicated in Figure 3.2 for 2018 relate to US measures on steel and the European Union's retaliation.

²⁷ The half-a-trillion dollars mark is significant as annual Chinese exports to the United States were a little over this amount the year before the Sino-US trade war began.

FIGURE 4.3

Last year's tariff hikes may have been shocking but they pale in size compared to some covert jumbo protectionism

Probability density function of the value of trade harmed by harmful interventions implemented 2008–2019

0.3

0.2

0.1

0.1

Trade value in billions of USD

FIGURE 4.4

US harmful interventions

implemented in 2018 trade war with China

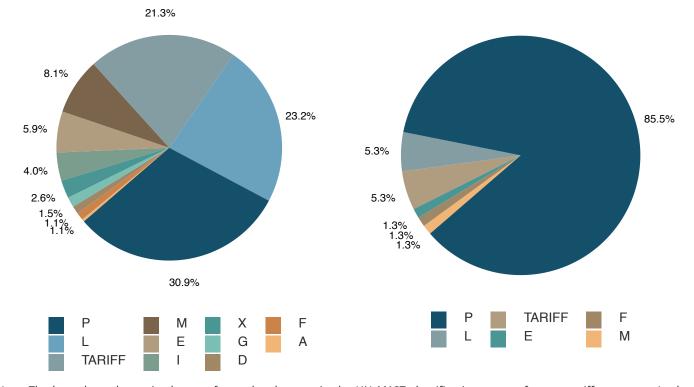
Subsidies—for import-competing firms and exporters—make up the lion's share of jumbo protectionism implemented over the past 10 years

Jumbo measures implicating \$10-\$100 billion of trade

China harmful interventions

implemented in 2018 trade war with the US

Jumbo measures implicating more than \$100 billion of trade



Note: The legends to these pie charts refer to the chapters in the UN MAST classification system for non-tariff measures. In that system "A" refers to a health standard, "D" to contingent protection measures, "E" to non-automatic licenses and quotas, "F" to price control measures, "G" to finance measures, "I" to trade-related investment measures, "L" to subsidies except export subsidies, "M" to government procurement-related measures, "P" to export subsidies and incentives, "X" to policy instrument unclear/not otherwise classified, and "TARIFF" to import tariff measures.

Subsidies account for the lion's share of jumbo protectionism

Tariff changes are amongst the easiest trade policy changes to spot. Raising them to please domestic constituencies is plain for all to see. Other government policies can have a much lower profile. What is of interest here is which government policies have been used over the past 10 years when governments have resorted to jumbo protectionism. The pie charts in Figure 4.4 reveal the answer.

Subsidies of different types (export-related and for import-competing sectors) account for the majority of jumbo protectionism implemented worldwide since the global financial crisis hit. For harmful state acts affecting between \$10 billion to \$100 billion of trade, raising taxes on imports accounted for 21% of cases of jumbo protectionism. That percentage falls to 5.3% for jumbo protectionist measures affecting \$100 billion or more of international trade.

A benchmark to judge possible work programmes for the WTO

The findings presented here have implications for how governments might develop a work programme for the World Trade Organization in an evidence-driven manner. It makes sense to test candidate work programmes against one another. One such programme could prioritise the reversal of protectionism over the past decade. Admittedly this is a more modest goal than some might like but it provides a useful benchmark. The statistics presented in the pie charts above lend support to prioritising the reform of multilateral trade rules on subsidies and rolling back tariff increases over other steps.

Put differently, if the total value of international trade implicated is one sensible metric to assess proposals for future WTO work programmes, then the evidence presented in this chapter sets the bar against which other proposals could be judged. As of this writing, reversing the jumbo protectionism of the past decade would have an effect on \$8.14 trillion of trade. Reversing all of the export incentives—not only the jumbo export incentives—that are in effect today would affect \$7.33 trillion of trade.²⁸

Reversing all of the domestic (non-export) subsidies given would influence \$2.88 trillion of trade. And, reversing all of the tariff increases witnessed since November 2008 would implicate \$1.59 trillion of trade.²⁹ In sum, restoring trade policy to the status quo ante of November 2008 is not small potatoes.

²⁸ This estimate and those in the following paragraph ensure no trade flow affected by multiple trade distortions is double counted.

Given that some trade flows are affected by more than one harmful intervention, an initiative that reversed all remaining crisis-era subsidies, export incentives, and tariff increases would reform \$8.29 trillion of international trade

SECTION 2 DEEPER FLAWS IN THE WORLD TRADING SYSTEM

CHAPTER 5 FUNDAMENTALS EXPLAIN LESS AND LESS TRADE GROWTH

In this section of the report we examine evidence over a longer time horizon to discern whether the world trading system is under-performing. For example, is there evidence of malaise setting in before the global financial crisis struck in 2008-9? First, we begin with evidence on the factors driving the growth of world trade. Then, in the next chapter, we present evidence showing the declining use of the WTO's Dispute Settlement Understanding by the G20 and suggest why this has happened.

In a well-functioning world trading system in which countries are removing trade barriers, and improving the transparency of their policy regimes, one would expect fundamental factors—or if you prefer "competition on the merits"—to explain a larger and larger share of world trade growth over time. Conversely, an under-performing system is one where factors such as productivity growth, changing relative prices, and shifting demand shares across the globe account for less and less of observed trade growth, which instead is being driven by policies that distort international commerce and the uncertainty surrounding those policies.

With this logic in mind and given this report is being prepared in advance of a G20 summit, using United Nations' COMTRADE data we constructed the largest possible dataset of bilateral trade between the 19 members of the G20³⁰ for the years 1995 to 2017.³¹ In 2018 intra-G20 trade accounted for 39% of world trade. Examining bilateral trade between larger economies also has the advantage of avoiding the statistical difficulties that arise from including transactions from small island economies that tend to have irregular trade patterns.

We deployed a state-of-the-art empirical approach that decomposes the total value of bilateral trade (and the growth of such trade) into three components: a term capturing the amount and competitiveness of goods available for export, a term representing the spending power of the importing nation, and a third term capturing impediments or facilitators to trade.³² The latter include some factors of trade that don't change over time (such as the importer and exporter sharing a common language, common border, or common colonial ties) as well as timevarying factors, largely reflecting changes in government policy towards goods trade.

Our goal is to see what share of bilateral trade is still to be explained after the contributions of fundamental supply side, demand side and time-invariant trade costs and facilitators have been removed using statistical tools.³³ The unexplained component (or residual as it is technically known) represents our best estimate of the impact of trade costs on the value of exports between two nations. In some cases the fundamentals will overexplain the level of bilateral trade and in others they will under-explain observed trade. The interesting question is whether the unexplained component gets larger over time, suggesting that fundamentals are driving less and less of trade flows and that time-varying trade policy is playing a greater role.^{34,35}

³⁰ The four European Union members of the G20 are treated as separate importers in this analysis.

³¹ Data on some countries is missing including for South Africa before the year 2000, Russia in the year 1995, and Saudi Arabia in 1997.

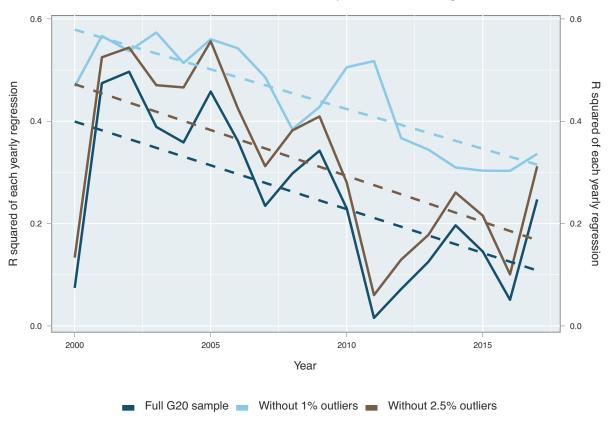
³² Empirical analysts of international trade flows will recognise the reference here to the terms used in a modern gravity equation of the sort derived by Anderson and van Wincoop (2003) which includes multilateral resistance terms.

Formally we used the PPML method of Santos Silva and Tenreyro (2006). In addition to coping with the few observations of zero bilateral trade between two G20 countries, this method has the advantage of taking care of the variance in the noise of the regression.

In approaches like this much turns on how confident the analyst is that the trade policy changes are not being picked up by the terms used to extract the explanatory power of the fundamental drivers of trade flows. What this means is that statistics presented below to capture how much G20 bilateral trade is explained by fundamentals will overstate the role of fundamentals. If anything this biases the results in favour of finding that fundaments have growing explanatory power over time.

The number of countries that have signed regional trade agreements (RTAs) took off exactly when our sample of data begins. Concerned about conflating the effects of RTA formation with the effects of other trade policy changes, we re-ran the analysis with a control (where appropriate) for the coming into force of a RTA. We found that the qualitative findings presented below are not sensitive to controlling for a RTA.

FIGURE 5.1 From 2000 on, fundamental factors explain less G20 trade growth



This way of analysing the drivers of bilateral trade flows is well established and fundamentals do an excellent job of explaining the differences in the total value of trade between pairs of countries in any given year. We confirmed in our sample when each year's data is estimated separately that between 90% to 95% of the variation across G20 members in the amount they trade with other G20 members was so explained.³⁶

Since 2005 fundamentals explain 20 percentage points less of intra-G20 trade growth

Given the concern that world trade growth has lost momentum in recent years, we are more interested in what our empirical approach reveals about the contribution of *changing* fundamentals to G20 bilateral trade *growth*. To examine this matter, we took our sample from 1995 to 2017 and used it to study the factors driving intra-G20 bilateral trade growth over five-year intervals. For example, we sought to explain how much of the growth in bilateral trade among G20 members between

1995 to 2000 was explained by changing fundamentals. We did the same for each five year interval from 1995 on to 2017.

Economists use a measure of explanatory power (so called R²) which varies between 0 and 1 where (in our case) higher values indicate that fundamentals did a better job explaining the growth in bilateral trade between G20 members. Whether or not one removes quirky datapoints (so called outliers), the finding in Figure 5.1 is clear: over time fundamentals explain less and less of observed trade growth.

For sure, and this is not terribly surprising given the quality of international trade data, the measure of explanatory power fluctuates from year to year. But the trend is unmistakable in this figure—it is downward. Fundamentals explained around 40% of the bilateral trade growth observed between 1995 and 2005. After that the explanatory power of fundamentals falls sharply to between 10% and 25% from 2013 to 2017. Similarly, the explanatory power of fundamental drivers of trade falls 20 percentage points when quirky or freak datapoints are systematically removed from the analysis.

We found that removing "outliers" (data points that involve unusually high or low levels of observed bilateral trade), specifically removing 1% and 2.5% of the largest outliers, increased the explanatory power of the fundamentals even further. These results are available upon request.

Whatever the sample, the message is clear: something other than competitiveness considerations, spending power, and long-standing factors determining bilateral ties between G20 members is becoming more important over time in accounting for trade growth. The leading candidate is time-varying policies affecting trade and the uncertainty that changing policy engenders. We cannot say whether the policy changes themselves or fear about policy changes are the bigger villain—even so, changing commercial policy is at the heart of both.

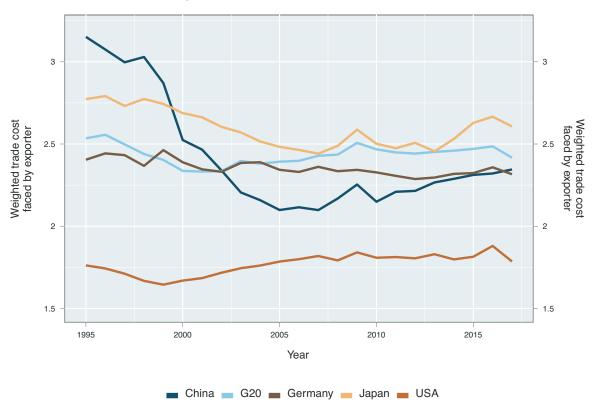
Trade costs faced by importers in G20 countries have risen

Analysts tend to have greater confidence in their findings if a different way of analysing the same data yields similar qualitative findings. To that end, we employed a state-of-the-art method to estimate the size of the bilateral trade costs between each pair of G20 members.

We focused on a measure of the total cost of getting a good across a border that can be expressed as a percentage of the value of the good. Simonovska and Waugh (2014) developed a cutting-edge approach that we used to estimate the cost of shipping a good from one G20 member Brazil (say) to another G20 member Japan (say) which allows for the costs paid by goods going in the opposite direction to be different. Furthermore, we were interested in seeing how those bilateral costs vary over time—are they rising or falling?

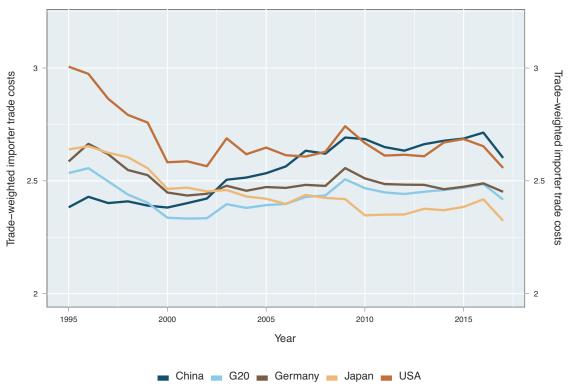
In any year each G20 member faces 18 potentially different trade costs when exporting to the other members of the G20. Having computed these 18 trade costs for each G20 member for each year from 1995 to 2017, we then calculated the export-weighted average for each G20 member.³⁷ When this weighted average is falling it indicates that the exporter is enjoying better market access in other G20 countries.





Other ways of summarising the bilateral trade costs are possible. For example, we could plot the cumulative distribution function or probability density functions at various points of time. Doing so for the bilateral exporter costs that we recovered showed that the average bilateral exporter cost from 1995 to 2005 and from 2005 to 2017, with the latter fall smaller than the former. Examining these plots revealed that a significant number of high bilateral export costs were reduced from 1995 to 2005.

FIGURE 5.3 The trade cost cutting engine stalled at the turn of the century



The weighted-average trade costs facing Chinese, German, Japanese, and US exporters and for the entire G20 from 1995 to 2017 are plotted in Figure 5.2. The sharp fall in trade costs facing Chinese exporters from the late 1990s to 2005 aligns nicely with China's process of accession to the WTO. Since then Chinese exporters have faced rising trade costs when shipping to the rest of the G20. Japanese exporters enjoyed a consistent fall in trade costs from 1995 until the crisis hits. US exporters faced rising trade costs abroad from the late 1990s, a finding that is consistent with complaints heard from American officials.

A similar analysis was conducted to extract the bilateral import costs of each G20 member and their importweighted average for the years 1995 to 2017. Figure 5.3 plots the variation over time in the costs faced by firms seeking to import into China, Germany, Japan, the United States, and the G20 on average. With the exception of China which sees no change, the other three G20 trading powers plus the G20 as a whole see sharp falls in bilateral import costs during the years 1995 to 2000. These falls occurred exactly at the time when the Uruguay Round was being implemented.

From the year 2000 on there is a divergence in importer costs across the larger G20 trading powers. The costs borne shipping goods into the United States are, broadly speaking, flat from 2000 to 2017. This suggests that, in aggregate, the US stopped cutting import barriers in 2000. Germany follows a similar pattern. Japan's import costs kept falling until 2010 and then recovered somewhat. Meanwhile, after acceding to the WTO, the costs faced on average shipping goods into China rose sharply until 2010 and then have moved sideways.

Overall, across the G20 import costs fell until 2000 and then began rising through to 2010 and then have remained broadly flat. Comparing this finding in Figure 5.3 with the evidence is Figure 5.1 is instructive. The falling explanatory power of fundamental drivers of the G20 trade growth (shown in the latter figure) occurs during exactly the same years (that the former figure reveals) that G20 importer costs are rising or higher. In addition, fundamental factors explained more of G20 export growth during 1995 to 2000 exactly when G20 importer and exporter costs were falling, an outcome likely influenced by the implementation of the Uruguay Round.

In sum, from both sets of evidence similar findings emerge. Fundamental factors—or competition on the merits—explained more trade growth during the era when the multilateral trading system was cutting trade barriers. That process came to a halt around the turn of the century.

CHAPTER 6 WANING RESORT TO WTO DISPUTE SETTLEMENT

The creation of a binding system for resolving international trade disputes in a relatively technocratic manner was one of the major institutional advances agreed upon during the Uruguay Round. Having a credible enforcement mechanism is thought by many to be an important tool in discouraging governments from breaking multilateral trade rules in the first place. And when such rules are broken, the current system of dispute settlement affords harmed parties some right of redress and encourages rule-breakers to come back into compliance.

Due to a disagreement over the appointment of new Appellate Body members to replace those whose terms have ended, this juridical system is close to breaking down or, perhaps more accurately, close to losing its appeal stage. As the terms of the remaining Appellate Body members draw to a close, the sense of urgency has grown.

For sure, much ink has been spilt analysing how this "crisis" came to pass and on possible reform options (see for example a concept paper by the European Union (2018) and proposal by a group of 12 WTO members (2018)). While finding a reform package that includes restoring the Appellate Body to full strength is important, the WTO system of dispute settlement has another, potentially overlooked, Achilles' heel.

In this chapter we will make an argument that may at first seem counterintuitive, especially given the unusual jump in the number of dispute settlement cases initiated during 2018. We will argue that, compared to the sustained growth of trade between the G20 members and the huge number of discriminatory measures taken by G20 governments over the past decade that harm other G20 members, there is waning resort to WTO Dispute Settlement by the largest trading nations.³⁸

The remainder of this chapter is organised as follows. Next, we recount the statistics on the use of the WTO's Dispute Settlement Understanding since 1995 by all WTO members and, in particular, by G20 members against each other. Then we relate the degree of G20-on-G20 litigation to the total value of intra-G20 trade, permitting an initial assessment of extent to which G20 resort to dispute settlement has changed over time. After that, we consider why such resort has changed and explore in depth one particular explanation which has systemic implications. Policy implications are discussed in the conclusion of this chapter.

Intra-G20 trade has grown much faster G20 than resort to DSU

Since it was established in 1995, the G20 group of nations have accounted for the lion's share of the cases under the WTO DSU (see Figure 6.1).³⁹ In particular, cases by G20 members against other G20 members have been a mainstay of WTO DSU litigation.⁴⁰ Consistently almost 70% of the cases brought to the WTO involve one G20 member bringing a case against another G20 member (again see Figure 6.1).

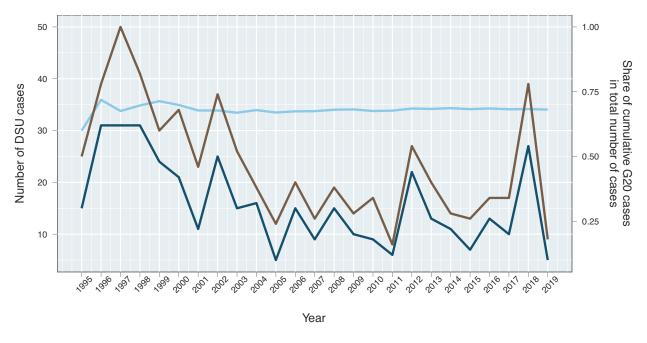
If there are significant changes over time in the use of DSU then it should show up in the propensity of the largest trading powers, the G20, to litigate. Apart from a short-lived spike in 2012 and another spike in 2018, the annual totals of DSU cases brought by the G20 has fallen over time (Figure 6.1). The question is how to interpret this reduction.

Our focus on the G20's use of the WTO dispute settlement system is two-fold. First, given their economic heft it is inconceivable that reform of the DSU would happen without the G20 members acting individually giving their assent. Second, and less importantly, this is the report we launch each year before the G20 Leaders' Summit and so we address the specific circumstances of this important group of nations. We do so knowing that other trading nations may have a strong interest in the efficient functioning of a multilateral system to resolve trade disputes

We appreciate that not every G20 member was a member of the WTO in 2001. If anything, the fact that some G20 members joined the WTO later strengthens the empirical argument made in this section as (a) the number of DSU cases brought by G20 members should rise as more G20 members joined the WTO and (b) the growth of trade among G20 members that were members of the WTO would grow as more G20 members joined the WTO.

⁴⁰ In preparing the statistics on resort to DSU by G20 members against other G20 members, we considered all DSU cases where a G20 member brought a case where one or more G20 members was a counterparty to the case, irrespective of the total number or identities of all of the respondents to the case.

FIGURE 6.1Most WTO dispute settlement cases involve one G20 member brought against another



Complainant

- By a G20 member brought against a G20 member (LHS)
- Cumulative G20 share of all WTO dispute settlement cases
- Total (LHS)

Perhaps the declining G20 use of the DSU since 1995 reflected a burst of activity after the system came into being in the mid-1990s and then settled down to a steady flow of 10-20 new cases per year. If this were the case then it might be difficult to argue that there is sustained shift away from the WTO DSU to settle trade disputes among the larger trading nations.

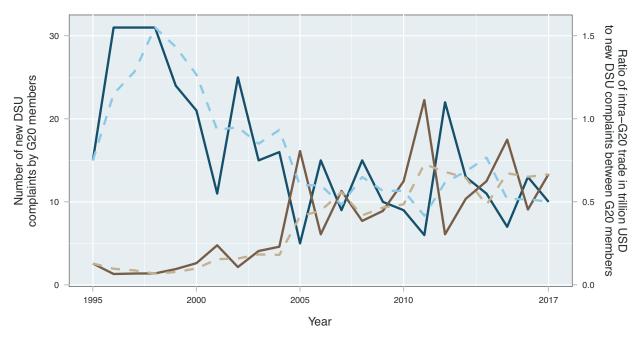
However, there is at least one good reason to doubt this benign interpretation. Intra-G20 trade has grown over time. If one is prepared to postulate that associated with every additional billion US dollars of trade is a probability (probably very small) of another trade dispute arising, then the expected number of trade disputes between G20 members should tend to rise over time.

In fact, between 1995 and 2017 intra-G20 trade rose in value from \$1.93 trillion to \$7.31 trillion, or by 278% in nominal terms. No comparable increase was observed in the rate of new DSU cases brought by G20 members against other G20 members. While sustained intra-G20 trade growth was witnessed from 2002 on (at an annual average nominal rate of 6.9% per annum until 2017), the number of new DSU cases brought by G20 members against other G20 members stayed with a limited range.

This evidence is summarised in Figure 6.2 which plots yearly totals of the number of G20 DSU cases brought against other G20 members and the trillions of US dollars of intra-G20 trade per DSU case among the G20. Unsurprisingly, these two series are negatively correlated but the upward trend in the latter is unmistakable. On average during the years 1995-1999 for every \$85 billion of intra-G20 trade one DSU case was brought. For the years 2013-2017 on average it took \$650 billion of intra-G20 trade to generate one DSU case.

Optimists might argue that the growth of intra-G20 trade occurred in sectors or between countries where the propensity to break the WTO rules was lower and lower over time. This is hard to square with the fact that from 2009 to 2018 the Global Trade Alert has recorded 6,920 instances where a G20 government has implemented some policy change that harmed the commercial interests of one or more other G20 trading partners. Moreover, the five-year period 2009-2013 saw fewer harmful measures implemented than 2014-18, the opposite of what such "optimistic" logic supposes. These statistics imply that, since 2009, on average every 13 hours a G20 government took action that harmed at least one other G20 member provides further perspective.

FIGURE 6.2Trade between the G20 grew much faster than G20 commercial disputes taken to the WTO



- Number of DSU complaints
- Moving average of number of DSU complaints
- Ratio of intra-G20 trade to complaints
- Moving average of ratio of intra-G20 trade to complaints

Compared to a sensibly chosen benchmark reflecting underlying trade growth among the G20 members, G20 governments are referring to the WTO DSU for resolution a declining fraction of the potential trade disputes that arose with fellow G20 members. This decline was underway before the disagreements between WTO members over the appointment of new Appellate Body members arose. In turn, this begs the question: what factors could account for the waning G20 use of WTO dispute settlement?

The build up of crisis-era protectionism and the Glass Houses Syndrome

Only a WTO member can bring a DSU case against another WTO member. Firms, NGOs, and even the WTO secretariat are not allowed to bring cases for dispute settlement at the WTO. During an era of sustained resort to protectionism this feature may have played a key role in accounting for the declining resort to DSU. In what follows we explain why and provide some supporting evidence.

Consider first an era when traditional business cycles operate and the boom-and-bust cycle of national economies are out of phase. Under these circumstances a WTO member with a booming economy and facing little

pressure to break WTO rules will be inclined to bring a case another member that breaks trade norms during a recession. In these circumstances the risk of a countersuit is lower.

However, during a systemic global economic crisis, or when governments face pressure to create or protect jobs in the low growth malaise that can follow such crises, many WTO members will *simultaneously* face domestic pressure to discriminate against foreign commercial interests, potentially in contravention of multilateral trade rules.

Under these circumstances, a government that has broken multilateral trade rules themselves will be more reluctant to bring a case against another WTO member on account of the latter retaliating by bringing a countersuit. Moreover, a government that has seen its principal trading partners break WTO rules may be less reluctant to contravene a WTO agreement on the grounds that their principal trading partners are less likely to bring a case against the latter infraction (for fear of counter-suits).

The adage at work here is that "people who live in glass houses should not throw stones." If this glasshouse syndrome is at work then, in a system where only a WTO member can bring a case against another WTO

member, we should expect to see declining resort to WTO DSU during systemic economic crises or eras when many trading powers simultaneously face straightened economic circumstances.

Moreover, when the systemic economic crisis is over, the legacy of WTO rule violation remains and the disincentive to bring WTO DSU cases endures. This argument, therefore, attributes the declining resort to WTO DSU to the combined effect of the global economic crises and their aftermath and a key institutional feature of the current WTO DSU.

Since our goal is to explain the declining resort to DSU by G20 members against other members of that group, the first step was check whether there has been a build up in the harm that G20 members have done to other G20 member's commercial interests.⁴¹ Data considerations (especially as they relate to services trade and harm to the subsidiaries of multinational corporations abroad) narrowed our analysis to the impact on the merchandise export interests of G20 members.

Using information on each G20 member's resort to protectionism from November 2008 on, the timing of the introduction and possible removal of each state intervention, and the products implicated by each commercial policy change, the percentage of each G20 member's exports⁴² to every another G20 member that faced one or more trade distortions introduced by the latter governments that were in force in 2009, 2012, 2015, and 2018 were calculated. To provide a meaningful crisisera benchmark, we set the percentage of intra-G20 trade harmed by protectionism to zero in November 2008 (to coincide with this group's first pledge on protectionism).

Figure 6.3 reports four panels of data showing how, as the years went by, the build up of G20 protectionism translated into changing exposure of each G20 member's exports to the crisis-era protectionism imposed by other G20 members. The panels in this figure have been designed so that, as the percentage of export exposure to protectionism rises, the colour coding shifts from green to yellow to red. For the purposes of examining the glass houses syndrome, it will be interesting to see how many cells turn yellow and ultimately red, because the less green the cell colour the lower the incentive of the implementing G20 jurisdiction to bring a DSU case then, or in the future, against the harmed G20 member.

Looking across the four years of data presented in Figure 6.3, the sustained build-up of G20-on-G20 protectionism did indeed turn more and more green cells in these panels into yellow and red as the crisis era lengthened. This need not have been the case—after all, protectionism implemented in earlier years (say in 2009 or 2010) could have been time-limited or removed. To the extent that some G20 protectionism was temporary or unwound in later years, it was clearly not enough to restore the later panels in Figure 6.3 to their greener initial state.

The small number of green cells in the panel for 2018 indicates just how few examples of intra-G20 bilateral trade there were where fewer than 20% of the exporting nation's shipments faced trade distortions imposed by the importing nation. The large number of orange cells in that panel indicates how frequently 50% or so of bilateral trade within the G20 faced trade distortions imposed by importing nations.⁴³

If the glasshouse syndrome is to be believed then Japan, Mexico, and South Korea have harmed their G20 trading partner's commercial interests so little since November 2008 that should they bring a DSU case they are less likely to face counter-suits.⁴⁴ While circumstances vary across the other G20 members, most have harmed their G20 partner's exports so extensively that they must surely think twice about bringing a case against another G20 member for fear of a counter-suit citing their own protectionism.

Now we translate this pattern of bilateral harm into an assessment of the disciplining effect of the current DSU on intra-G20 trade after a decade of covert protectionism. One way to do this is to ask the following question: what percentage of intra-G20 trade in 2018 is between bilateral trading partners where one partner does not fear counter-suits by the other party because the former has harmed so little of the trading partner's exports and where the opposite is also true? In such bilateral pairs the glass house syndrome will not apply.

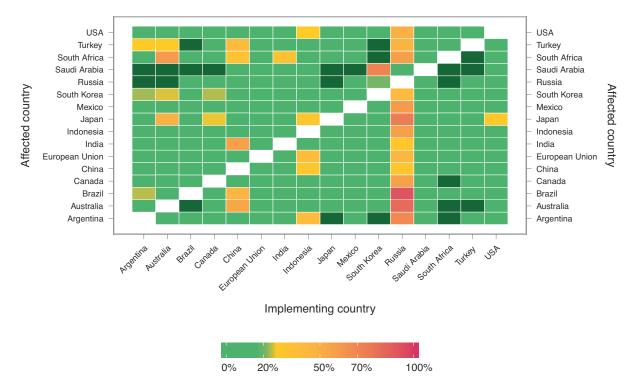
⁴¹ Since our goal ultimately is to learn about the resort to DSU and given that EU member states cannot individually bring cases to the WTO DSU, then for the purpose of this analysis (and for that matter the remainder of this chapter) we replaced the four EU members of the G20 with the European Union.

⁴² We used the most fine-grained international trade data available globally (the six-digit level of disaggregation of the UN COMTRADE database) to perform these calculations.

⁴³ In these calculations the scale of the protectionism by each G20 nation is revealed. G20 members can, and some do, use financial incentives to increase exports to third markets. These third-party effects are not captured in the panels in figure

This is not to suggest that a G20 member would not "dare" bring a case against Japan, Mexico, and South Korea. Rather the point being made is that the pattern of protectionism documented since the onset of the global economic crisis suggests that there are fewer grounds for complaint against these three nations. It may be useful to think in probabilistic terms here. In which case, we contend that the probability that any of these three nations attaches to a counter-suit from another G20 member is likely to be lower on account of the fact that these three nations have harmed less of their trading partner's exports. That probability may still be above zero.

FIGURE 6.3
Less and less bilateral trade between G20 members was unscathed by the protectionist build-up of the past 10 years 2009



Percentage of bilateral exports facing importer's trade distortions

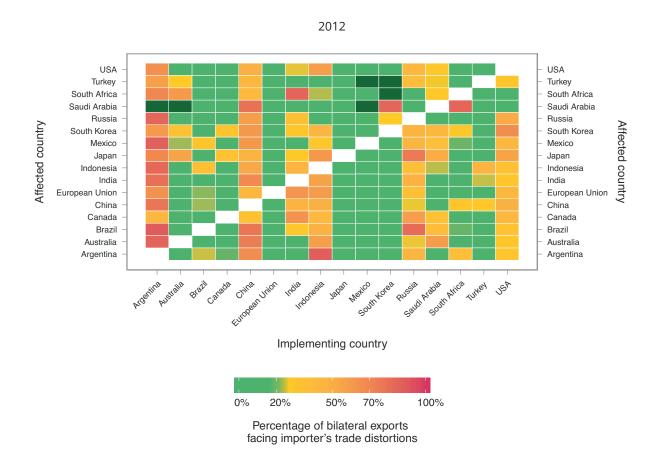
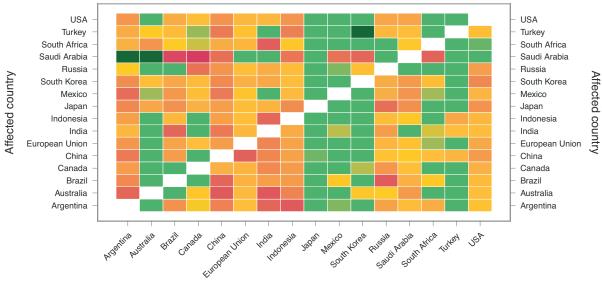


FIGURE 6.3 (CONTD.)

2015

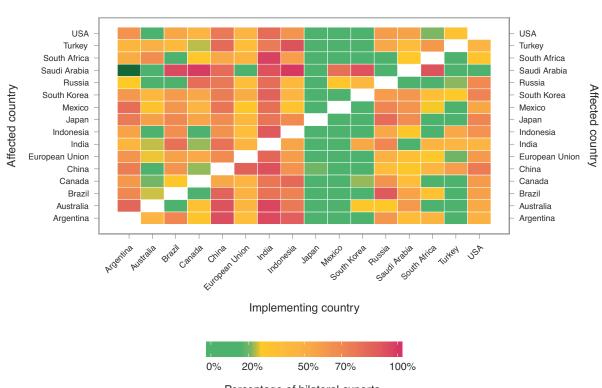


Implementing country



Percentage of bilateral exports facing importer's trade distortions

2018



Percentage of bilateral exports facing importer's trade distortions Suppose counter-suits become credible when a G20 member has harmed more than one-eighth of the exports of another G20 member. With this threshold, only \$44 billion, or less than 0.6%, of intra-G20 trade is between pairs of G20 members where the glass house syndrome does not apply.

There is, of course, nothing special about the threshold of one-eighth. So what about a threshold of one-quarter? The amount of intra-G20 trade between pairs of nations where the protectionism in force now implicates no more than a quarter of each other's exports is approximately \$103 billion, or 1.5% of intra-G20 trade.

These statistics lay bare how the accumulation of protectionism over the past 10 years has blunted the effectiveness of the WTO's Dispute Settlement Understanding. Under these circumstances, the overwhelming majority of G20 members know that other members of that group have plenty of "dirt" on them and this provides a strong disincentive to use the WTO DSU system.

Bringing a case under these circumstances amounts to an invitation for a counter-suit which, in turn, is likely to trigger bilateral negotiations or long-drawn out litigation which may result in the party that started the dispute having to scrap some it's own protectionism. Rather than initiate a DSU case, which is a public act, some governments find it preferable to move directly to private bilateral negotiations (the outcome of which may not satisfy multilateral norms) or not bringing a case at all

(and living with the irksome foreign protectionism.). Both of the latter outcomes imply a diminished role of the WTO in resolving trade disputes.

Concluding remarks

In this chapter we presented evidence that, given the growth of intra-G20 trade since 1995 and the significant resort to beggar-thy-neighbour activity by G20 members over the past 10 years, the number of cases brought by G20 members against each other is unusually low. Either G20 members are more reluctant to bring cases (because of the glass house syndrome) or swathes of the discriminatory acts taken by the G20 fall outside WTO rules (which points to another problem with the multilateral trading system.)

In light of the findings presented here, current deliberations on the looming "crisis" in WTO dispute settlement are at best incomplete and serve as a reminder of how the urgent often supersedes the important. Replenishing the bench of the Appellate Body won't fix the structural factors that have resulted in waning use of the WTO dispute settlement system. Until the protectionism of the crisis-era is voluntarily unwound or negotiated away, the glass house syndrome will continue to diminish the role that the WTO plays in settling trade disputes between its members. This provides another reason why the next section of this report examines WTO reform options that remove the protectionist silt that has clogged up the arteries of the world trading system over the past decade.

SECTION 3 IDENTIFYING WTO REFORM OPTIONS—INSIDE THE WTO SANDBOX

CHAPTER 7 NEEDED: A SYSTEMATIC APPROACH TO IDENTIFYING WTO REFORM OPTIONS

The current work programme of the WTO, such as it is, comprises potentially important legacy items (such as the negotiations on fishery subsidies and on environmental goods) as well as initiatives launched at the last WTO Ministerial Conference, held in Argentina in December 2017. The latter included talks-about-talks on electronic commerce, on investment facilitation, and on micro, small, and medium-sized enterprises.

No doubt some WTO members came to a considered view as to which, if any, of these initiatives are in their interest. However, what is missing is any sense that a system-wide perspective has informed which initiatives should be prioritised. Perhaps the view is that getting any initiatives going is a step forward. Yet, the concern remains that reform options that could potentially benefit large numbers of WTO members may have been overlooked.

This concern motivated us to develop an approach to systematically compare WTO reform options on the basis of observed policy-induced trade distortions and cross-border trade flows. Recognising (regrettably) the limited appetite for reform options that require the participation of all WTO members, in what follows we focus on critical mass accords that countries can opt into and where choosing not to do so does not come with a penalty Formally, we consider WTO reform options that involve members of a critical mass accord reforming their policies on a most-favoured nations basis. Moreover, building on the findings in the first two sections of this report, we focus on reforms options that remove the build-up over the past 10 years of discrimination against foreign commercial interests.

We know of no publicly-available, systematic data-driven comparison of critical mass WTO reform options similar to that presented here. Since the data we use to conduct this comparison is public, nothing prevents others—including officials in WTO member governments and in the international organisations—from conducting similar, and hopefully improved, analyses. Others may want to consider alternative policy experiments (such as removing only border barriers to trade) or alternative decision rules for joining a critical mass accord.⁴⁵

A major advantage of our evidence-driven approach over more qualitative processes to identify WTO reform options is that the commercial scale of different options is readily apparent. Nevertheless, we do not claim our approach is the final word—it should be seen as a complement, rather than a substitute, to whatever other processes are employed by others to formulate WTO reform options.

This section of the report begins by describing the method used to assess single-sector critical mass accords that remove all of the discrimination⁴⁶ against foreign commercial interests imposed since November 2008 and that is still in force today.⁴⁷ As such, the critical mass accords seek to return the world trading system to the status quo before the global economic crisis. Not that there is anything inherently wrong with trade liberalisation in our view, it is worth noting that the sectoral accords considered in this section of this report are not really liberalising—they merely seek to remove the silt clogging up the world trading system over the past decade.⁴⁸

⁴⁵ As will become clear, our approach identifies whether a WTO member gains on net from joining a critical mass accord. We deliberately shied away from assessing a number of strategic considerations that arise from the decision to join such an accord.

In the calculations that follow we exclude the removal of contingent protection measures (taken to include anti-dumping duties, counter-vailing duties, and safeguard duties.) Our reason for doing so is that these measures, if the associated investigations and tariffs are implemented in line with the relevant multilateral rules, are allowed exceptions under existing WTO rules.

⁴⁷ In this section we use the United Nations' CPC 2.1 classification of sectors at the two-digit level of disaggregation to identify and distinguish sectors of economic activity.

⁴⁸ After all, the chapters in section one of this report demonstrate how much the world trading system has moved away from the level commercial playing field since the onset of the global economic crisis. The chapters in section two of the report show how this build-up of discrimination has held increasingly influenced world trade growth and the resort to the Dispute Settlement Understanding of the WTO.

Clarifying our point of departure

To put the WTO reform options considered in this section in perspective a number of observations should be made. These observations are in addition to the important point made directly above that the critical mass accords examined in this section of the report are better viewed as status quo restoring than a bold new attempt to break open foreign markets.

First, the possible accords considered are critical mass accords where a subset of WTO members implement steps on a Most Favoured Nations basis to all WTO members, including to those WTO members that do not join an accord. In this respect the accords considered are similar to the original and updated Information Technology Agreements (ITA) and to the Telecoms Reference Paper.⁴⁹

In contrast, the accords considered here differ from the WTO's Agreement on Government Procurement where the benefits of liberalisation are shared only with signatories to that accord. 50 Moreover, we do not claim that critical mass accords are new. To the contrary, we argue that key features of the critical mass accords considered here should be well known to any informed WTO member government. The options we explore here, therefore, are not without precedent.

Second, some WTO members have expressed the desire to experiment with new negotiating formats, as part of their desire to revive the WTO's negotiating function. In this respect, in its communication of 24 November 2018⁵¹, Canada noted "A first task for a group of Members committed to making progress might be to identify those issues that might be subject to efforts to achieve multilateral agreement and those that might be better achieved through plurilateral initiatives or other approaches to upgrading the rules."

We note also that in a recent statement of its trade policy New Zealand, another nation highly dependent on trade to sustain its living standards, argued that "a new organising construct which may help us better position ourselves against the possibility of a slow disintegration of the trade rules based system. This is the concept of 'open plurilateralism' which involves a more deliberate structured focus and emphasis by New Zealand on plurilateral processes and instruments" (Vitalis 2018). The time has come, then, to systematically explore what trade policy topics lend themselves to agreements that do not

involve the full WTO membership and to identify which negotiations are most likely to be concluded successfully and deliver the greatest benefit.

Third, to some the renewed emphasis on negotiating accords at the WTO outside of multilateral trade rounds will feel like a move "back to the future." After all, at the time the WTO was created, some argued that there was little appetite among WTO member governments for further large scale trade rounds, such as the Uruguay Round (Bacchus 2011). Indeed, they may well contend that the subsequent failure to conclude the Doha Development Agenda supported their argument. To such policymakers and analysts, a revival of interest in plurilateral or in critical mass accords is in line with their vision of what the WTO was supposed to have become.

Fourth, we agree with the recommendation of the recent Bertelsmann Report that

Careful choices need to be made in pursuit of such initiatives. Ideally, the focus should be on matters of importance to influential constituencies and ones that stimulate engagement/support from the private sector and other stakeholders. The WTO is best served by initiatives that 'move the needle' (page 38).

To that end, wherever possible, quantitative attempts to assess the relative importance of different initiatives should be undertaken. In this chapter and the three that follow we attempt to do this, contrasting possible critical mass accords by the total value of trade in goods implicated among other metrics. Data limitations preclude us from assessing accords affecting service sector trade and the commercial consequences of cross-border data flows. We do not deny the potential importance of WTO initiatives in these latter two areas. Even so, we argue our approach goes further than any other we have found in systematically comparing various WTO reform options involving subsets of the WTO membership that wish to move forward with reform.

Fifth, a possible outcome of an analysis such as this is that the WTO might be better viewed as a "club of clubs" as opposed to all WTO members adhering to a single rule book. As a way of managing the diversity among WTO members, Lawrence (2006) advocated the former, identifying principles by which the WTO could house a collection of accords that are enforced through the WTO's Dispute Settlement Understanding.⁵² Unlike Lawrence, however, as will become clear in the next two chapters, we will go beyond single issue (sector) accords and examine

⁴⁹ Furthermore, there are the ongoing negotiations on environmental goods, which is being conducted among a subset of the WTO membership.

⁵⁰ Some prefer to refer to the latter as plurilateral accords. Because of the free riding possible with the former accords

⁵¹ See WTO document JOB/GC/201.

⁵² Levy (2010) also makes the case for variable geometry.

whether combinations of sectoral accords offer greater promise by eliciting the participation of a larger number of WTO members.⁵³

A Neo-Mercantilist approach to assessing critical mass WTO reform options

Whichever WTO reform options are considered, we need a metric to assess how beneficial each are for every WTO member. Instinctively, as economists, we are inclined towards judging sectoral accords by their impact on aggregate economic welfare of a WTO member, which takes account of the impact on buyers, local sellers, and exporters. While we understand that this is how many analysts prefer to rank reform options, the zeitgeist in 2019 inclines us—for better or for worse—towards a neomercantilist alternative. Our starting point, then, is that a WTO member assesses reform options by its impact on total exports and total imports. We will, therefore, judge reform options by the difference between the change in total national imports, where the latter is weighted by a parameter.⁵⁴

We refer to that parameter as the relative import aversion parameter and it will play a key role in our analysis. The lower is that parameter the more a WTO reform option that expands imports is penalised in our method. In the case where the parameter equals minus one, WTO reform options are judged by their impact on the national trade balance—much as one would expect an old fashioned mercantilist policymaker to evaluate options.

There are very good reasons why policymakers may not trade-off export and import changes one-for-one, however. In a sectoral accord that removes discrimination against imports of parts and components, then the local buyers are likely to be firms, some of whom may export.⁵⁵ In this case, a policymaker may realise that not every US dollar more of imported parts must be matched by another US dollar of exported parts (as the exports of downstream parts-buying sectors may have risen as well).

A second reason why a one-to-one trade-off between imports and exports in a sector may be too restrictive is that, in the critical mass accords we consider here, we will remove all of the sources of cross-border discrimination against imported goods, some of which have public finance benefits. For example, the removal of a subsidy regime that targets local producers will benefit the national treasury and policymakers may value the alternative uses of such funds.

We recognise that policymakers may differ in the degree to which they are adverse to increased imports. Nevertheless, when assessing a WTO reform option, we impose the same parameter to capture import aversion and interpret this as the maximum aversion to imports that supports a coalition of WTO members that would gain from a particular critical mass accord.

We focus in this chapter and the next on critical mass sectoral accords that remove all of the crisis-era era discrimination in a particular sector implemented by members of that accord which are documented in the Global Trade Alert database (except the resort to trade defence and safeguard measures.) Specifically, for each WTO member we identify the tariff lines where a discriminatory policy instrument affecting imports was in effect on 15 April 2019.⁵⁶

As we are interested in critical mass accords that are implemented on a Most Favoured Nation basis we assume that only members of the accord remove discrimination against imports.⁵⁷ We also assume that benefits from such removal are also enjoyed by non-members that export the relevant product to members of a potential accord.⁵⁸

For each of the 31 non-agricultural goods sectors defined by the United Nations at the two digit level of disaggregation⁵⁹, and for values of the relative import aversion parameter ranging from zero to minus one, we identified the largest number of WTO members that would, on the basis of the net export gain criterion

We are well aware that considering issue linkage across sectors essentially rediscovers the logic of negotiating trade-offs associated with a full-fledged multilateral trade negotiation. However, we would note that a multi-sectoral negotiation involving a limited number of sectors can exploit such trade-offs as well. Perhaps the latter should be referred to as minilateralism. For a thorough, theoretical analysis of issue linkage across negotiations see Maggi (2016).

In fact, we will judge a reform proposal in terms of the exposure of national exporters to the removal of discrimination by governments abroad and by the exposure of national imports to the removal of discrimination at home. In a critical mass sectoral accord, then, four key drivers of the assessment of net gains are the total value of sectoral exports by a WTO member to the members of the critical mass accord, the total value of sectoral imports by a WTO member, the exposure of the WTO member's sectoral exports to discrimination in trading partners that join the critical mass sectoral accord, and (for those WTO members joining the sectoral accord) the exposure of sectoral imports to the WTO member's own discrimination against foreign suppliers. This formulation effectively imposes the condition that changes in exposure to discrimination and trade flows map into changes in exports and imports in a similar manner across WTO members. In the absence of systematic evidence across WTO members that can be employed, this assumption of uniformity avoids any building in bias into our calculations. Should such systematic evidence be collected or obtained from econometric estimation then clearly the approach here can be extended accordingly.

This argument is in addition to the traditional one that removing or reducing trade barriers enhances the welfare of customers, irrespective of whether the transaction is B2C or B2B.

Actions taken by governments to boost exports (through any means) are excluded from this analysis.

⁵⁷ In our analysis we treat the European Union as a single commercial entity and exclude intra-EU trade from our calculations. As a result, as far as the EU is concerned, the removal of discrimination against imports relates to the removal of policy interventions by the European Commission and by Member States that had disadvantaged foreign suppliers located outside of the EU.

⁵⁸ We allocate the benefits of the removal of discrimination in a particular tariff line to trading partners according to their export shares in 2017.

⁵⁹ In 2017 twenty-three of those sectors accounted for more than one percent of world goods trade.

described above, benefit from joining a critical mass accord. Throughout we use international trade data from the United Nations COMTRADE database for 2017.⁶⁰

Indeed, for each proposed critical mass accord, we separate the WTO membership into the following three groups:

- those that would be net gainers from joining⁶¹ (which are the potential *members* of the accord),
- those that would have to remove discrimination if they joined the accord, that are net losers from joining, and so do not do so (thereby becoming free riders if any accord is signed), and
- those where the net gain is zero because they do not have any discrimination to remove and do not export the products in the sector in question to any of the potential members of the accord (referred to in what follows as bystanders).

Once the members of a critical mass accord are identified then we can compare across critical mass accords along the following five metrics:

- 1 the total number and identities of the members of a given critical mass accord.
- 2 the identities of the free riders to a given critical mass accord.
- 3 the total amount of imports by the members of the accord in the sector in question.
- 4 the percentage of sectoral imports for which the members of a critical mass accord are responsible.
- 5 the total amount of sectoral imports where discrimination has been removed as a result of a critical mass accord.

In this manner we can assess how inclusive a critical mass accord is, whether certain WTO members or groups of members have an incentive to join a critical mass accord, and how much trade is implicated by a commitment to reverse crisis-era discrimination by the members of the accord.

A first look at the findings

Sectors differ considerably in the patterns of trade between nations and in the degree of discrimination undertaken against foreign commercial interests by governments over the past 10 years.⁶² We should not be surprised, then, to find that the size and membership of coalitions of WTO members prepared to join a critical mass accord varies across sectors. Moreover, as the parameter

indicating aversion to imports points to greater political sensitivity to import increases, predictably the number of members of such coalitions falls.

For the 31 sectors for which we examined individual critical mass accords, the total number of members (net gains) from joining such accords are portrayed for different degrees of relative import aversion. The findings are reported in Figure 7.1, where the sectors are listed in terms of descending amounts of the total value of global trade.

To appreciate the findings in this figure, start from the case where policymakers do not worry at all about import increases. In this case the relative import aversion parameter is zero and the net gain calculation for joining a critical mass accord depends only on the potential for export gains. In the wastes and scraps sector over 100 WTO members would join such a critical mass accord if there was no aversion to imports. In contrast, even under this extreme case, no critical mass accord would attract members in the uranium and thorium ores sector. This highlights the differences in circumstances across sectors.

Figure 7.1 also reveals that as aversion to imports rises then the rate at which membership of critical mass accords falls off varies across sectors. Support for a single-standing critical mass accord in office machinery falls off quickly, as it does in the salt, precious stones, and fertiliser sector.

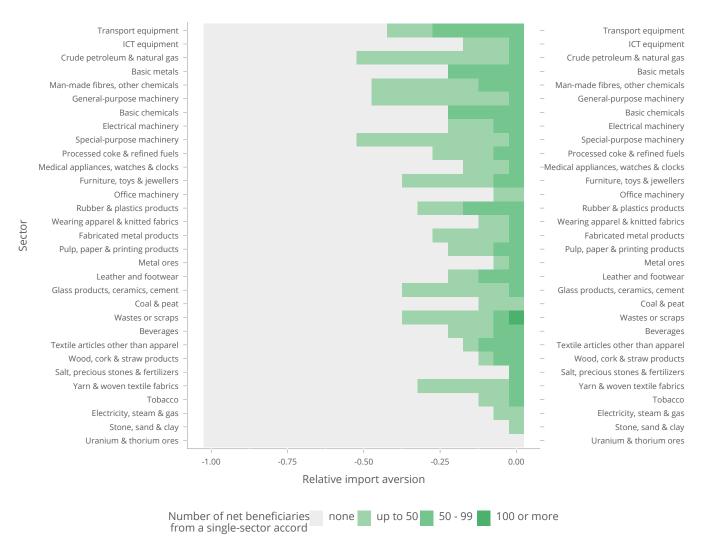
Interestingly, five of the 10 largest sectors in terms of global trade flows are ones where coalitions can be sustained until the import aversion parameter reaches almost one-half (in absolute value). The five sectors are transport equipment, crude petroleum, man-made fibres, general-purpose machinery, and special-purpose machinery. These five sectors alone account for a third of global trade. In the next chapter we will examine which, if any, of these sectors can support a stand-alone sectoral critical mass accord. Moreover, we will examine how close stand-alone sectoral accords come to attracting enough members so that a threshold of (say) 80% of sectoral trade falls within the accord.

⁶⁰ So as to have the most fine-grained calculations at the global level we used the six-digit level of product classification in COMTRADE.

⁶¹ Of course, our approach lets the "numbers speak for themselves." That is, the likely impact on total exports and total imports.

⁶² For a discussion of the five sectors most frequently hit by discrimination since the onset of the global economic crisis see pages 27 and 28 of Evenett (2019).

FIGURE 7.1A third of world goods trade is in five sectors where sectoral accords afford net benefits to dozens of WTO members



CHAPTER 8 CAN CRISIS-ERA DISCRIMINATION BE REVERSED THROUGH SINGLE-SECTOR CRITICAL MASS DEALS?

The last chapter demonstrated that for five sectors of the world economy dozens of WTO members would gain if they joined single-sector accords which involved removing, on a Most Favoured Nation basis, discrimination against imports imposed over the past decade. That is encouraging but it reveals little about the amount of sectoral trade that these WTO members are responsible for and the share of such trade that would benefit from removing discrimination.

If single-sector accords are going to "move the needle"⁶³ then they need to reach "critical mass." Previous critical mass sectoral accords at the WTO have involved members responsible for at least 80%, and in some cases at least 90%, of sectoral trade. Such high thresholds reduce the likelihood that a large competitive exporter can remain outside the accord and free ride on the reforms of others.

The question, then, for this chapter is in how many sectors can crisis-era discrimination be reversed in single-sector deals that reach a critical mass of worldwide sectoral trade? For the purposes of this chapter critical mass is said to be attained if a single-sector accord includes members responsible for 80% or more of global trade in that sector.

Few single-sector deals reach critical mass

For different levels of aversion to imports by policymakers, recall that Figure 7.1 revealed for each sector how many WTO members would be net gainers from a single-sector accord. Figure 8.1 takes the identities of the WTO members associated with each potential single-sector accord and calculates in 2017 the share of sectoral world imports those WTO members are responsible for and the share of sectoral imports that would be affected by the removal of crisis-era discrimination. The former share is shown

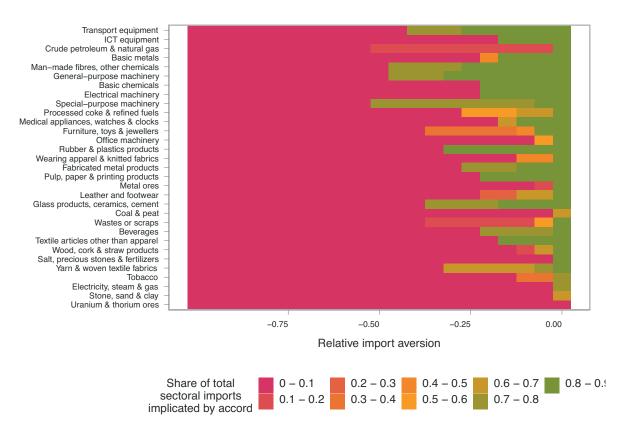
in the top panel of Figure 8.1 and the latter share in the bottom panel. The redder the colour the smaller shares of sectoral trade implicated. The greener the colour the larger share affected.

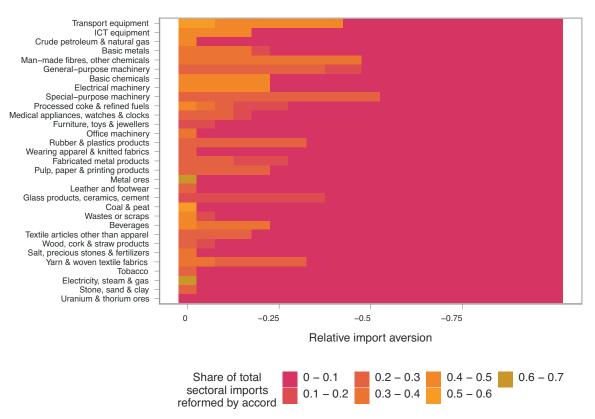
Looking at the top panel it is apparent that, as the aversion to imports becomes more severe, the share of sectoral imports associated with the remaining members of a sectoral deal falls off, often quite sharply. Nevertheless, there are five sectors where the "green" shading persists for moderate levels of import aversion, implying critical mass could be reached. These five sectors are transport equipment, man-made fibres, general purpose equipment, special-purpose machinery, and glass products, ceramics, and cement.

Turning to the bottom panel of Figure 8.1, it is apparent that the shares of sectoral imports that benefit from the removal of crisis-era discrimination rarely exceed one-half once moderate levels of import aversion are reached (-0.25 and beyond). The shares of sectoral exports benefiting are highest in transport equipment and manmade fibres. The shares for special-purpose machinery are lower but a single-sector deal can be sustained at higher levels of policymaker dislike for imports.

Comparing the top and bottom panels of Figure 8.1 provides a stark reminder that, while a group of WTO members may be responsible for a large share of global trade in a sector, that need not translate into a large share of trade being reformed in a sectoral accord. Indeed, given the voluntary nature of sectoral accords considered here, it may be the case that many of the countries that are net gainers from such an accord are those which have both large export interests in the sector in question and undertook relatively limited discrimination against foreign suppliers.

FIGURE 8.1
Relatively few stand-alone sectoral accords attract enough members to restore large shares of sectoral trade to their pre-crisis state





Special-purpose machinery can support a single-sector critical mass accord

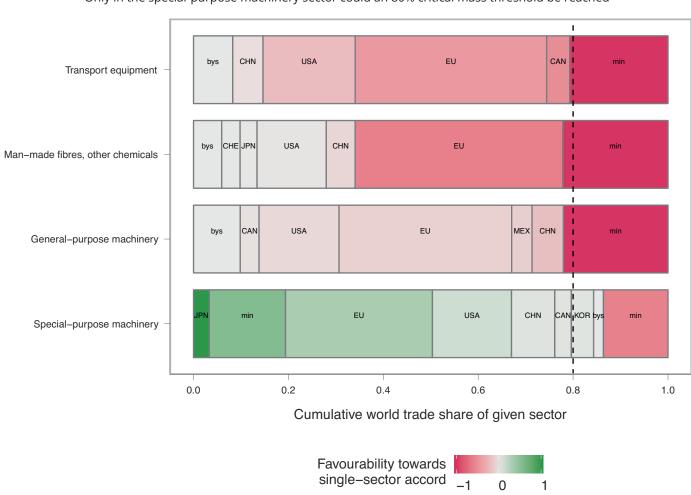
Another way of summarising the findings is to rank WTO members in terms of their intensity of opposition or support for a single-sector accord. The metric we construct for this ranking uses the net gain that a WTO member has from a given accord. We then divide this net gain by the maximum absolute value of the net gain observed in the same accord. By construction, then, for each WTO member this ratio will lie between -1 and +1.

Using this ratio to arrange WTO members from those most predisposed towards a single-sector accord to those least pre-disposed reveals which countries are stronger supporters of the accord and whether the 80% critical mass threshold is reached. Figure 8.2 does this for four

of the largest aforementioned sectors in terms of global trade. WTO members that are net gainers are indicated in green, net losers are shown in red.

Figure 8.2 reveals that the special-purpose machinery sector generates gains for Japan, the European Union, the United States, China, Canada and Korea that the accord will meet an 80% requirement for critical mass. The other three sectors shown in Figure 8.2 cannot reach the 80% critical mass threshold. The challenges doing so seem particularly acute in transport equipment (where the United States, the European Union, and Canada are net losers) and in man-made fibres (where the large share of world trade attributed to the European Union, which loses from this accord, is a hurdle).

FIGURE 8.2Only in the special-purpose machinery sector could an 80% critical mass threshold be reached



Note: See main text for the explanation of the degree of favourability towards a sectoral accord. This figure was produced when the relative import aversion parameter took the value of -0.5. In this figure "min" refers to the total sectoral share of imports associated with nations each responsible for less than 3% of sectoral imports. There may be such small exporters that are in favour of and against a sectoral accord (as is the case in the special-purpose machinery sector.) The label "bys" refers to the market share of the bystanders to a sectoral accord

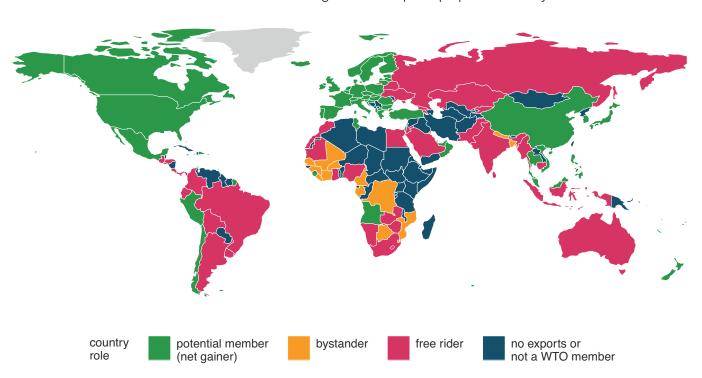
A single-sector critical mass accord in special-purpose machinery would attract 30 WTO members, 14 of which would remove their crisis-era discrimination. A total of 32 other WTO members would be free riders. As Figure 8.3 makes clear, those free riders include Argentina, Australia, Brazil, India, Russia, and South Africa. Interest in this critical mass accord would be limited in Sub-Saharan Africa and in Central Asia (as indicated by the bystanders showing in the map in Figure 8.3).

We estimate that a total of \$142 billion of the \$557 billion of trade in the special-purpose machinery sector would benefit from the removal of crisis-era discrimination in this critical mass accord. Moreover, 84.3% of the sectoral trade that would benefit is between the members of this single-sector accord (implying the free riders get less than sixth of the benefits).

What could generate more viable reform options?

Essentially, there are two factors that could open up more sectors to critical mass accords. The first is if policymakers could be persuaded to value exports more positively or to be more relaxed about import increases that result from these accords. Winning the argument that imports are valuable would shift the calculus in favour of more WTO members gaining from any single-sector accord. As the number of WTO members that are net gainers from a sectoral accord rises, this increases the total value of trade that benefits from the removal of crisis-era trade discrimination which, in turn, shifts the calculus in favour of yet more members joining. In short, a snowball effect can be generated. This highlights the importance of winning the argument in enough national capitals in favour of returning commerce to its pre-crisis treatment, in particular in those nations responsible for significant shares of world trade in a sector.

FIGURE 8.3 Positive net export gains for China, the European Union, Japan, and North America from a stand-alone critical mass agreement on special purpose machinery



Note: The above map was generated when the relative aversion to import parameter was -0.5.

Figure 8.4 reveals the possibilities for single-sector accords that are unlocked once the aversion to import decreases (in this case reflecting a parameter shift from -0.5 to -0.25). It shows that among the 10 largest sectors in terms of global trade, an 80% critical mass threshold can be reached in four of them (transport equipment, manmade fibres, general-purpose machinery and special-purpose machinery).

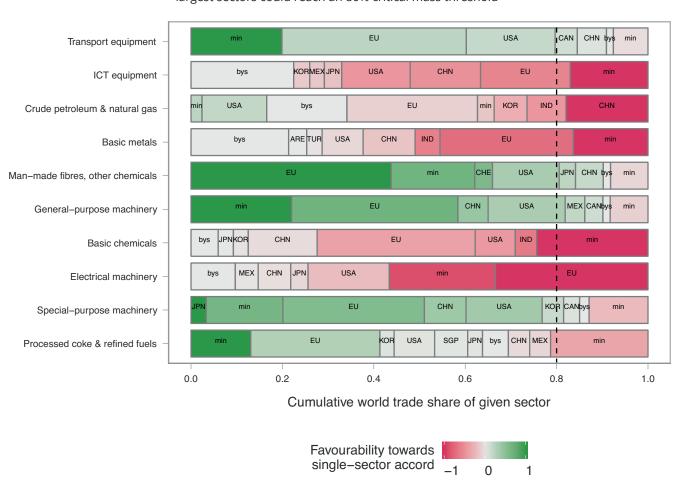
The second way to unlock further reform options is to consider multiple sector accords where the critical mass threshold is reached. Again, Figure 8.4 helps reveal why this is possible. Consider the processed coke and refined fuel sector which, but for the mild opposition of China and Mexico⁶⁴, would almost reach the critical mass threshold. Given that China and Mexico both gain from a

single-sector accord in general-purpose machinery, then a two-sector accord that combined both processed coke and general-purpose machinery may well tip the balance towards acceptance and breach the 80% threshold.

In the next chapter we will systematically examine all of the potential permutations of sectors, but the logic underlying horse-trading across sectors should be apparent already. Figure 8.4 also reveals that, once one moves away from requiring the assent of all WTO members for an accord, reaching an 80% critical mass threshold requires the buy-in of a remarkably small number of (admittedly economically large) WTO members. The dynamics underpinning trade cooperation in critical mass accords appears to be much less restrictive than for multilateral negotiations.

FIGURE 8.4

Making the case for imports pays—with weaker import aversion four of the 10 largest sectors could reach an 80% critical mass threshold



Note: The above figure was generated when the relative aversion to import parameter was -0.25.

As shown by the light pink coloration of the indicators for these two WTO members.

CHAPTER 9 REVIVING WTO NEGOTIATIONS THROUGH WELL-CHOSEN MULTI-SECTOR DEALS

To restore confidence in the WTO's negotiating function a string of meaningful deals needs to be concluded—thereby dispelling the impression that the Agreement on Trade Facilitation, concluded at the WTO Ministerial Conference in Bali in 2013, was a one-off. From the perspective of a neo-mercantilist policymaker, the last chapter demonstrated the limited support for the negotiation of a series of single-sector accords that attain critical mass.

However, the finding that some sectors were close to attaining the critical mass threshold suggests that sensibly chosen multiple-sector deals may find favour with a large number of WTO members. The purpose of this chapter is to demonstrate that the commercial opportunities created by critical mass accords that simultaneously eliminate crisis-era discrimination from multiple sectors are substantial. Specific examples of potential two and three sector deals are given and their inclusiveness and the degree of free-riding discussed.

While such multiple-sector critical mass accords fall short of negotiating a new multilateral trade round, they would still represent a step forward for the WTO membership. Of course, the very bargaining trade-offs across sectors involved in critical mass accords are at work in the multilateral trade deal-making. The road back to multilateralism may require "minilateralism", which is one way of charactering the multiple-sector deals examined here. Rediscovering the utility of trade-offs across sectors as well as the sensible design of negotiating agendas is essential in designing a viable work programme for the WTO.

In what follows we retain the approach described in chapter 7 and implemented in chapter 8. That is, we focus on the 31 non-agricultural merchandise sectors identified by the United Nations. All sectoral deals considered here involve the roll back of discrimination against foreign commercial interests implemented since November 2008 that was still in effect in May 2019.⁶⁵

Multi-sector accords elicit greater interest from WTO members

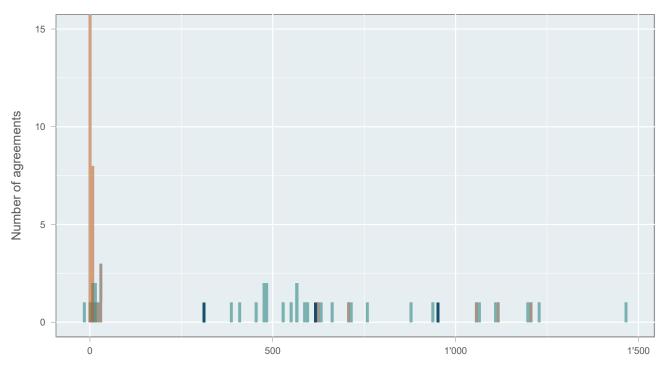
We begin our analysis with two-sector accords. To demonstrate what is at stake commercially, we first compare the outcome of a two-sector accord with that of the two corresponding single-sector accords. We undertake this comparison for every possible sector pair. As there are 31 non-agricultural merchandise sectors, this generates 465 possible pairings of sectors.

For different values of the import aversion parameter, this difference is plotted in Figure 9.1 for those two-sector accords that attained the 80% critical mass threshold. That is, the WTO members who are net gainers from the two-sector accord account for at least four-fifths of the total value of global trade in those two sectors.

Even at higher levels of import aversion (here taken to be -0.5), the two-sector deals that meet the critical mass threshold of 80% would expose hundreds of billions of US dollars of more international trade to reform than the corresponding single-sector accords. Indeed, as indicated by a dark blue marker in Figure 9.1, one such two-sector accord adds nearly a trillion dollars of trade to be reformed compared to implementing the respective two sectors independently.

We also retain the neo-mercantilist approach to evaluating whether a WTO member is a net gainer from any proposed deal, but in the case of multiple sectors deals we add up the respective import and export exposures to crisis-era discrimination weighting each associated US dollar of trade equally. We continue to weight import changes by a relative import aversion parameter, whose value varies from 0 to -1.

FIGURE 9.1The value-added from pairing sectors—three possible deals with much larger trade coverage

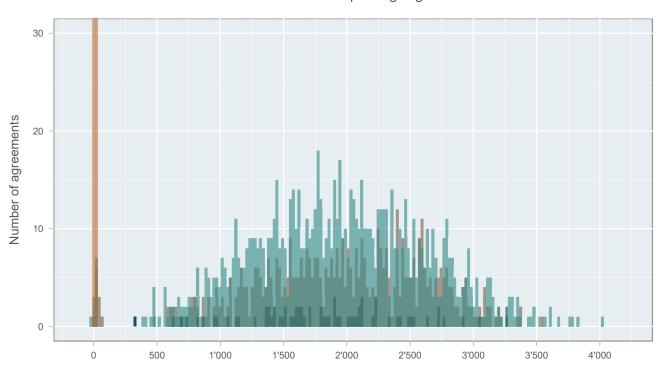


Additional imports reformed by a multi-sectoral accord as opposed to single-sector accords in same sectors, billions USD

Degree of import aversion -0.5 -0.4 -0.25 (

FIGURE 9.2

Horse-trading across sectors opens the door for deals that reform trillions of US dollars more trade that the corresponding single-sector deals



Additional imports reformed by a multi-sectoral accord as opposed to single-sector accords in same sectors, billions USD

Degree of import aversion -0.5 -0.4 -0.25

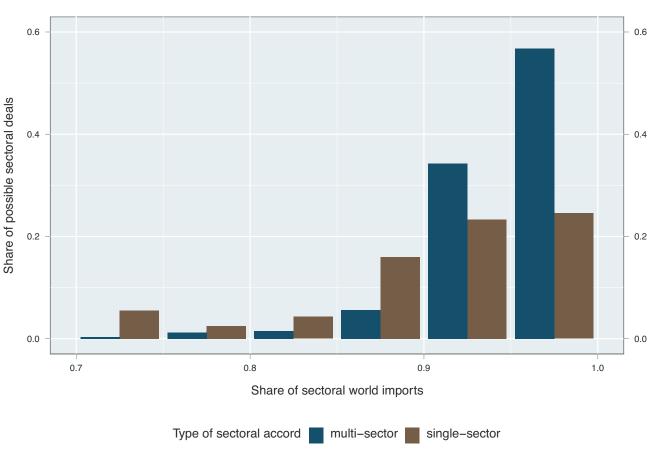
But why stop at two sectors? We extended the above analysis above for every possible permutation of the 10 largest goods trade sectors. Together, these 10 sectors accounted for 64 percent of world trade in 2017. We simulated all possible combinations of 10 or fewer sector accords and calculate our value-added statistic as above. The results can be found in Figure 9.2. This form of minilateralism can result in multiple-sectoral deals that reform over \$3 trillion more trade than implementing the associated single-sector accords independently.

In chapter 8 we reported that the only single-sector accord whose members were responsible for 80% or more of global sectoral trade would, when implemented, expose \$142 billion of trade in special-purpose machinery to reform.⁶⁶ In contrast, we found a nine-sector accord which, for the same level of import aversion, would result in \$3.25 trillion of trade being reformed. For sure, the total amount of trade associated with nine sectors exceeds that for one sector. But also in relative terms, the nine-sector

deal is more appealing. According to our simulation, the nine-sector accord would reform 36% of world trade in those sectors, while the comparable reform percentage for the special-purpose machinery accord is 25%.⁶⁷ Much of this difference results from the number of participants. The nine-sector accord counts 83 WTO members amongst its net beneficiaries while the special-purpose machinery deal only motivates 30 WTO members to join. Higher sectoral trade coverage and higher inclusiveness are strong testaments to the desirability of multi-sector accords.

There is nothing sacrosanct about insisting that 80% of a sector's trade be undertaken by the WTO members of an accord. Figure 9.3 shows for different critical mass thresholds the share of sectoral accords that can reach that threshold, differentiating between the single-sector accords and multiple-sector accords. As is evident, multiple-sector accords are more likely to exceed whatever critical mass threshold is set.

FIGURE 9.3Multi-sectoral accords elicit more participation and are more likely to hit an 80% or 90% critical mass threshold



⁶⁶ This statement applies when the import aversion parameter is -0.5. When policymakers are less adverse to imports, more single-sector critical mass accords are possible.

Our simulations of the up-to-10-sector deals also revealed that there is a four-sector critical mass deal which would that can be sustained for 52 WTO members if the import aversion parameter was -0.55 and reforms 26 percent of sectoral world trade. We could find no multi-sector deal that would elicit WTO member participation for import aversion parameters -0.6 and below.

Examples of multiple-sector critical mass accords

Once each multiple-sector deal that attains 80% critical mass has been identified, it is possible to determine which WTO members have an incentive to join such an accord, those that do not, and the amount of trade that will be reformed. It is also possible to identify multiple-sector deals that involve sectors where single-sector deals would not attain critical mass, highlighting the value-added of encouraging cross-sector bargaining trade-offs.

A particularly interesting two-sector deal is one that eliminates crisis-era discrimination in general purpose machinery and transport equipment. For the same degree of import aversion by policymakers, single-sector deals would not attain critical mass. We estimate that a total of \$950 billion of trade would be reformed if this two-sector accord was fully implemented.

A total of 38 WTO members⁶⁸ would be net winners from this two-sector accord in general purpose machinery and transport equipment. Those winners include nations in

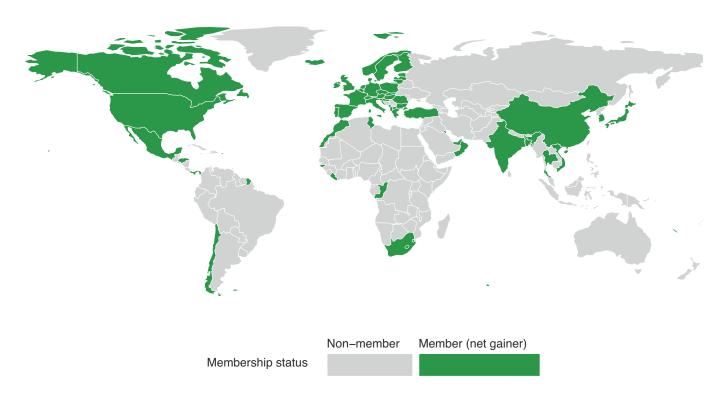
North America and Western Europe, China, India, and South Africa. Interest in this deal, however, among Latin American, Sub-Saharan African, and CIS nations would, however, be weak.

An even more striking case of the benefits of negotiating multiple sectoral accords arises in a deal involving reforming trade in the base metals, man-made fibres, and transport equipment sectors. As Figure 9.5 shows, winners from this accord are well represented in North and Latin America, Western Europe, East and South Asia, and the CIS region.

While not every Sub-Saharan African nation would gain from this accord, many more do than in the two-sector deal involving general purpose machinery and transport equipment. Should all of the net gaining WTO members join this three-sector deal then just under 93% of global sectoral trade would be undertaken by the signatories and 41% of the global trade in these three sectors would be reformed. This example highlights how careful choice of sectors to bundle together can widen the range of beneficiaries from critical mass agreements.

FIGURE 9.4

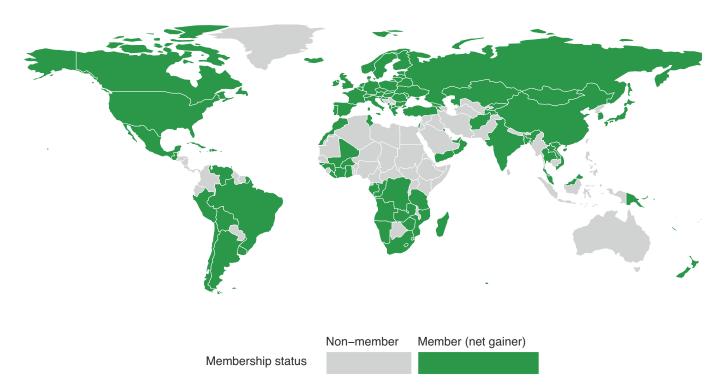
A two-sector deal, where crisis-era discrimination was eliminated in general-purpose machinery and transport equipment, would attract 38 WTO members accountable together for over 86% of global trade in those products



Note: The above map is based on the net gain calculations that employed an import aversion parameter of -0.5.

FIGURE 9.5

A total of 76 WTO members would have an incentive to join a deal eliminating crisis-era discrimination in the base metals, man-made fibres and transport equipment sectors, implicating \$1.5 trillion of trade



Note: The above map is based on the net gain calculations that employed an import aversion parameter of -0.5.

In this section we have provided two examples of the possible critical mass agreements. We chose these examples because they highlight how systematic analysis of WTO reform options can result in the design of a negotiating agenda that is more limited than a multilateral trade round (and therefore hopefully easier to conclude) while at the same time potentially including a diverse set of WTO members. Moreover, the multi-sector examples chosen here involved the reform of trade in sectors where single-sector deals would not be viable, given the same degree of aversion to imports by policymakers.

Multi-sector reform options that benefit the "Big Four"

When comparing across multi-sector reform options, other conditions can be imposed. One condition of considerable contemporary interest is that China, the European Union, Japan, and the United States each be net gainers. This does not guarantee that each of these four big players in the world trading system would join a multiple-sector critical mass accord, but it is surely a necessary condition for them doing so. How many such accords would elicit the interest of these four players and what are their characteristics?

We found that there are 67 sectoral accords involving the elimination of crisis-era discrimination in three or more sectors that would generate net gains for China, the European, Japan, and the United States when the import aversion parameter is -0.5. In only one of these 67 accords is more than 10% of the trade reformed likely to benefit freeriders.

Figure 9.6 plots the amount of trade reformed in each of these 67 accords against the share of trade that takes place between net beneficiaries of each accord. As is evident from this Figure, accords involving a larger number of sectors reform more trade and result in less free-riding. Several accords would involve reforming over \$2.5 trillion of trade.

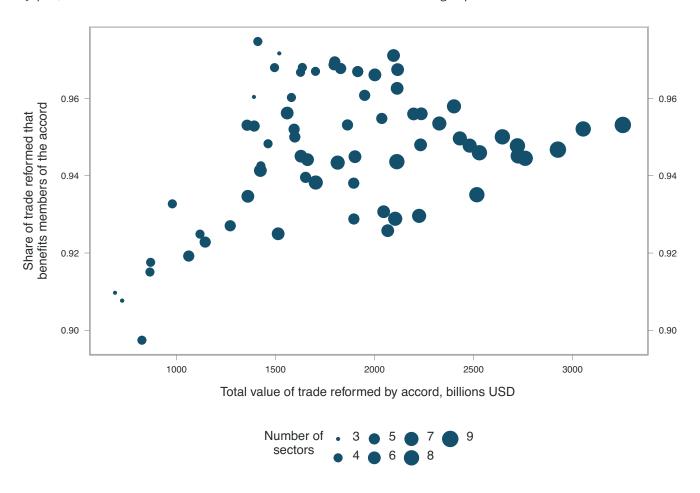
The findings can be interpreted in three ways. First, even if there is no appetite for another multilateral trade round, trillions of US dollars of trade can be reformed in accords where the biggest trading nations can gain. Inaction is not the sole alternative to multilateralism. There are other valuable reciprocal reform options.

Second, the notion that there are no common interests among the largest trading nations should be set aside. Each has an export interest in rolling back the discrimination imposed since the onset of the global financial crisis.

Third, that so much could be accomplished through multiple-sector critical mass accords highlights the opportunity cost of the current stand-off between the major trading powers and the impasse at the WTO.

FIGURE 9.6

A total of 67 critical mass deals involving three or more sectors can be identified where China, the European Union, Japan, and the United States are net beneficiaries —some involve removing impediments on over \$3 trillion of trade



CHAPTER 10 MUSTERING SUPPORT FOR A SUBSIDY ACCORD COULD BE DIFFICULT

The approach we have developed can also be applied to potential WTO accords on specific policy instruments or combinations of those policy instruments. The purpose of this chapter is to summarise our findings from simulating alternative subsidy accords. Each variant simulated removes the state largesse offered to local import-competing firms since November 2008 (the first time the G20 Leaders met in crisis mode) and that was still in effect in May 2019.

Why a focus on trade-distorting subsidies matters

The Global Trade Alert team has documented over 4,000 discriminatory subsidies to local firms since November 2008 of which, as of this writing, three-quarters are still in force.⁶⁹ Information has been collected on different types of subsidy and fine-grained data has been used to calculate the shares of world trade that compete against import-competing firms subsidised by different policy instruments (see Figure 10.1).

Of all of the available subsidy instruments, financial grants, state loans, and tax and social insurance relief affect the most non-agricultural goods trade. Depending on whether the free emission permits granted under the European Union's Emission Trading Scheme (ETS) are included⁷⁰, the share of world goods trade currently facing subsidies is just below 20% or just above 22%. Therefore, trade-distorting subsidies implicate on fifth of global goods trade, which make it the second largest class of trade distortions found since the onset of the global financial crisis.⁷¹

This matter is topical for another reason: China has faced accusations of mass subsidisation of its domestic industry and exporters. Concerns about the systemic impact of such subsidies is one of the reasons why Japan, the European Union, and the United States have formed a so-called trilateral approach to devise new rules for subsidies.⁷²

Apparently, progress has been made recently in drafting text on new subsidy rules and the intention is in due course to circulate such text among like-minded WTO members. Whether anything comes of this initiative remains to be seen. Still understanding the relationship between the design parameters of such an accord (including which types of subsidies are included), the trade flows, and the interests implicated is of interest. The approach we developed in earlier chapters can be adapted to shed light on this matter.

Lest any reader dismiss the concerns of the parties to the trilateral accord, it is worth noting that a large share of many nations' exports compete in foreign markets against bailed out or subsidised local firms. Figure 10.2 reproduces a map which shows the variation in the shares of exports affected across countries. It is noteworthy that some of the hardest hit are developing countries in Africa and Latin America, amongst others.

⁶⁹ Subsidies to local exporters are not included in this total or in the simulations in this chapter.

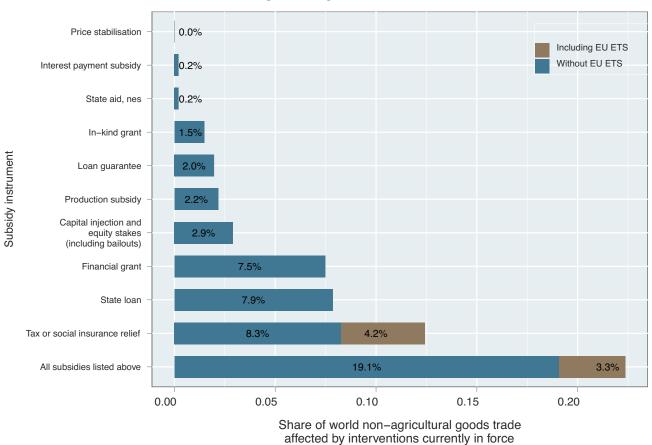
⁷⁰ The regulation that governs the EU's ETS regime specifically excludes the free permits given to EU firms from the EU state aid regime.

⁷¹ In terms of world goods trade affected, export incentives affect by the largest share.

⁷² Senior officials from these three jurisdictions met on 23 May 2019 in Paris and issued the following statement.

⁷³ For further details see this report of 20 May 2019 by Bloomberg.

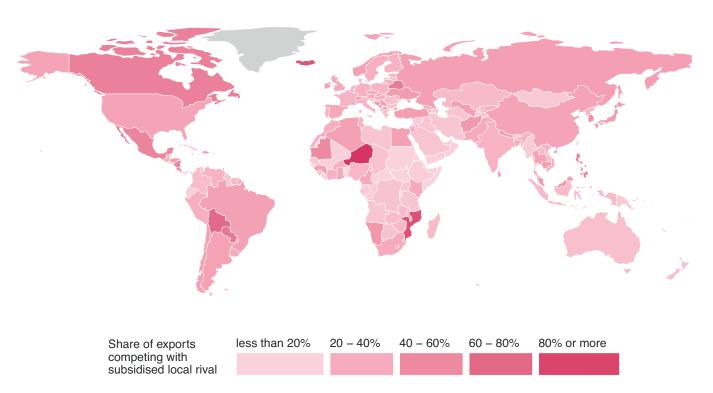
FIGURE 10.1Around a fifth of world non-agricultural goods trade faces subsidised local rivals



Note: That the sum of the component estimates for world exports facing different subsidies exceeds the amount shown for "all subsidies" indicates that some goods face foreign rivals benefiting from multiple subsidies.

FIGURE 10.2

Although the European Union, Japan, and the United States have been in the vanguard of developing recent proposals for new subsidy rules, many other nations' exports compete against subsidised local rivals too



Scenarios for a new WTO subsidy accord that eliminate crisis-era subsidies

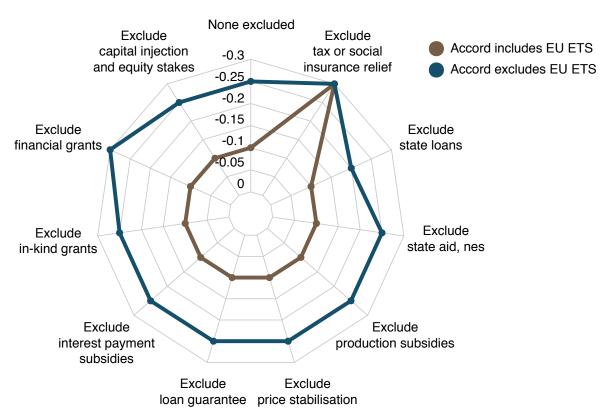
Since we are not party to the trilateral talks, we do not know what new rules for subsidies they have in mind. This did not deter us, not least as we have shown in earlier sections of this report that state financial support of different kinds have been an important part of the cross-border discrimination against foreign commercial interests witnessed over the past decade. Consequently, we simulated variants on accords that remove different types of trade-distorting subsidies granted to local firms.

Specifically, using the taxonomy of subsidy-related policy instruments found in Figure 10.1, and with the same neomercantilist approach to scoring possible trade deals used in earlier chapters, we identified which WTO members stood to gain from the removal of all subsidies introduced

during the crisis-era. Moreover, to see if the results depended on the inclusion of any particular subsidy policy instrument, we dropped each such instrument in turn and repeated the analysis.

In previous chapters we used the amount of trade that would be reformed as a metric to compare across agreements. Here, we take a different tack. Given the viability of any new WTO subsidy is likely to depend on China, the European Union, Japan, and the United States signing up, for each accord we estimated the greatest aversion to imports that is associated with all four jurisdictions being net gainers. It may be useful to recall that for the multiple-sector accords discussed in chapter 9 an import aversion parameter as strong as -0.5 was still compatible broad-based buy-in among the WTO membership. The question is whether that carries through to a subsidy accord focusing on non-agricultural goods trade.

FIGURE 10.3 With or without the inclusion of the EU ETS, modest levels of import aversion will cause China, the EU, Japan, or the United States to lose from a deal



Note: The vertical axis of this spider diagram shows the maximum degree of import aversion that is consistent will all four big players in the trading system enjoying net gains from an accord that removed crisis-era subsidies. Each axis in the spider diagram represent a different type of subsidy agreement. "None excluded" refers to the most comprehensive subsidy accord where all types of crisis-era subsidy are removed. "Exclude Y" denotes a subsidy accord that includes all types of crisis-era subsidy except subsidy type Y.

The answer in short is no. First, we started by including the EU ETS regime, which is a form of relief from carbon taxes. So long as the ETS regime is included then the maximum aversion to imports that sustains the participation of China, the EU, Japan, and the United States is just -0.1. Literally, this would imply only a neo-mercantilist policymaker who perceives so many other benefits from reforming subsidies (such as improved public finances) that they are prepared to allow imports to rise \$10 for every \$1 increase in exports would support a deal reversing crisis-era subsidisation. At this time, meeting this condition seems implausible even in nations where support for open borders remains high.

Removing the ETS from any such subsidy accord improves matters but does not alter the fundamental finding. The maximum aversion to imports parameter that can sustain all four big players signing up to an accord which removes all crisis-era trade-distorting subsidies falls to -0.25. It could fall to -0.3 if either financial grants or tax and social insurance relief are removed from the accord, but this would have the effect of excluding the very policy instruments responsible for most of trade covered by subsidies (recall the data in Figure 10.1).

These results imply that, if policymakers from these trading powers had a similar aversion to imports considered in the last chapter, they would all without hesitation decline to join a subsidy accord that eliminated remaining crisisera state aid. Indeed, in light of these results, it will be interesting to see which types of trade-distorting subsidy will be proposed for inclusion in any new subsidy accord that the European Union, Japan, and the United States put forward.

All of the major trading powers use subsidies—and if our data collection is accurate, they use them a lot—so it will be revealing if senior policymakers balk at the scale of the reform implied by a comprehensive new subsidy accord. In this respect, according the calculations made with fine-grained international trade data74, 38.2% of extra-EU imports in May 2019 competed against one or more firms located in the EU that received state aid. The comparable percentages for China and the United States (where much of the subsidisation is at the state level) are 23.9% and 45.5%, respectively. The percentages of these jurisdiction's exports that compete against subsidised import-competing firms in markets abroad is lower, much lower in the case of the European Union and the United States. Given this sizeable imbalance, do not be surprised if neo-mercantilist policymakers in the trilateral trading powers look askance at an accord that scrapped the crisisera build-up of subsidies.

What to make of these negative findings?

Before drawing strong policy implications from these findings, it is worth bearing in mind the assumptions made. Here we only considered reforming subsidies affecting trade in non-agricultural products. In principle and we have no illusions here—the scope of any future subsidy accord could be expanded to include financial support for the agricultural sector.

Moreover, we only considered removing subsidies unrelated to exporting. The inclusion of state-provided export incentives into any subsidy accord would implicate much larger shares of world trade, possibly affording substantial potential export gains to some WTO members and shifting the calculus towards joining an accord.

Furthermore, one could go beyond unwinding crisis-era subsidies and seek to reduce or remove some of the pre-crisis subsidy schemes. While there may be limited appetite among many governments for such a liberalising move, we mention it for completeness sake.

In sum, the simulations presented in this chapter call into question whether there is a sufficient basis for a deal between the world's trading powers on a subsidyremoving accord. This is not the end of the matter, as other packages of reforms which go beyond subsidies could elicit more support from WTO members. Plus as more data on crisis-era subsidies is collected the reform calculus may shift.

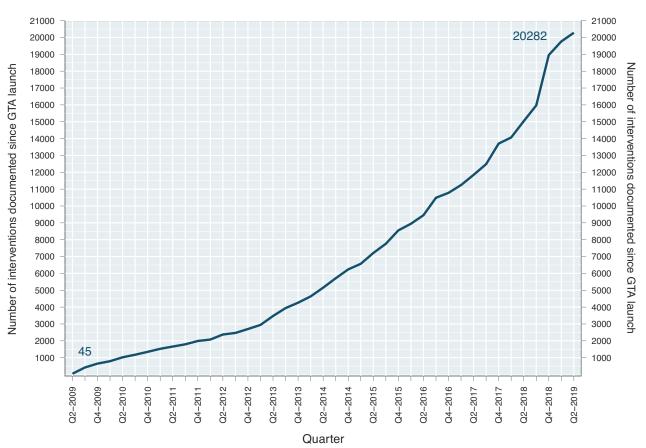
Still, the burden of proof will be on the proponents of any new trade rules on subsidies and much will turn on the range of policy instruments and sectors that will fall within the scope of any proposed new accord.

CHAPTER 11 WHAT'S NEW IN THE GTA DATABASE?

Our previous, the 23rd, report drew upon GTA database entries published through to the middle of November 2018. At that time, the database included 18,137 entries on public policy changes that alter the relative treatment of domestic firms vis-à-vis their foreign rivals. The data collection for this report included policy interventions announced or implemented through to 15 April 2019. In the five-month interval since our 23rd report was prepared a total of 2,145 new policy interventions were documented, checked, and added to the GTA database.

With this latest expansion, the total number of entries in the GTA database has risen to 20,282. As implied by the data reported in Figure 11.1, during the past three years the GTA database has doubled in size. Put differently, the GTA database has grown as much in the past three years as it did during the previous seven years. In earlier reports, we have described the various factors responsible for this expansion and the accounts provided there remain accurate.

FIGURE 11.1By Q1 2019 over 20,000 public policy interventions have been documented, checked, and published



In recent years we have found troves of information about public policy interventions which are amenable to web scraping, cleaning, checking, and uploading in a form that is compatible with the GTA database.

Since November 2018 we incorporated the pertinent entries of the European Commission's TARIC database of customs tariff, commercial, and agricultural legislation into the GTA database. Every month the European Commission updates this database with information about all of the customs-related changes and the monthly changes relevant to the GTA have been extracted.

Incorporating this information into the GTA database resulted in over 400 new entries (both liberalising and discriminatory) going back to November 2008. Consequently, the totals reported on our website and in our reports of policy interventions by the EU member states have risen, a jump that some readers may have noticed. Going forward, periodic updates using new information reported in the TARIC database will provide even better coverage of the conditions facing farmers and manufacturers seeking to sell in the European Union.

It is also worth emphasising what has not changed. We continue to apply the relative treatment standard for classifying policy interventions without modification. We have not changed the taxonomy of policy instruments in the database. We have retained the overwhelming preference for official sources over other sources. We have not changed our standards or procedures for checking reports submitted on public policy interventions.

We continue to reply to a large number of inquiries concerning data extraction, data collection methods, and interpretation of evidence. As of this writing, according to the Google Scholar database approximately 1,690 studies or reports cite the Global Trade Alert. We were interested to see recent publications by the European Central Bank, the European Commission, the European Policy Strategy Centre, Allianz, the International Chamber of Commerce, Swiss Re, T20, the Commonwealth Secretariat, the latest publication associated with the Japanese Article IV consultation by the International Monetary Fund, Bruegel, and Boston Consulting Group amongst others make reference to or use GTA data.

WHAT IS THE GLOBAL TRADE ALERT?

The Global Trade Alert (GTA) was launched in June 2009 when many feared that the global financial crisis would lead governments to adopt widespread 1930s-style beggar-thy-neighbour policies. Although global in scope, the GTA has given particular attention to the policy choices of the G20 governments ever since their leaders made a pledge of sorts on protectionism in Washington, DC in November 2008.

Initially conceived as a trade policy monitoring initiative, as thousands of policy announcements have been documented, the GTA has become a widely-used input for analysis and decision-making by firms, industry associations, journalists, researchers, international organisations, and governments. As of June 2019, the GTA has been mentioned or its data used in 1,690 entries in

Google Scholar. This usage reflects the fact that, as the International Monetary Fund noted in 2016, the GTA "has the most comprehensive coverage of all types of trade discriminatory and trade liberalizing measures."

GTA is a policy-oriented and research initiative associated with the Centre for Economic Policy Research (CEPR), an independent academic and policy research think-tank based in London, UK. Simon J. Evenett, a Research Fellow of CEPR's International Trade and Regional Economics Programme, is the coordinator of the GTA. The GTA is also an initiative linked to the Swiss Institute for International Economics at the University of St. Gallen, Switzerland. Most of the funding for the GTA comes from University of St. Gallen-related sources. For further information, visit www.GlobalTradeAlert.org/about.

ACKNOWLEDGEMENTS

As this report draws so often upon the contents of the Global Trade Alert database, it is incumbent on me that I thank the committed team that identify, investigate, document, and evaluate the public policy interventions found there. Let me take this opportunity to express my gratitude to Callum Campbell, Gunther Errhalt, Craig vanGrasstek, Chintan Jadwani, Josse Jakobsen, Liyana Othman, Piotr Lukaszuk, Anvar Rahmetov, and Ana Elena Sancho.

In addition, much of the data extraction and preparation of the statistics and charts for this report and other GTA product has been undertaken by an impressive pair of coders, specifically Patrick Buess and Kamran Sattary. Furthermore, the statistical analysis underlying chapter five of this report was ably undertaken by Piotr Lukaszuk. He is also mastering the preparation and uploading of the troves of public policy interventions that we occasionally find online or elsewhere.

My colleague, Johannes Fritz, not only manages effectively the GTA team day-to-day but also provides strategic inputs into the GTA initiative. He also devises and follows through to implementation many of the innovations in the GTA's reporting, website, and documentation. These words do not do justice to my gratitude for his sustained commitment to this project.

The production and editing of this report was once again deftly handled by Anil Shamdasani. I would also like to thank the Carey Business School, Johns Hopkins University, for hosting me during the period when this report was prepared. Specific thanks in this regard to DLA Piper (whose generosity made my visiting professorship possible), to Dean Ferrari, Vice-Dean Suslow, and to Tina Lohrmann.

The Global Trade Alert started as an initiative of the Centre for Economic Policy Research (CEPR), whose leadership has offered fulsome support when we started this venture in the second quarter of 2009. The funding from the Global Trade Alert comes principally from sources associated with the University of St. Gallen, whose leadership has backed this venture as well. The most important funding source is the Max Schmidheiny Foundation, whose continued financial support and practical advice is greatly appreciated.

Simon J. Evenett, Coordinator

HOLD THEIR FEET TO THE FIRE: THE TRACK RECORD OF EACH G20 MEMBER

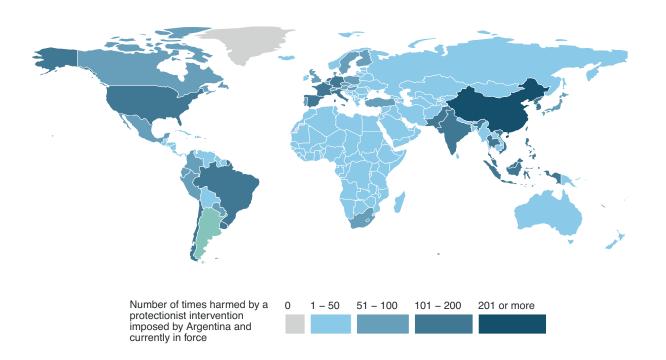
ARGENTINA

What is at stake for Argentina's exporters?

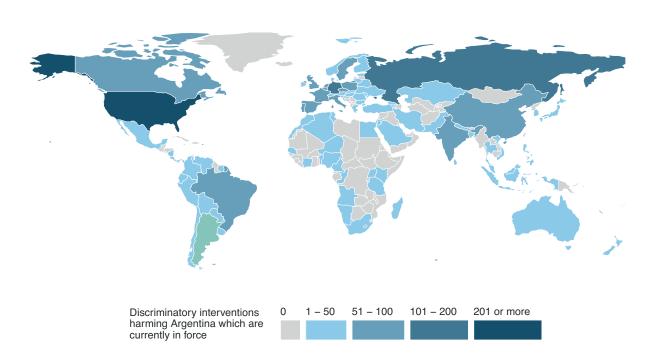
UN MAST	AST discriminatory	Percentage of this G20 member's exports at risk due to										
chapter		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	14.40	34.51	47.79	56.84	67.78	71.53	70.47	73.65	76.29	75.64	75.89
D	Contingent trade protection	0.31	0.45	0.46	0.17	0.40	0.53	0.53	0.66	0.72	1.02	1.02
E	Non-automatic licensing, quotas	1.69	1.47	4.05	9.31	8.93	9.61	9.76	12.14	12.80	13.00	12.91
F	Price control measures	0.17	0.17	1.21	3.57	0.41	3.46	4.62	5.19	5.19	6.60	6.73
G	Finance measures	0.32	1.38	1.72	1.72	1.72	1.72	1.73	1.74	1.74	1.74	1.74
1	Trade-related investment measures	0.26	0.54	1.01	3.11	2.42	4.53	6.98	7.66	7.15	4.71	4.65
L	Subsidies (excluding export subsidies)	2.73	4.24	6.00	7.41	20.69	23.27	21.59	19.22	24.94	26.17	27.05
М	Government procurement	0.27	0.30	0.32	1.19	2.28	2.48	2.54	1.30	2.03	2.45	2.63
Р	Export measures	9.13	28.92	40.54	46.94	51.17	57.68	56.63	60.59	64.46	63.35	65.57
	Import tariff increases	1.19	1.54	3.17	4.26	13.93	16.24	15.87	16.15	16.34	17.79	19.05
	Instrument unclassified	0.05	0.10	0.10	0.39	0.39	0.57	1.23	1.41	1.47	1.51	1.54

Note: This table presents estimates of the percentage of a nation's exports that face different harmful policy interventions in their export markets. Only those harmful interventions implemented after November 2008 count towards these totals--therefore, the estimates indicate the exposure of national exports to crisis-era policy intervention that favours domestic commercial interests. The trade data used in the estimation is taken from UN Comtrade and at the six-digit level of the Harmonised System product classification. For each product exported by a nation, the foreign markets accounted for in this estimate are those where bilateral exports exceeded \$1 million for the given product. De minimis trade flows are therefore excluded. To limit endogeneity problems (that is, the harmful policy interventions affecting the total value of exports observed) pre-crisis shares of world trade are employed in these calculations. The pre-crisis shares are computed as the mean weight for the years 2005-7. The calculations also take into account when a harmful policy intervention comes into force and, where relevant, lapses. When an intervention lasts for only part of a year, the trade flow is discounted by the fraction of the year the harmful measure is not in force.

COUNTRIES HARMED BY ARGENTINA'S DISCRIMINATORY INTERVENTIONS

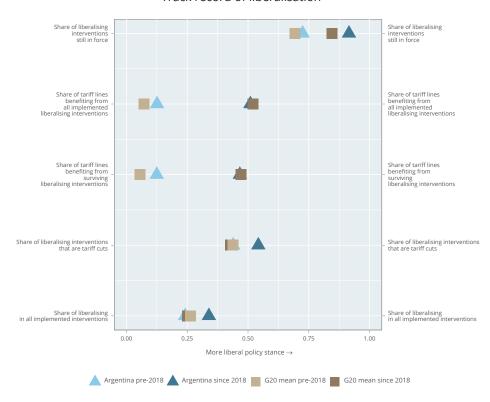


DISCRIMINATORY INTERVENTIONS HARMING ARGENTINA'S INTERESTS



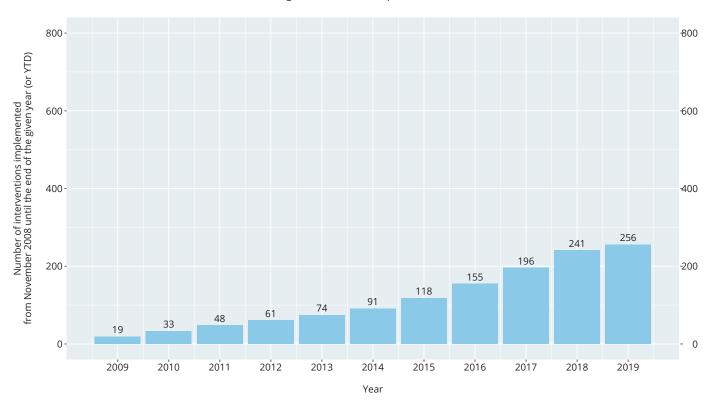
ARGENTINA

Track record of liberalisation

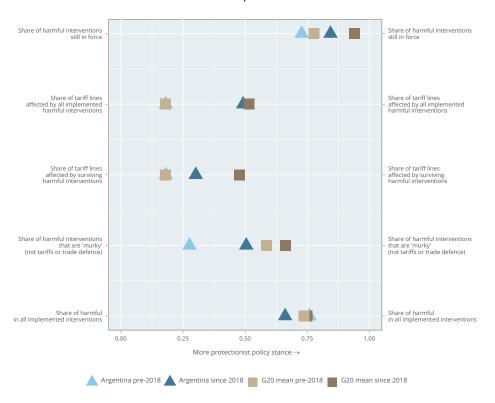


ARGENTINA

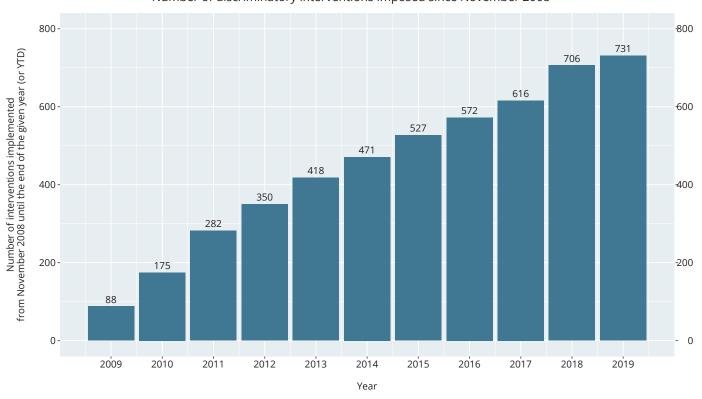
Number of liberalising interventions imposed since November 2008



ARGENTINA Track record of protectionism



ARGENTINA Number of discriminatory interventions imposed since November 2008



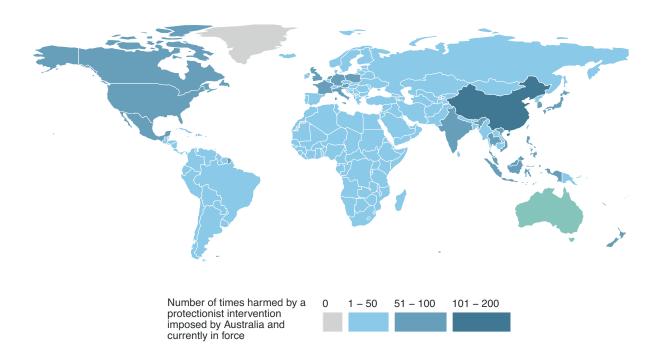
AUSTRALIA

What is at stake for Australia's exporters?

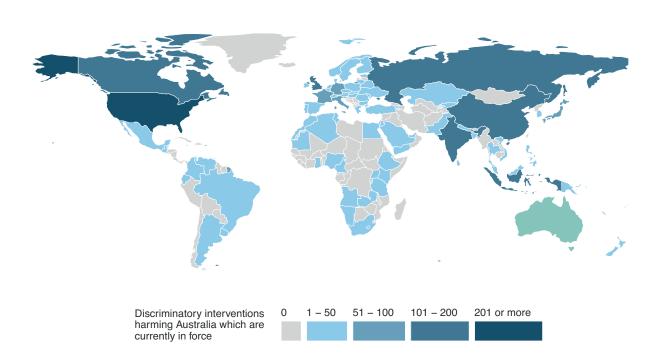
UN MAST	Foreign discriminatory policy instrument	Percentage of this G20 member's exports at risk due to										
chapter		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	20.55	27.72	33.17	39.38	48.47	56.21	54.88	56.62	58.52	60.85	60.66
D	Contingent trade protection	0.04	0.02	0.02	0.03	0.05	0.08	0.13	0.32	0.39	0.45	0.48
E	Non-automatic licensing, quotas	1.53	7.28	11.63	12.73	13.72	13.82	14.05	14.28	14.34	14.95	15.06
F	Price control measures	9.06	9.06	9.10	9.12	9.11	10.07	11.03	11.03	11.03	14.58	14.95
G	Finance measures	0.06	0.30	0.69	0.69	0.69	0.69	1.07	1.19	1.19	1.19	1.19
1	Trade-related investment measures	0.00	0.02	0.03	0.04	0.04	0.33	0.47	0.48	0.49	0.49	0.49
L	Subsidies (excluding export subsidies)	0.58	1.62	1.81	2.65	10.44	11.21	8.46	11.89	13.84	15.84	16.25
M	Government procurement	0.58	0.90	0.81	1.74	1.83	1.94	2.00	2.01	2.18	2.55	3.07
Р	Export measures	8.68	14.61	19.16	23.23	25.25	28.05	26.24	29.60	37.87	39.14	40.63
	Import tariff increases	0.31	0.56	0.58	2.45	9.85	13.46	13.60	13.54	13.96	14.33	14.31
	Instrument unclassified	0.20	0.39	0.40	0.96	2.42	3.19	1.41	1.36	1.74	2.59	2.73

Note: This table presents estimates of the percentage of a nation's exports that face different harmful policy interventions in their export markets. Only those harmful interventions implemented after November 2008 count towards these totals--therefore, the estimates indicate the exposure of national exports to crisis-era policy intervention that favours domestic commercial interests. The trade data used in the estimation is taken from UN Comtrade and at the six-digit level of the Harmonised System product classification. For each product exported by a nation, the foreign markets accounted for in this estimate are those where bilateral exports exceeded \$1 million for the given product. De minimis trade flows are therefore excluded. To limit endogeneity problems (that is, the harmful policy interventions affecting the total value of exports observed) pre-crisis shares of world trade are employed in these calculations. The pre-crisis shares are computed as the mean weight for the years 2005-7. The calculations also take into account when a harmful policy intervention comes into force and, where relevant, lapses. When an intervention lasts for only part of a year, the trade flow is discounted by the fraction of the year the harmful measure is not in force.

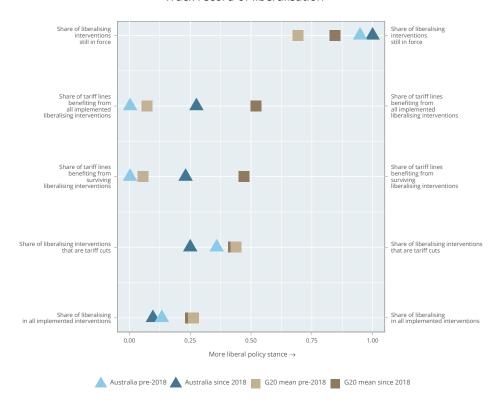
COUNTRIES HARMED BY AUSTRALIA'S DISCRIMINATORY INTERVENTIONS



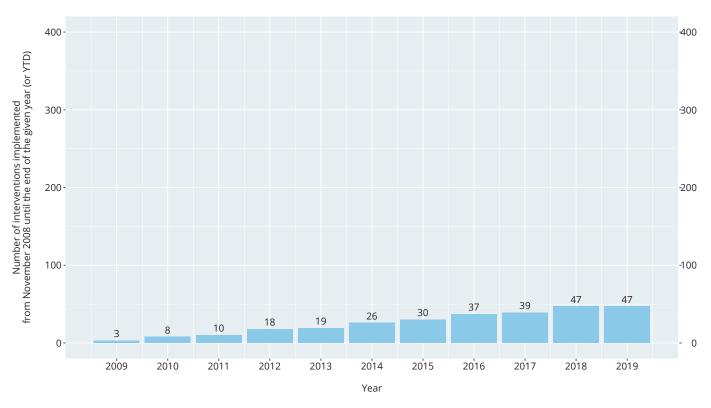
DISCRIMINATORY INTERVENTIONS HARMING AUSTRALIA'S INTERESTS



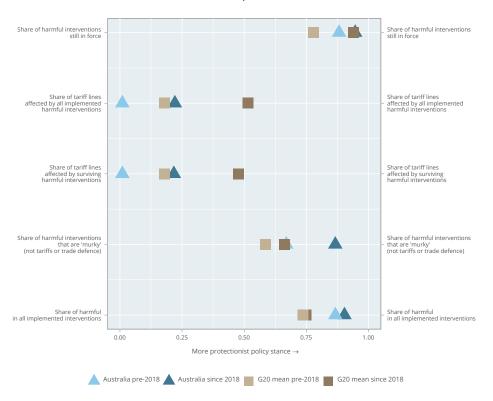
AUSTRALIATrack record of liberalisation



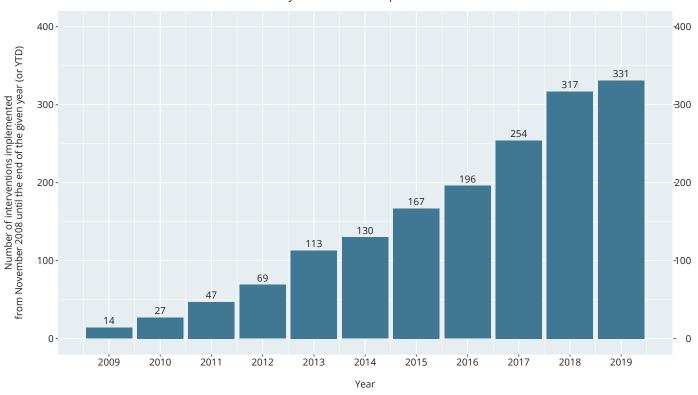
AUSTRALIANumber of liberalising interventions imposed since November 2008



AUSTRALIATrack record of protectionism



AUSTRALIANumber of discriminatory interventions imposed since November 2008



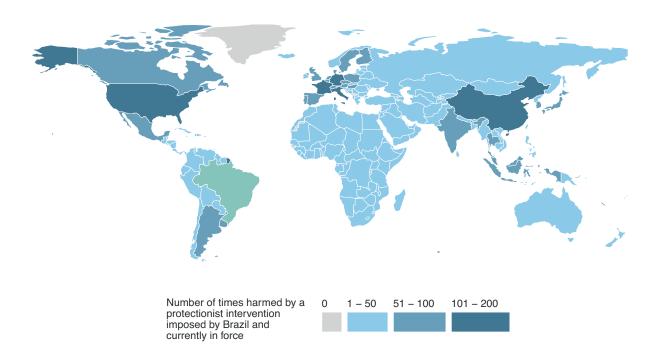
BRAZIL

What is at stake for Brazil's exporters?

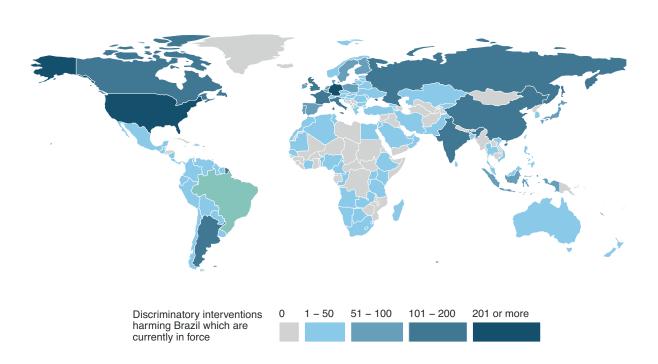
		_		_							_	
UN MAST		Percentage of this G20 member's exports at risk due to										
chapter		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	33.48	43.18	45.74	53.79	66.95	67.64	67.87	71.65	72.86	74.07	74.98
D	Contingent trade protection	0.04	0.09	0.18	0.27	0.26	0.27	0.28	0.75	1.00	2.20	2.62
E	Non-automatic licensing, quotas	2.62	6.87	11.49	16.78	18.15	18.33	17.18	14.72	14.89	15.07	15.51
F	Price control measures	4.70	4.72	4.73	4.75	4.75	4.75	4.76	4.76	4.76	5.16	5.20
G	Finance measures	0.39	1.48	1.57	1.57	1.57	1.57	1.61	1.63	1.63	1.63	1.63
1	Trade-related investment measures	0.52	1.15	2.08	2.54	2.56	3.71	5.48	6.16	6.17	6.24	6.27
L	Subsidies (excluding export subsidies)	3.68	9.05	8.40	10.38	24.05	25.98	25.34	25.13	27.79	29.06	28.55
M	Government procurement	2.71	2.74	2.29	3.83	5.34	5.67	6.20	6.83	8.12	8.45	8.67
Р	Export measures	21.38	27.17	29.05	32.80	39.35	39.16	39.31	51.75	53.84	54.67	57.59
	Import tariff increases	1.52	2.21	3.42	4.01	7.88	8.81	9.98	12.43	13.69	14.61	15.18
	Instrument unclassified	0.02	1.30	1.44	1.48	3.81	4.50	6.18	6.35	6.08	5.63	5.71

Note: This table presents estimates of the percentage of a nation's exports that face different harmful policy interventions in their export markets. Only those harmful interventions implemented after November 2008 count towards these totals-therefore, the estimates indicate the exposure of national exports to crisis-era policy intervention that favours domestic commercial interests. The trade data used in the estimation is taken from UN Comtrade and at the six-digit level of the Harmonised System product classification. For each product exported by a nation, the foreign markets accounted for in this estimate are those where bilateral exports exceeded \$1 million for the given product. De minimis trade flows are therefore excluded. To limit endogeneity problems (that is, the harmful policy interventions affecting the total value of exports observed) pre-crisis shares of world trade are employed in these calculations. The pre-crisis shares are computed as the mean weight for the years 2005-7. The calculations also take into account when a harmful policy intervention comes into force and, where relevant, lapses. When an intervention lasts for only part of a year, the trade flow is discounted by the fraction of the year the harmful measure is not in force.

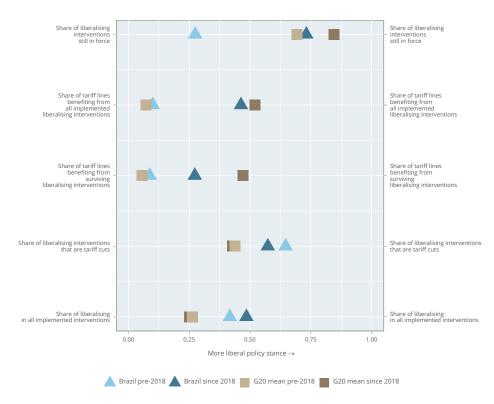
COUNTRIES HARMED BY BRAZIL'S DISCRIMINATORY INTERVENTIONS



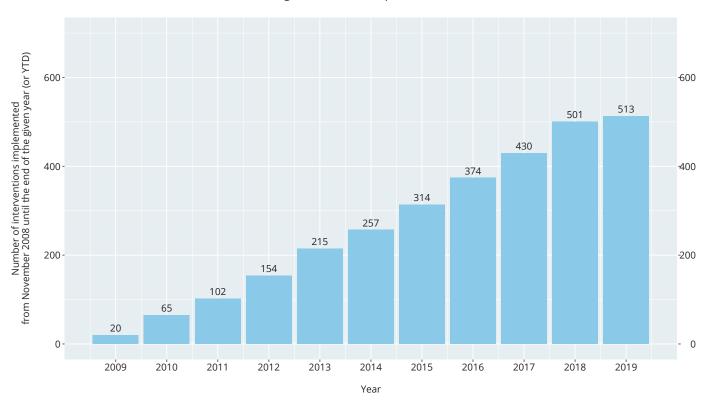
DISCRIMINATORY INTERVENTIONS HARMING BRAZIL'S INTERESTS



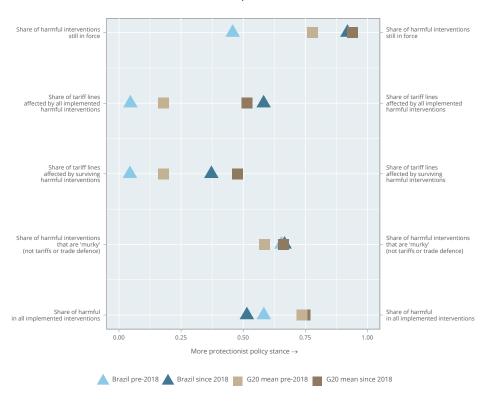
BRAZILTrack record of liberalisation



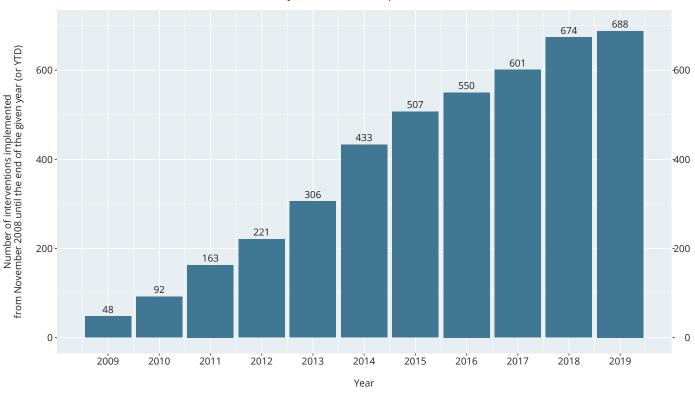
BRAZILNumber of liberalising interventions imposed since November 2008



BRAZILTrack record of protectionism



BRAZILNumber of discriminatory interventions imposed since November 2008

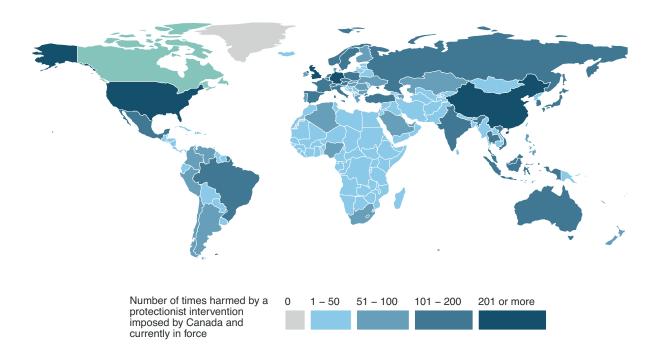


CANADA

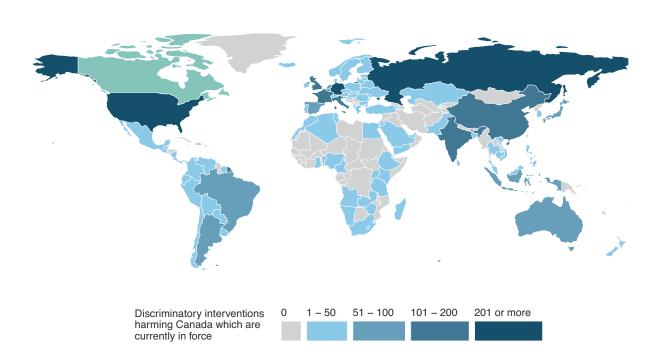
What is at stake for Canada's exporters?

							1		li .			
UN	Foreign		P	ercenta	ge of thi	s G20 m	nember's	s export	s at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	36.45	47.90	53.60	65.58	72.24	72.20	79.33	82.91	85.22	86.42	86.78
D	Contingent trade protection	0.11	0.12	0.13	0.13	0.13	0.14	0.44	2.07	2.59	4.53	4.66
E	Non-automatic licensing, quotas	0.12	0.26	0.59	0.65	0.83	0.86	0.94	1.04	1.41	2.19	2.18
F	Price control measures	0.31	0.31	0.33	0.33	0.34	0.42	0.55	0.65	0.66	0.88	0.90
G	Finance measures	0.03	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11
1	Trade-related investment measures	0.14	0.41	0.21	0.23	0.24	1.65	2.99	3.41	3.95	3.92	3.86
L	Subsidies (excluding export subsidies)	12.13	16.69	21.07	30.12	38.61	39.37	38.09	40.47	41.91	44.52	45.29
М	Government procurement	2.19	2.78	3.16	8.00	9.15	9.51	10.10	10.10	10.86	11.74	12.11
Р	Export measures	23.48	31.32	42.03	54.76	56.29	45.99	52.38	56.03	58.17	58.45	58.09
	Import tariff increases	0.10	0.28	0.48	0.99	1.82	1.87	1.94	2.24	2.56	6.80	7.88
	Instrument unclassified	0.01	0.14	0.03	0.13	1.10	3.71	12.26	12.66	12.95	13.27	13.28

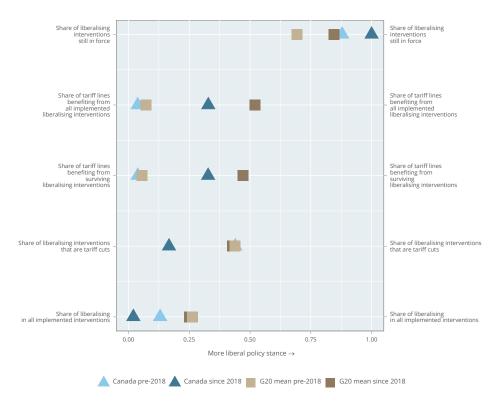
COUNTRIES HARMED BY CANADA'S DISCRIMINATORY INTERVENTIONS



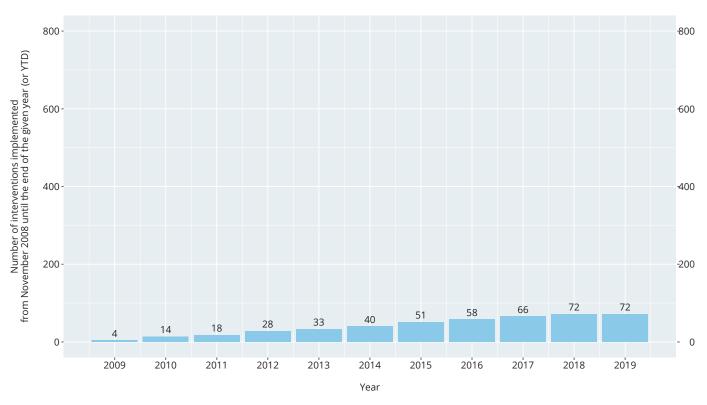
DISCRIMINATORY INTERVENTIONS HARMING CANADA'S INTERESTS



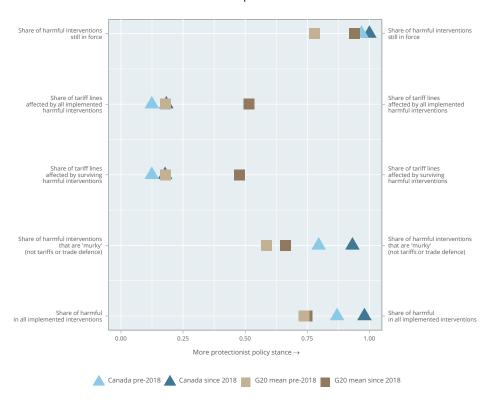
CANADATrack record of liberalisation



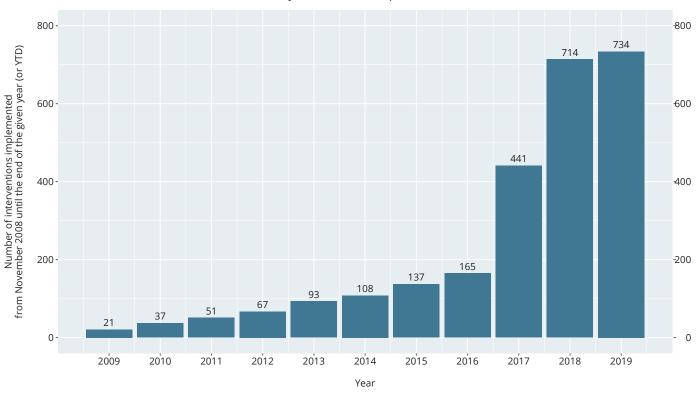
CANADANumber of liberalising interventions imposed since November 2008



CANADATrack record of protectionism



CANADANumber of discriminatory interventions imposed since November 2008

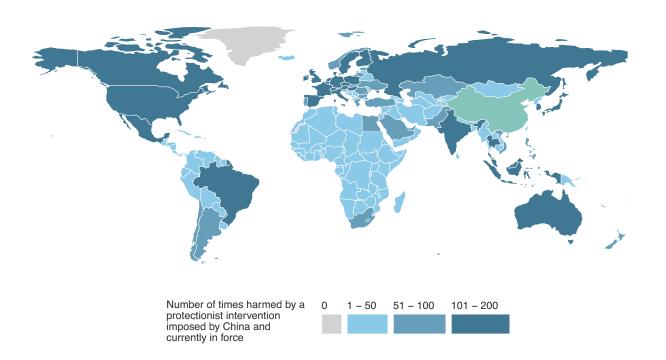


CHINA

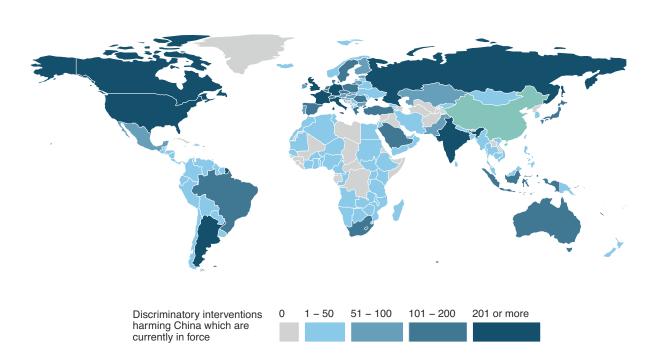
What is at stake for China's exporters?

_		Percentage of this G20 member's exports at risk due to												
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember's	s export	ts at risk	due to				
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
	All instruments	14.78	26.33	42.86	51.89	66.91	70.88	66.16	69.16	71.13	72.50	72.90		
D	Contingent trade protection	0.54	1.90	2.69	2.92	3.21	3.57	3.79	4.10	4.45	4.86	5.11		
E	Non-automatic licensing, quotas	0.32	0.25	0.44	0.53	0.70	0.69	0.83	1.19	1.42	1.47	1.46		
F	Price control measures	0.00	0.00	0.07	0.15	0.15	0.28	0.39	0.42	0.42	0.98	1.07		
G	Finance measures	0.28	0.61	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.02		
1	Trade-related investment measures	0.04	0.19	0.36	0.49	0.54	1.06	1.63	1.82	1.94	1.95	1.93		
L	Subsidies (excluding export subsidies)	1.81	2.62	7.57	11.33	31.31	31.96	22.12	22.62	23.35	24.15	24.85		
M	Government procurement	0.83	1.92	2.11	2.41	4.48	5.35	5.67	5.62	5.83	5.96	6.04		
Р	Export measures	10.37	20.39	34.09	44.35	51.19	52.04	42.59	51.66	54.35	55.57	55.51		
	Import tariff increases	0.95	1.61	2.29	3.16	4.08	24.46	22.38	23.13	25.44	30.67	36.51		
	Instrument unclassified	0.15	0.34	0.39	0.41	0.55	0.94	1.04	1.11	1.10	2.17	2.25		

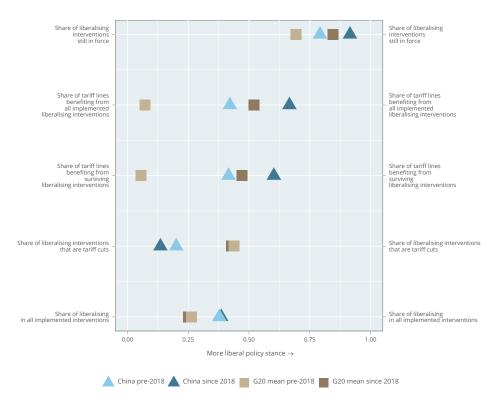
COUNTRIES HARMED BY CHINA'S DISCRIMINATORY INTERVENTIONS



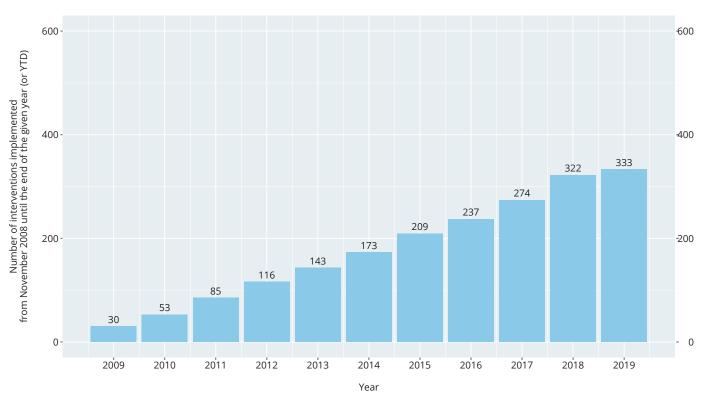
DISCRIMINATORY INTERVENTIONS HARMING CHINA'S INTERESTS



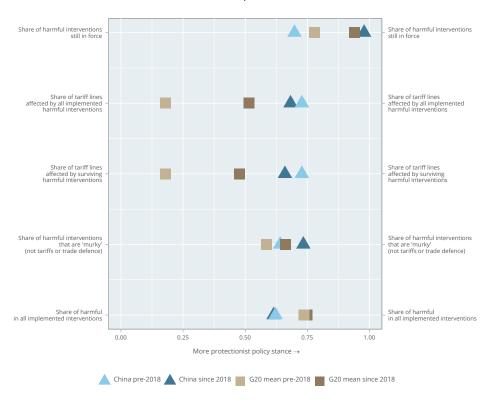
CHINATrack record of liberalisation



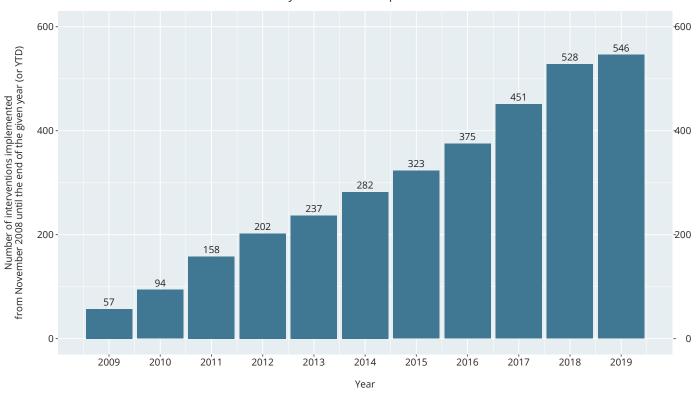
CHINANumber of liberalising interventions imposed since November 2008



CHINA Track record of protectionism



CHINA Number of discriminatory interventions imposed since November 2008

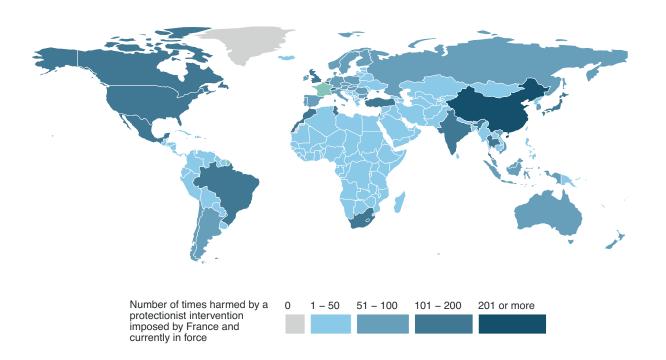


FRANCE

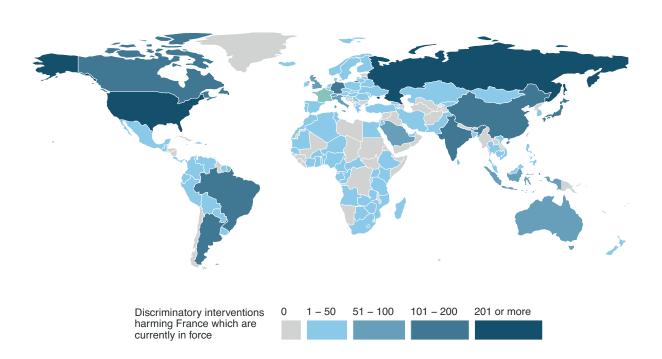
What is at stake for France's exporters?

UN MAST	Foreign		P	ercenta	ge of thi	is G20 m	nember'	s export	s at risk	due to		
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	34.33	48.45	54.21	60.30	62.94	65.13	63.23	65.30	66.77	68.05	69.54
D	Contingent trade protection	0.01	0.03	0.04	0.05	0.08	0.18	0.17	0.27	0.29	0.33	0.39
E	Non-automatic licensing, quotas	0.12	0.17	1.11	1.23	1.31	1.40	1.45	1.48	1.77	2.38	2.38
F	Price control measures	0.00	0.00	0.04	0.07	0.27	0.80	0.96	1.04	1.05	1.18	1.21
G	Finance measures	0.17	0.24	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
1	Trade-related investment measures	0.11	0.17	0.21	0.23	0.25	0.46	0.67	0.97	1.52	1.46	1.45
L	Subsidies (excluding export subsidies)	5.61	9.66	7.57	9.30	9.94	13.01	12.28	13.30	14.81	17.90	19.95
M	Government procurement	0.34	0.47	0.36	0.56	0.71	0.82	1.01	1.23	1.27	1.37	1.61
Р	Export measures	29.75	41.73	49.85	56.97	59.33	59.31	57.74	59.85	61.26	62.65	64.42
	Import tariff increases	0.21	0.42	0.65	1.34	1.80	2.10	2.11	2.50	2.95	3.44	3.54
	Instrument unclassified	0.15	0.27	0.31	0.33	0.95	1.25	1.36	1.44	1.53	1.64	1.62

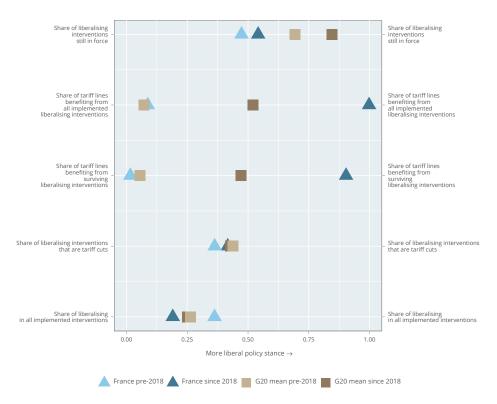
COUNTRIES HARMED BY FRANCE'S DISCRIMINATORY INTERVENTIONS



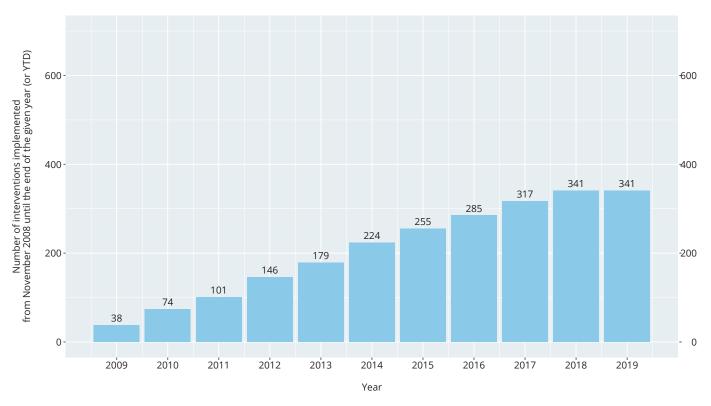
DISCRIMINATORY INTERVENTIONS HARMING FRANCE'S INTERESTS



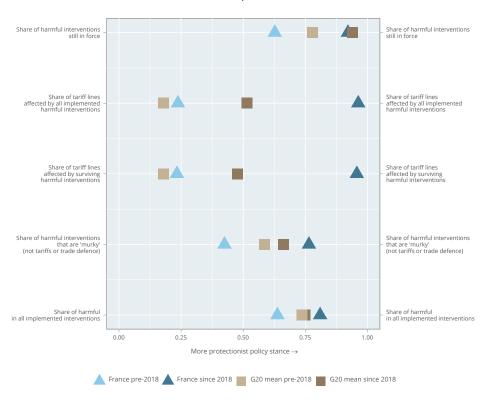
FRANCE Track record of liberalisation



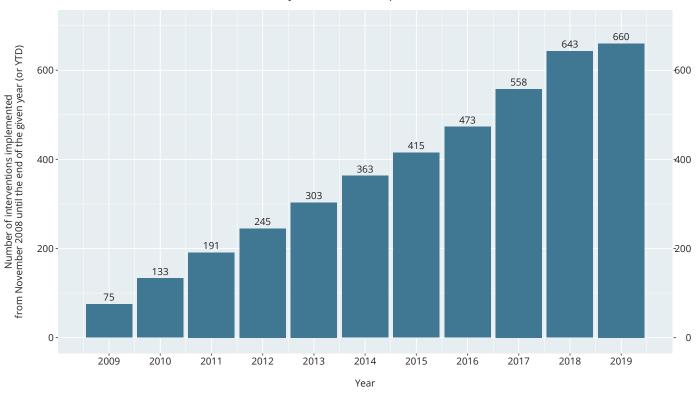
FRANCE Number of liberalising interventions imposed since November 2008



FRANCE Track record of protectionism



FRANCE Number of discriminatory interventions imposed since November 2008

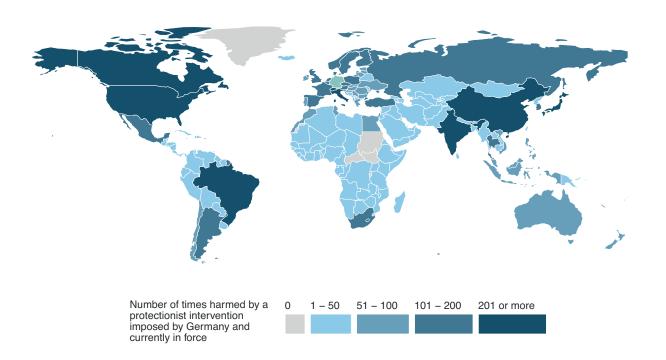


GERMANY

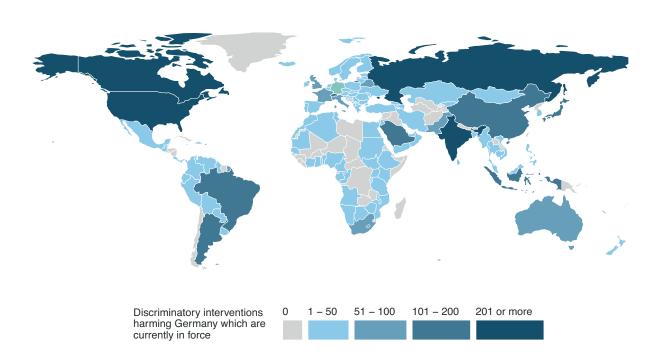
What is at stake for Germany's exporters?

UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember'	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	39.92	52.32	54.70	58.27	60.57	61.49	59.76	62.04	64.27	65.39	67.03
D	Contingent trade protection	0.04	0.08	0.09	0.14	0.20	0.24	0.25	0.33	0.35	0.48	0.51
E	Non-automatic licensing, quotas	0.26	0.37	1.51	1.60	1.99	1.67	1.70	1.71	1.92	2.33	2.34
F	Price control measures	0.00	0.00	0.03	0.07	0.09	0.23	0.39	0.50	0.74	1.07	1.11
G	Finance measures	0.20	0.26	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
1	Trade-related investment measures	0.25	1.61	1.81	1.84	1.87	2.04	2.32	2.63	2.73	2.67	2.67
L	Subsidies (excluding export subsidies)	8.37	11.62	8.28	9.44	10.11	11.71	11.03	12.80	15.26	16.98	18.86
M	Government procurement	0.33	0.54	0.54	0.86	0.95	1.15	1.55	1.72	1.79	1.82	1.86
Р	Export measures	32.91	43.84	48.09	53.45	55.63	54.51	52.98	54.73	56.87	58.30	59.95
	Import tariff increases	0.45	0.73	0.92	1.36	2.20	2.55	2.70	2.91	3.14	3.69	3.80
	Instrument unclassified	0.05	0.24	0.32	0.34	0.48	0.95	2.74	2.77	2.90	3.00	2.97

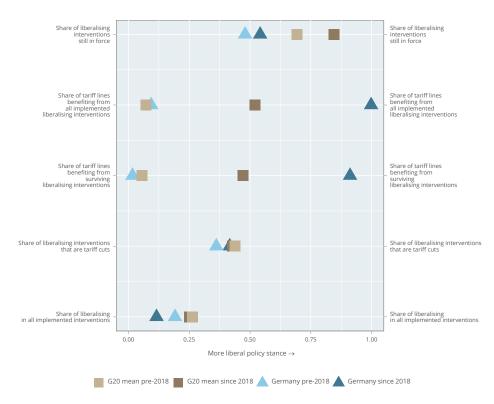
COUNTRIES HARMED BY GERMANY'S DISCRIMINATORY INTERVENTIONS



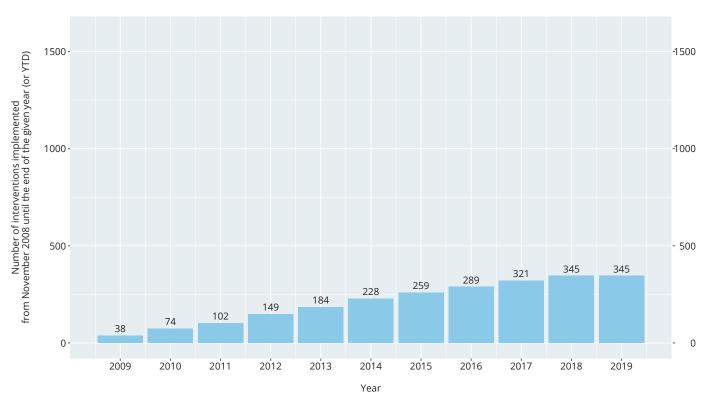
DISCRIMINATORY INTERVENTIONS HARMING GERMANY'S INTERESTS



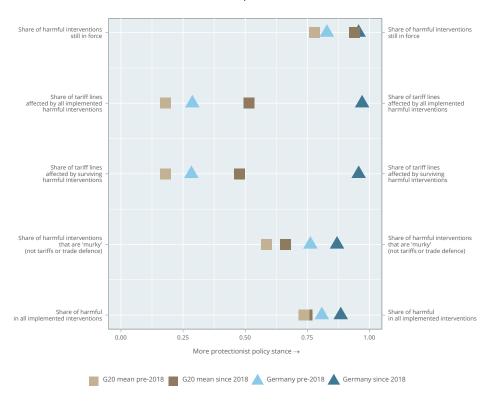
GERMANY Track record of liberalisation



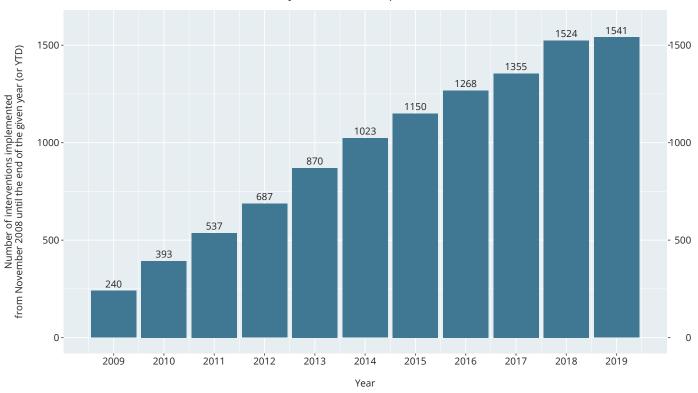
GERMANY Number of liberalising interventions imposed since November 2008



GERMANYTrack record of protectionism



GERMANYNumber of discriminatory interventions imposed since November 2008

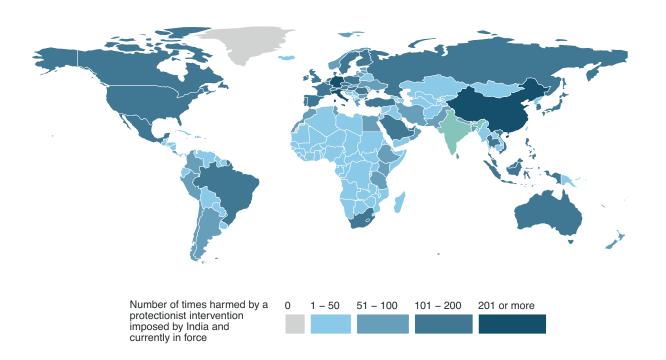


INDIA

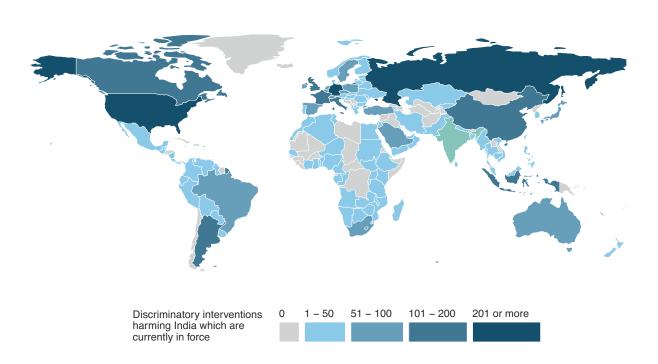
What is at stake for India's exporters?

							1		ı			
UN	Foreign		P	ercenta	ge of thi	is G20 m	nember'	s export	s at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	37.06	43.91	55.15	51.62	57.38	61.91	71.91	75.36	76.19	76.55	76.63
D	Contingent trade protection	0.15	0.23	0.65	0.83	0.94	1.12	1.16	1.68	1.85	2.55	3.12
E	Non-automatic licensing, quotas	0.19	4.19	6.06	7.60	7.04	7.28	7.43	8.56	9.21	9.53	9.36
F	Price control measures	5.35	5.35	5.35	5.35	5.35	5.50	5.58	5.61	5.61	5.62	5.66
G	Finance measures	0.60	0.89	1.28	1.28	1.36	1.28	1.31	1.31	1.31	1.36	1.48
1	Trade-related investment measures	0.04	0.18	0.22	0.28	0.33	1.23	2.36	2.47	2.43	2.34	2.33
L	Subsidies (excluding export subsidies)	1.18	2.55	2.66	4.24	22.54	23.35	14.22	15.16	18.36	20.90	20.89
М	Government procurement	1.10	2.98	3.03	3.37	3.45	3.56	3.75	4.12	4.09	4.14	4.27
Р	Export measures	29.43	34.89	45.64	40.26	40.41	46.33	58.36	67.97	69.19	69.78	69.50
	Import tariff increases	0.39	1.22	1.62	2.90	5.12	23.03	10.52	11.34	13.45	15.90	16.21
	Instrument unclassified	0.10	0.26	0.17	0.20	0.25	0.43	0.55	0.72	0.82	0.85	0.91

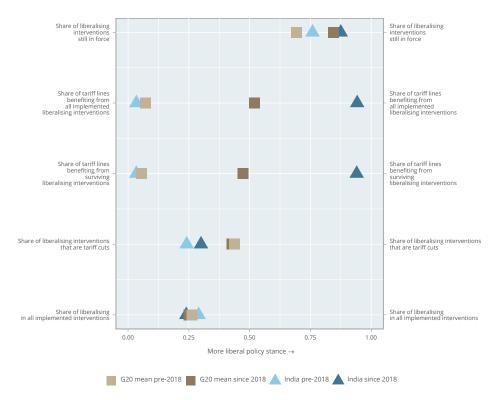
COUNTRIES HARMED BY INDIA'S DISCRIMINATORY INTERVENTIONS



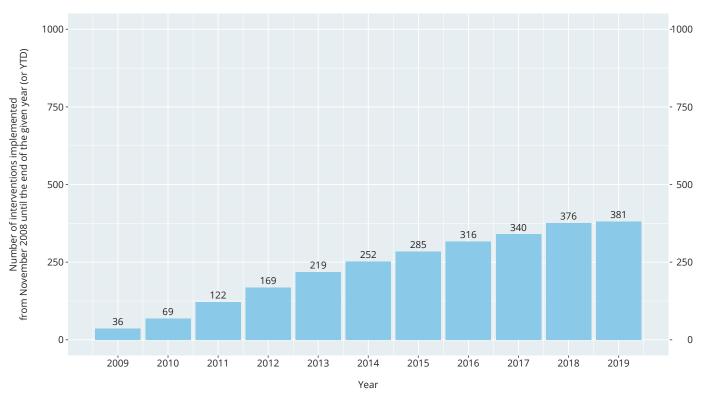
DISCRIMINATORY INTERVENTIONS HARMING INDIA'S INTERESTS



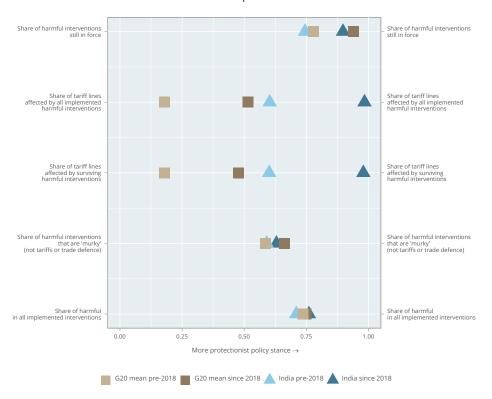
INDIATrack record of liberalisation



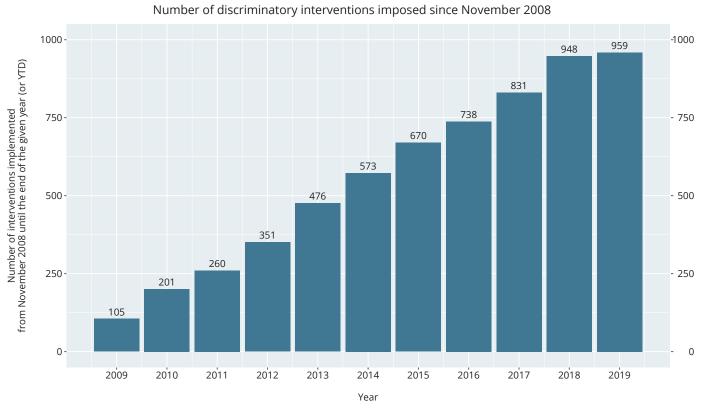
INDIANumber of liberalising interventions imposed since November 2008



INDIA Track record of protectionism



INDIA

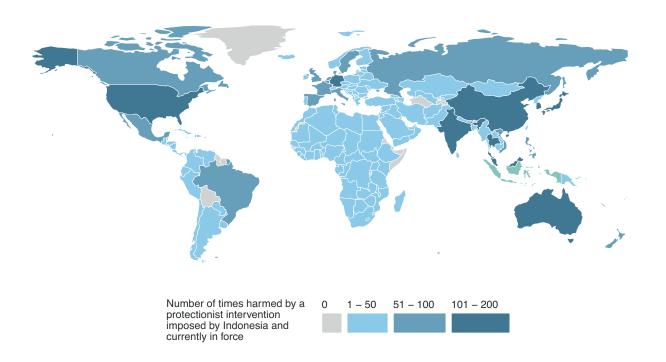


INDONESIA

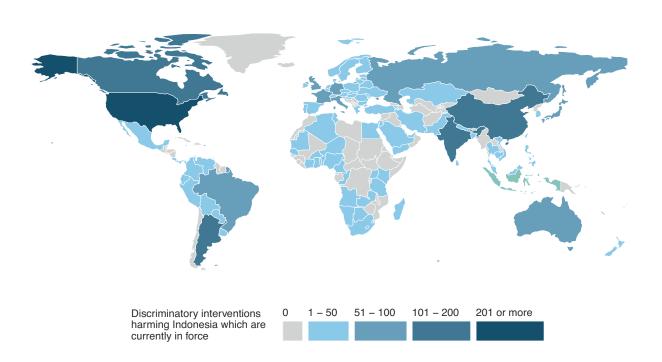
What is at stake for Indonesia's exporters?

UN MAST	Foreign		P	ercenta	ge of thi	is G20 m	nember'	s export	ts at risk	due to		
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	35.22	41.71	46.22	50.25	57.46	65.53	62.88	66.52	68.16	68.97	68.82
D	Contingent trade protection	0.20	0.30	0.36	0.43	0.49	0.53	0.55	0.61	0.66	1.35	1.37
E	Non-automatic licensing, quotas	0.87	0.62	2.59	2.99	2.74	2.76	2.98	4.01	4.14	4.22	4.22
F	Price control measures	1.18	1.18	1.24	1.30	1.30	1.75	2.52	2.53	2.53	5.04	5.31
G	Finance measures	0.06	0.31	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
1	Trade-related investment measures	0.00	0.03	0.14	0.29	0.41	0.52	0.57	0.62	0.65	0.66	0.66
L	Subsidies (excluding export subsidies)	0.81	1.34	2.38	3.15	12.51	13.30	9.52	10.64	12.50	16.02	16.63
M	Government procurement	0.32	3.70	3.56	3.71	3.77	3.81	4.01	4.00	4.15	4.32	4.58
Р	Export measures	32.25	37.29	40.04	43.14	47.90	55.64	53.56	57.80	59.64	59.79	59.40
	Import tariff increases	0.35	1.89	2.88	3.98	5.70	16.17	9.68	10.16	11.62	13.61	13.85
	Instrument unclassified	0.01	0.21	0.05	0.05	0.19	0.32	0.47	0.85	1.13	1.19	1.20

COUNTRIES HARMED BY INDONESIA'S DISCRIMINATORY INTERVENTIONS

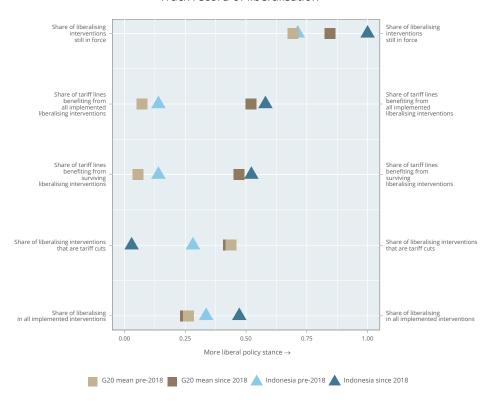


DISCRIMINATORY INTERVENTIONS HARMING INDONESIA'S INTERESTS



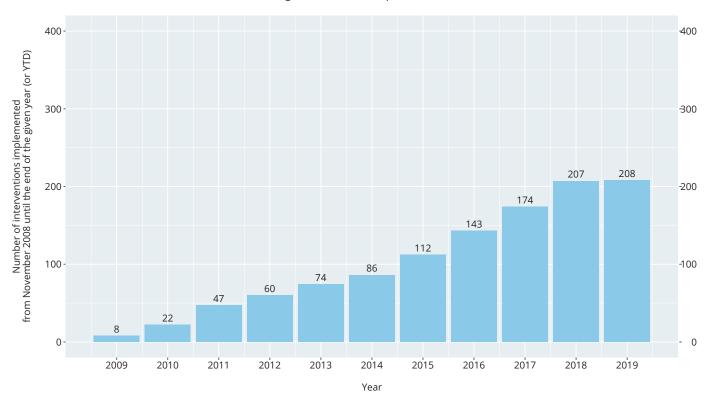
INDONESIA

Track record of liberalisation



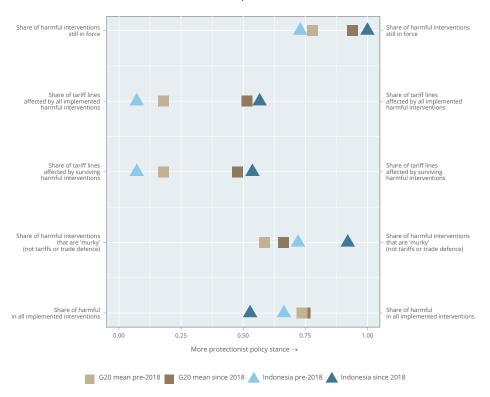
INDONESIA

Number of liberalising interventions imposed since November 2008



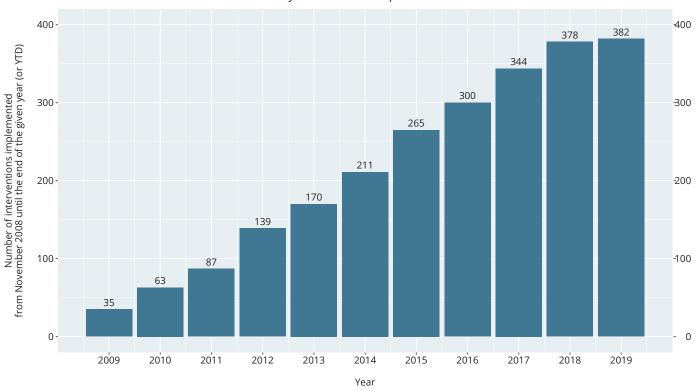
INDONESIA

Track record of protectionism



INDONESIA

Number of discriminatory interventions imposed since November 2008

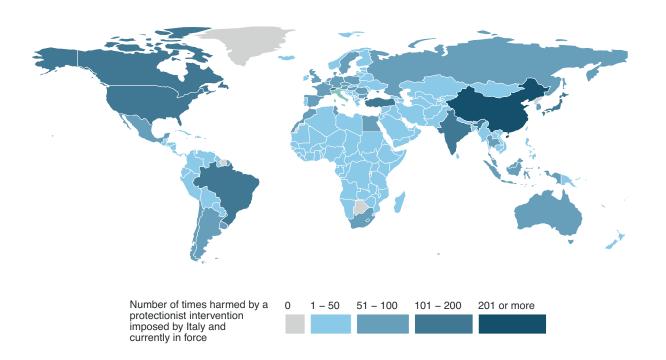


ITALY

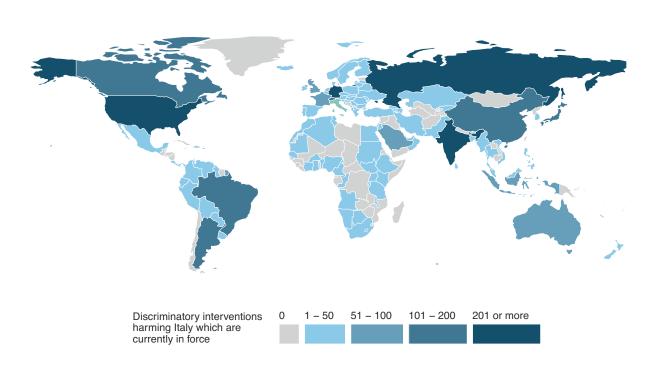
What is at stake for Italy's exporters?

										ı		
UN	Foreign		P	ercenta	ge of thi	is G20 m	nember'	s export	s at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	46.53	58.12	61.22	64.57	66.83	67.95	66.52	68.80	70.74	71.68	73.46
D	Contingent trade protection	0.03	0.06	0.08	0.12	0.16	0.22	0.21	0.33	0.36	0.42	0.49
E	Non-automatic licensing, quotas	0.23	0.22	0.63	0.74	0.79	0.80	1.01	1.01	1.15	1.43	1.43
F	Price control measures	0.00	0.00	0.07	0.11	0.10	0.12	0.26	0.33	0.34	0.68	0.72
G	Finance measures	0.24	0.35	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
1	Trade-related investment measures	0.03	0.76	0.94	0.98	1.02	1.29	1.53	1.65	1.72	1.68	1.68
L	Subsidies (excluding export subsidies)	3.76	5.90	4.43	5.45	6.81	9.41	9.69	12.51	14.45	15.71	16.90
М	Government procurement	0.37	0.74	0.70	1.04	1.12	1.38	1.71	1.85	1.98	2.17	2.44
Р	Export measures	43.99	54.43	58.11	62.01	64.33	63.99	62.11	64.05	65.46	66.23	67.99
	Import tariff increases	0.18	0.52	0.76	1.31	1.90	2.34	2.38	2.62	3.19	3.64	3.81
	Instrument unclassified	0.07	0.14	0.16	0.17	0.26	0.34	0.67	0.82	0.91	1.01	1.02

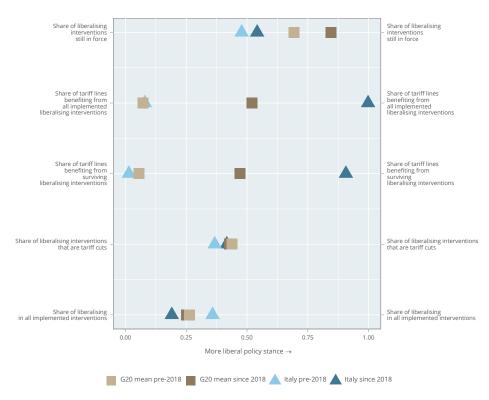
COUNTRIES HARMED BY ITALY'S DISCRIMINATORY INTERVENTIONS



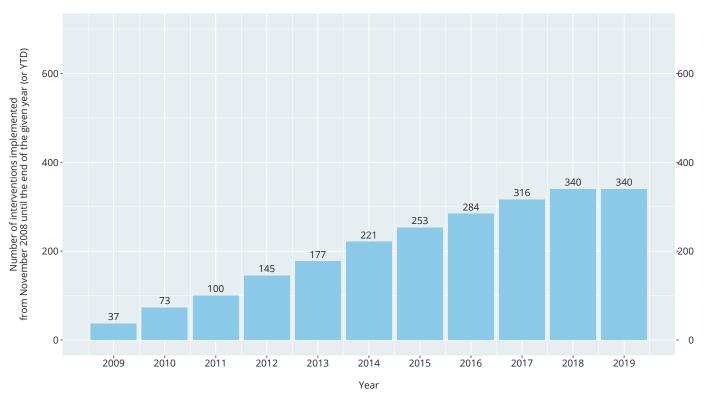
DISCRIMINATORY INTERVENTIONS HARMING ITALY'S INTERESTS



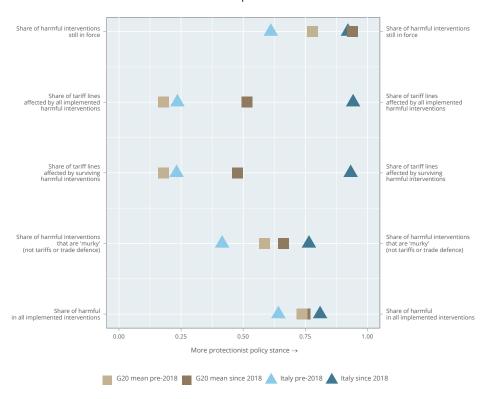
ITALYTrack record of liberalisation



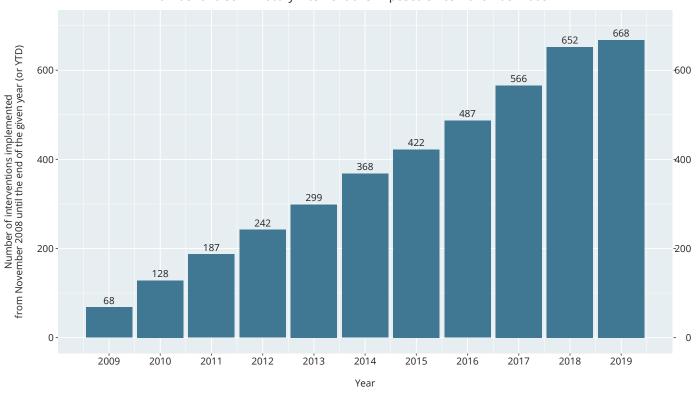
ITALYNumber of liberalising interventions imposed since November 2008



ITALYTrack record of protectionism



ITALYNumber of discriminatory interventions imposed since November 2008

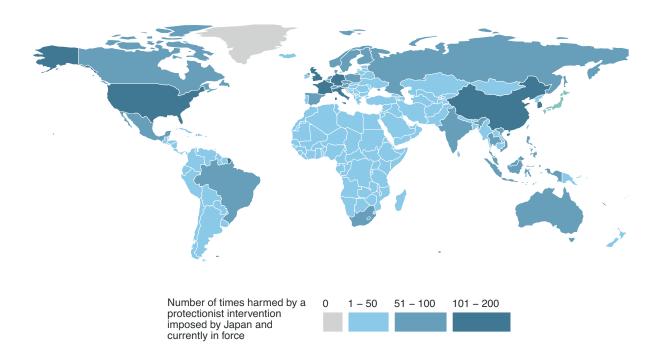


JAPAN

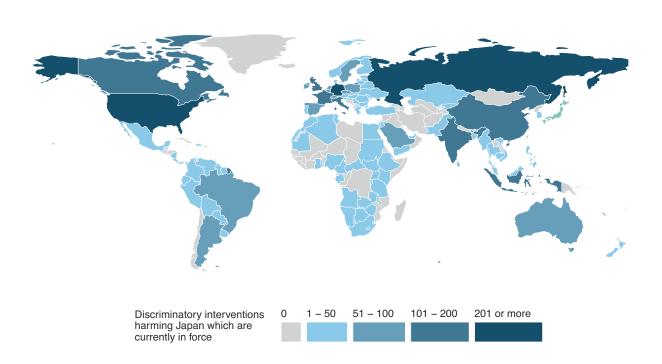
What is at stake for Japan's exporters?

UN MAST	Foreign		P	ercenta	ge of thi	is G20 m	nember'	s export	s at risk	due to		
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	51.18	66.39	69.19	74.22	80.00	80.87	78.59	80.04	81.95	82.85	83.10
D	Contingent trade protection	0.14	0.31	0.58	0.95	1.09	1.16	1.15	1.38	1.44	1.63	1.71
E	Non-automatic licensing, quotas	0.84	1.38	4.31	4.67	6.71	5.18	5.42	5.78	5.93	6.30	6.40
F	Price control measures	0.02	0.02	0.04	0.07	0.06	0.22	0.89	1.02	1.30	1.61	1.67
G	Finance measures	0.17	0.46	0.83	0.83	0.84	0.83	0.83	0.83	0.83	0.84	0.86
1	Trade-related investment measures	0.76	1.56	1.49	1.57	1.59	1.87	2.37	3.11	3.08	3.05	3.03
L	Subsidies (excluding export subsidies)	11.07	15.84	18.38	20.33	31.61	32.52	25.77	27.28	28.98	30.83	32.07
M	Government procurement	0.47	1.47	1.76	2.09	2.20	2.54	3.62	3.63	3.70	3.76	3.81
Р	Export measures	39.35	51.88	57.18	66.14	69.63	66.99	65.54	67.53	71.38	72.94	73.34
	Import tariff increases	1.78	2.88	3.49	5.18	8.72	8.85	10.46	10.78	11.34	14.59	14.80
	Instrument unclassified	0.27	0.95	1.37	1.41	1.48	3.20	8.33	8.23	8.36	8.74	8.79

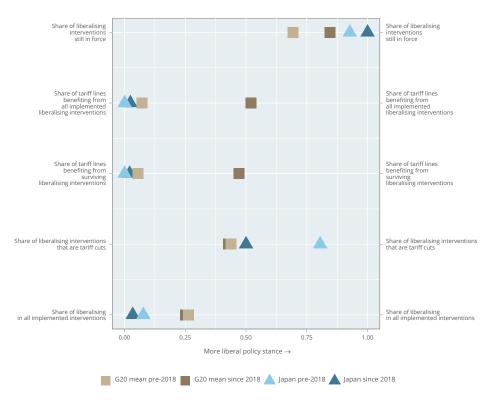
COUNTRIES HARMED BY JAPAN'S DISCRIMINATORY INTERVENTIONS



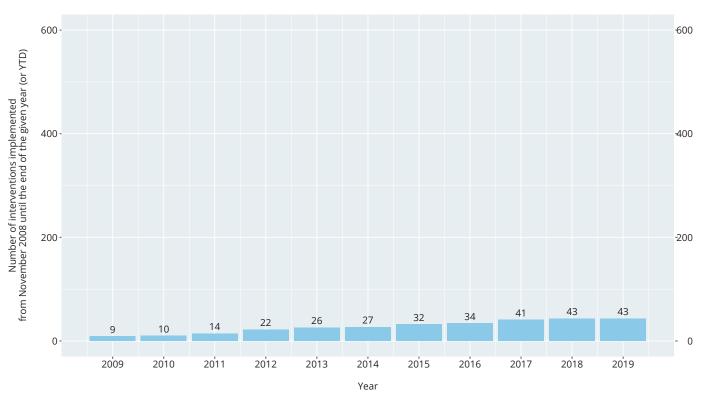
DISCRIMINATORY INTERVENTIONS HARMING JAPAN'S INTERESTS



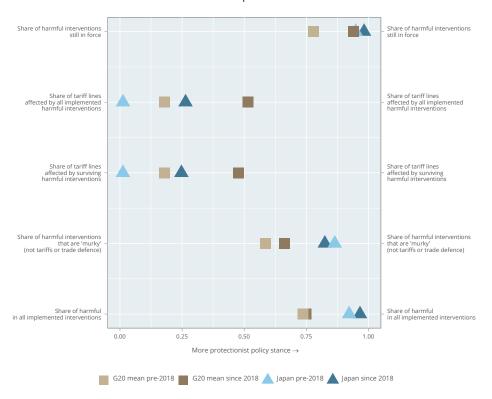
JAPANTrack record of liberalisation



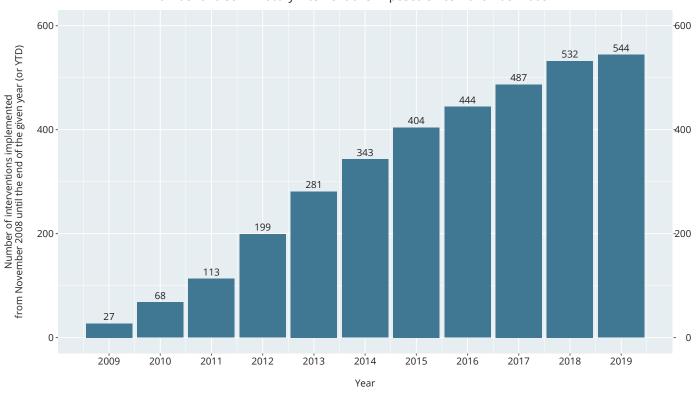
JAPANNumber of liberalising interventions imposed since November 2008



JAPANTrack record of protectionism



JAPANNumber of discriminatory interventions imposed since November 2008

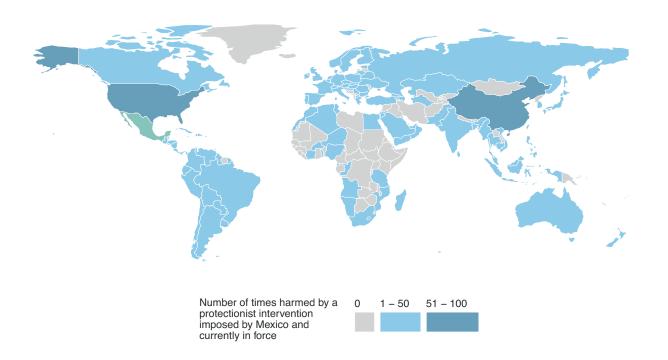


MEXICO

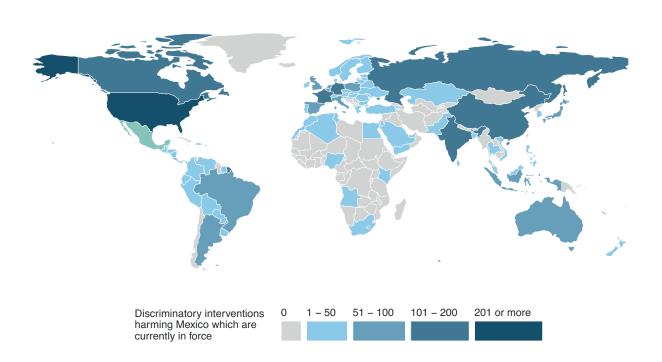
What is at stake for Mexico's exporters?

UN MAST	Foreign		Po	ercenta	ge of thi	s G20 m	nember'	s export	s at risk	due to		
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	58.98	67.98	71.26	74.73	77.58	78.26	88.64	89.19	91.59	92.76	93.16
D	Contingent trade protection	0.00	0.36	0.68	1.44	1.83	2.00	2.06	2.77	2.95	3.45	3.42
Е	Non-automatic licensing, quotas	0.07	0.15	0.54	0.76	0.86	0.93	0.92	0.88	0.79	0.94	0.93
F	Price control measures	0.11	0.11	0.16	0.26	0.14	0.27	0.33	0.40	0.41	0.58	0.59
G	Finance measures	0.02	0.41	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
1	Trade-related investment measures	0.05	0.40	0.55	0.73	0.77	1.98	2.94	3.44	3.50	3.42	3.38
L	Subsidies (excluding export subsidies)	8.43	11.89	25.51	31.09	35.62	36.45	35.83	36.91	37.38	42.71	44.73
M	Government procurement	1.81	3.54	4.01	8.02	8.87	9.50	12.20	12.17	12.96	14.38	16.30
Р	Export measures	49.25	55.68	62.61	71.02	72.16	68.44	78.95	79.80	83.86	86.33	86.81
	Import tariff increases	0.09	0.21	0.21	0.29	0.99	1.13	1.55	1.70	2.30	5.75	6.38
	Instrument unclassified	0.00	0.13	0.08	0.09	0.31	1.74	6.19	6.28	6.39	6.44	6.45

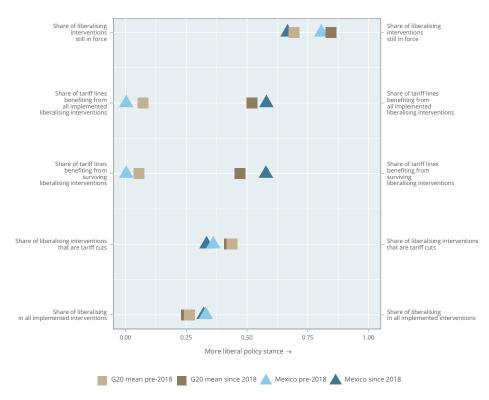
COUNTRIES HARMED BY MEXICO'S DISCRIMINATORY INTERVENTIONS



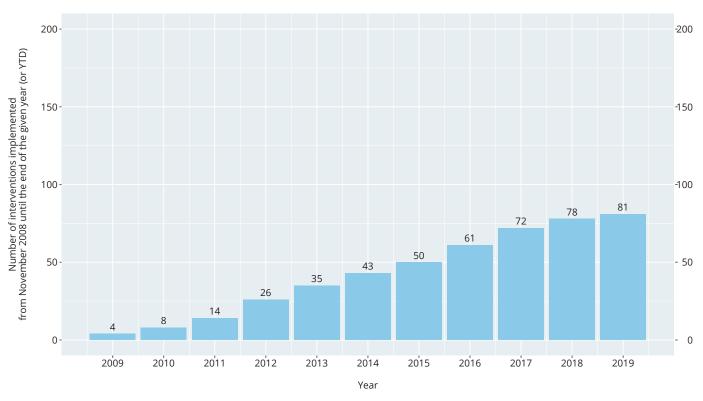
DISCRIMINATORY INTERVENTIONS HARMING MEXICO'S INTERESTS



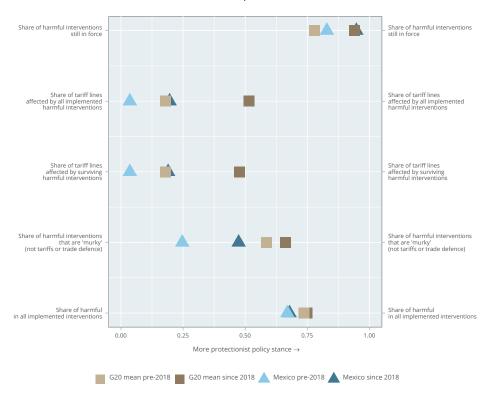
MEXICOTrack record of liberalisation



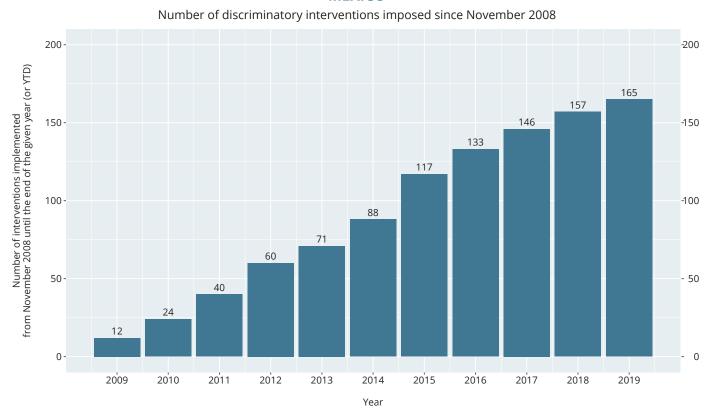
MEXICONumber of liberalising interventions imposed since November 2008



MEXICOTrack record of protectionism



MEXICO

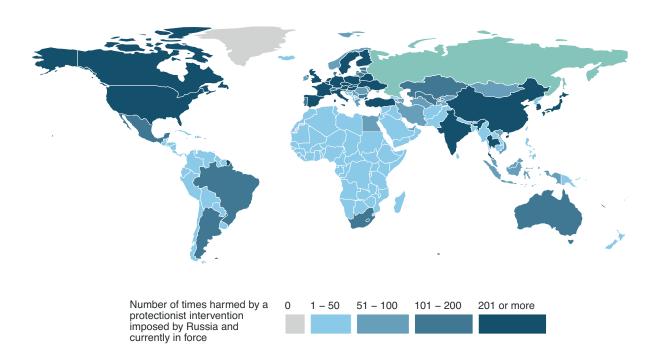


RUSSIA

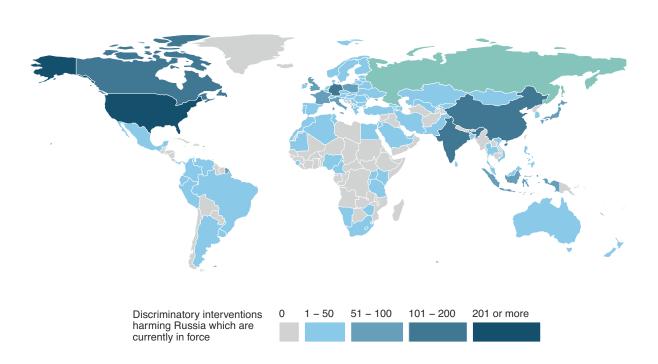
What is at stake for Russia's exporters?

UN MAST	Foreign		P	ercenta	ge of thi	s G20 m	ember'	s export	s at risk	due to		
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	9.94	20.08	32.48	36.76	73.24	72.93	47.36	46.18	57.95	61.90	61.75
D	Contingent trade protection	0.03	0.15	0.18	0.51	0.69	0.79	0.87	1.14	1.30	2.31	3.14
E	Non-automatic licensing, quotas	0.43	0.13	3.76	4.02	4.30	4.18	4.17	4.68	5.00	5.07	5.05
F	Price control measures	0.22	0.22	0.23	0.24	0.25	0.34	1.19	1.49	1.49	2.02	2.08
G	Finance measures	2.80	3.19	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30
1	Trade-related investment measures	0.02	1.03	1.01	1.01	1.11	1.49	1.72	1.72	1.73	1.73	1.76
L	Subsidies (excluding export subsidies)	1.50	5.32	7.95	8.50	53.55	53.48	23.89	24.72	25.81	27.26	27.39
M	Government procurement	0.51	0.72	0.83	0.85	0.87	0.88	0.93	1.00	1.14	1.19	1.19
Р	Export measures	4.56	10.33	20.42	24.34	25.67	23.88	25.34	27.22	41.41	48.03	47.03
	lmport tariff increases	0.87	2.17	1.52	1.93	5.02	4.03	7.37	4.46	5.10	5.89	6.10
	Instrument unclassified	0.00	0.06	0.00	0.08	0.19	2.21	3.57	3.68	3.82	3.76	3.76

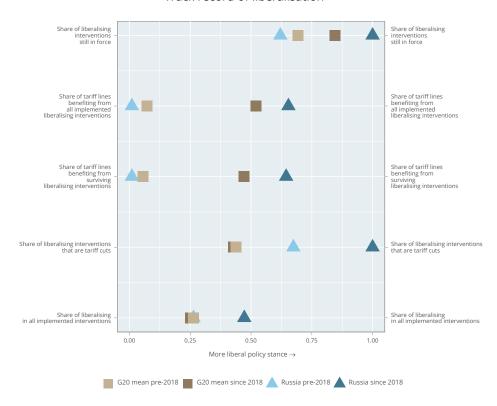
COUNTRIES HARMED BY RUSSIA'S DISCRIMINATORY INTERVENTIONS



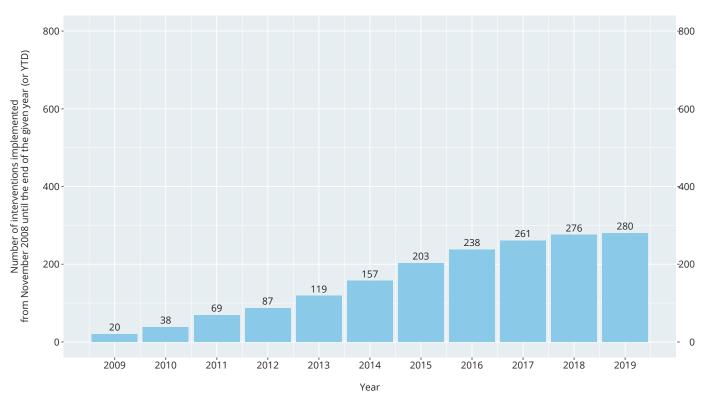
DISCRIMINATORY INTERVENTIONS HARMING RUSSIA'S INTERESTS



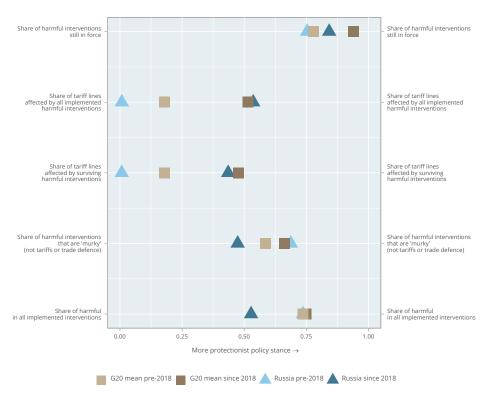
RUSSIATrack record of liberalisation



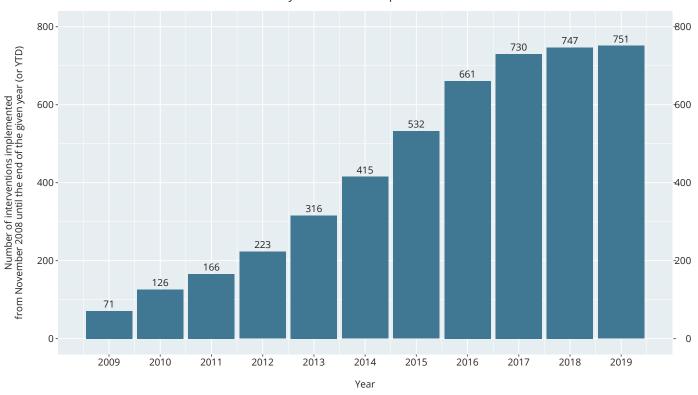
RUSSIANumber of liberalising interventions imposed since November 2008



RUSSIATrack record of protectionism



RUSSIANumber of discriminatory interventions imposed since November 2008

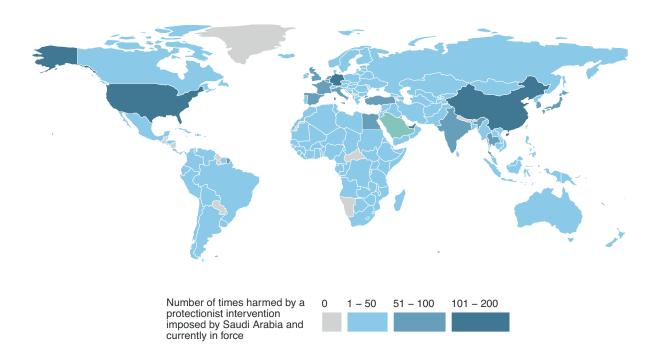


SAUDI ARABIA

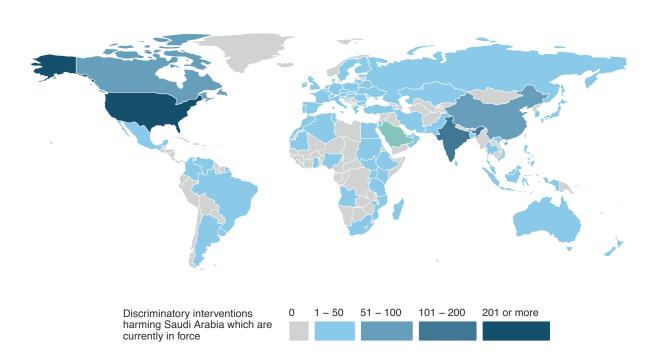
What is at stake for Saudi Arabia's exporters?

									_			
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s G20 m	nember'	s export	ts at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	9.99	15.55	26.78	29.80	42.52	43.66	55.27	56.31	62.12	63.99	63.99
D	Contingent trade protection	0.01	0.04	0.08	0.10	0.08	0.08	0.05	0.01	0.01	0.01	0.01
E	Non-automatic licensing, quotas	4.54	0.04	5.97	6.73	6.02	6.04	7.31	7.86	7.85	7.86	7.86
F	Price control measures	0.07	0.07	0.16	0.28	0.28	0.28	0.40	0.41	0.41	4.86	5.29
G	Finance measures	0.05	0.07	0.10	0.10	0.10	0.10	1.17	1.53	1.53	1.53	1.53
1	Trade-related investment measures	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03	0.03	0.03
L	Subsidies (excluding export subsidies)	0.04	0.81	1.86	2.52	16.93	17.26	6.39	6.52	8.90	10.47	10.47
M	Government procurement	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Р	Export measures	2.34	5.78	10.43	12.43	13.46	13.54	40.02	41.47	47.23	47.46	47.32
	Import tariff increases	7.46	9.04	9.32	9.90	10.78	11.11	13.43	13.42	14.10	14.71	14.72
	Instrument unclassified	0.00	0.00	0.00	0.00	0.04	0.87	0.89	0.89	0.89	1.36	2.34

COUNTRIES HARMED BY SAUDI ARABIA'S DISCRIMINATORY INTERVENTIONS

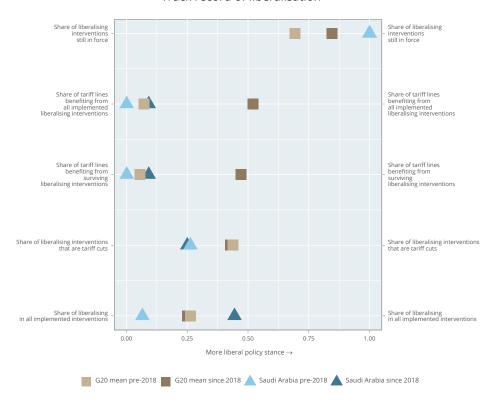


DISCRIMINATORY INTERVENTIONS HARMING SAUDI ARABIA'S INTERESTS



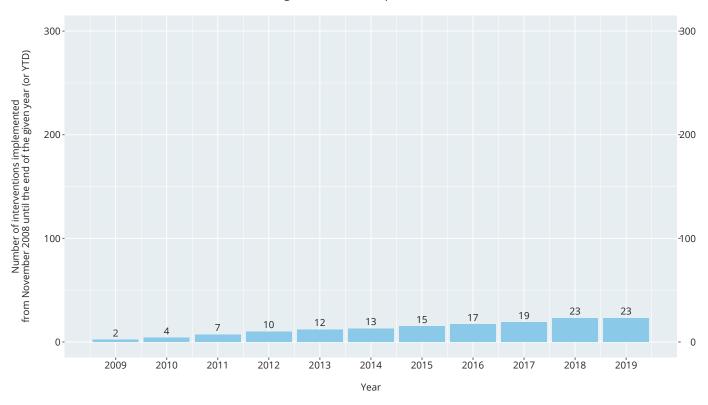
SAUDI ARABIA

Track record of liberalisation



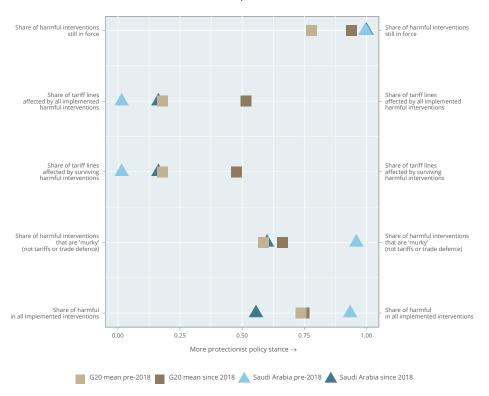
SAUDI ARABIA

Number of liberalising interventions imposed since November 2008



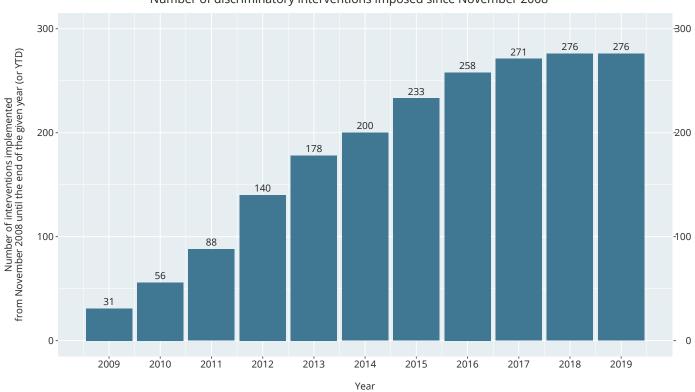
SAUDI ARABIA

Track record of protectionism



SAUDI ARABIA

Number of discriminatory interventions imposed since November 2008

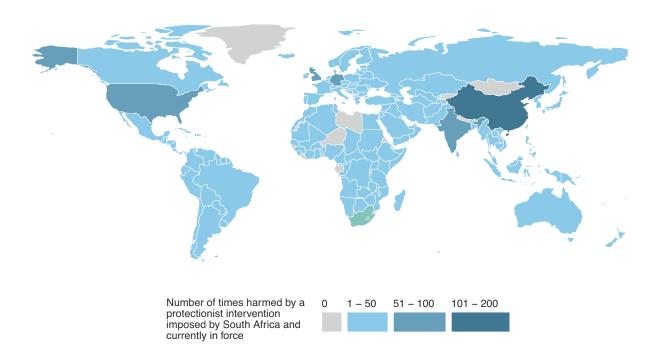


SOUTH AFRICA

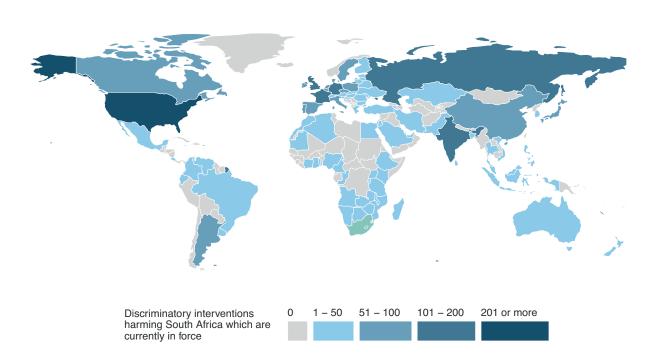
What is at stake for South Africa's exporters?

UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember'	s export	ts at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	27.00	34.50	42.50	46.39	60.10	57.22	49.50	51.99	53.76	54.77	54.60
D	Contingent trade protection	0.03	0.05	0.06	0.06	0.06	0.10	0.13	0.52	0.62	1.03	1.29
E	Non-automatic licensing, quotas	0.45	1.74	3.83	4.39	4.51	4.99	4.73	5.34	5.51	5.72	5.63
F	Price control measures	2.12	2.12	2.15	2.22	2.22	2.23	2.25	2.25	2.25	4.87	5.12
G	Finance measures	0.44	0.47	0.52	0.52	0.52	0.52	0.53	0.53	0.53	0.53	0.53
1	Trade-related investment measures	0.00	0.15	0.19	0.19	0.22	0.85	1.30	1.32	1.34	1.32	1.35
L	Subsidies (excluding export subsidies)	4.26	6.75	6.08	6.90	31.59	31.66	20.00	21.77	23.31	23.64	23.64
M	Government procurement	0.90	0.86	1.06	1.18	1.24	1.30	1.45	1.52	1.53	1.58	1.63
Р	Export measures	17.97	22.66	31.79	36.30	38.02	30.90	27.55	33.87	36.93	38.44	38.36
	Import tariff increases	1.62	3.37	3.89	4.88	7.91	8.58	9.17	10.04	10.52	11.78	11.97
	Instrument unclassified	0.05	0.70	0.69	0.70	1.78	2.74	0.75	0.87	1.52	2.82	2.85

COUNTRIES HARMED BY SOUTH AFRICA'S DISCRIMINATORY INTERVENTIONS

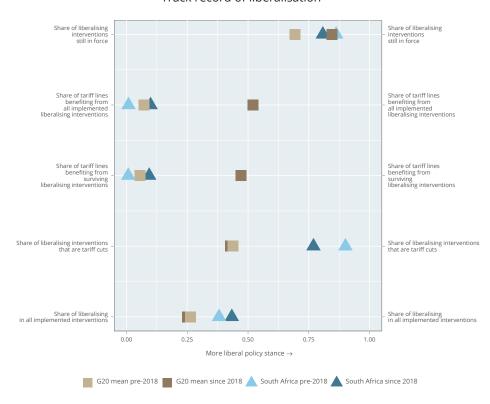


DISCRIMINATORY INTERVENTIONS HARMING SOUTH AFRICA'S INTERESTS



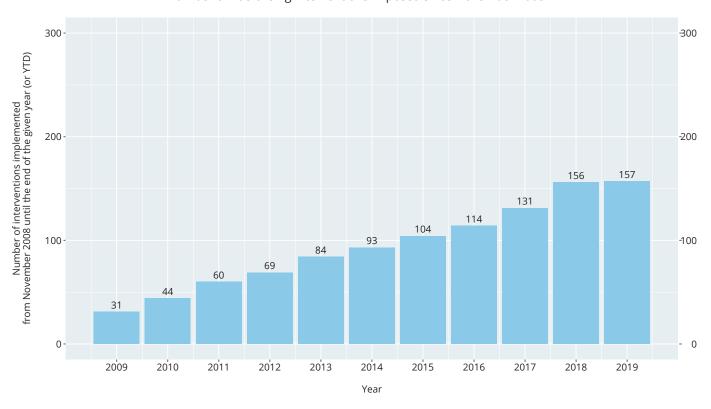
SOUTH AFRICA

Track record of liberalisation



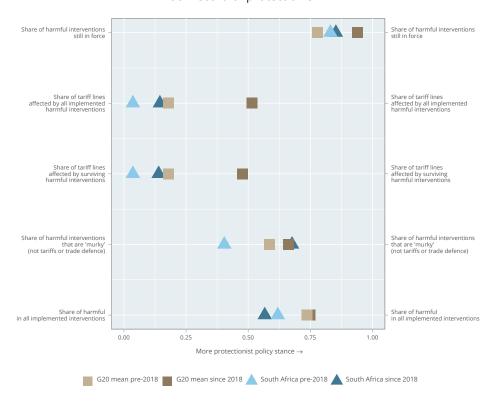
SOUTH AFRICA

Number of liberalising interventions imposed since November 2008



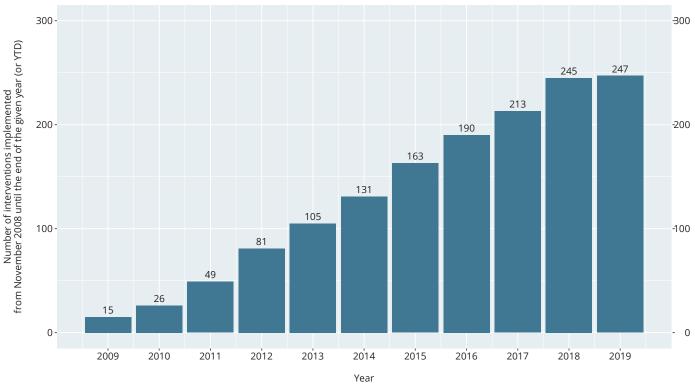
SOUTH AFRICA

Track record of protectionism



SOUTH AFRICA

Number of discriminatory interventions imposed since November 2008

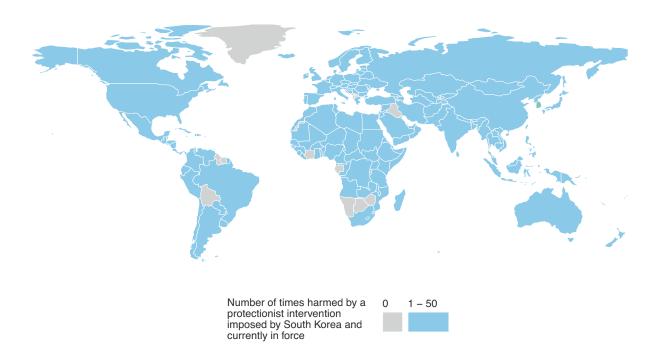


SOUTH KOREA

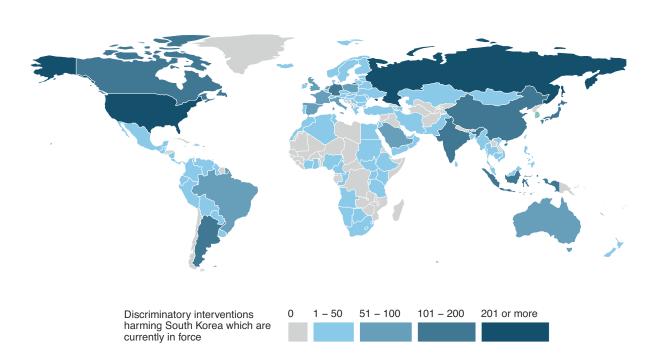
What is at stake for South Korea's exporters?

					6.1.1							
UN MAST	Foreign discriminatory		Po	ercenta	ge of thi	is G20 m	nember'	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	50.68	71.39	73.46	78.20	83.58	84.31	82.47	83.89	85.33	86.41	87.04
D	Contingent trade protection	0.24	1.19	1.33	1.75	1.97	2.03	2.00	2.39	2.59	3.21	3.58
E	Non-automatic licensing, quotas	0.43	0.83	5.17	5.38	5.60	5.79	6.16	7.03	7.03	7.41	7.65
F	Price control measures	0.02	0.02	0.06	0.12	0.07	0.24	1.92	2.04	2.20	2.97	3.17
G	Finance measures	0.19	0.66	1.37	1.37	1.37	1.37	1.38	1.38	1.38	1.38	1.38
1	Trade-related investment measures	0.38	0.78	0.94	1.04	1.05	1.51	2.06	2.60	2.70	2.77	2.78
L	Subsidies (excluding export subsidies)	9.34	16.33	22.78	24.83	36.95	37.99	33.53	34.17	37.31	39.77	41.00
M	Government procurement	0.85	2.23	2.37	2.54	2.85	3.02	3.40	3.40	3.62	3.70	3.71
Р	Export measures	41.26	55.73	60.52	68.88	72.96	72.75	70.54	72.35	74.45	75.61	77.06
	Import tariff increases	2.10	3.81	6.16	7.35	11.49	12.12	12.89	12.72	14.12	21.42	21.55
	Instrument unclassified	0.12	0.56	0.80	0.84	0.76	1.37	3.66	3.79	3.79	4.24	4.29

COUNTRIES HARMED BY SOUTH KOREA'S DISCRIMINATORY INTERVENTIONS

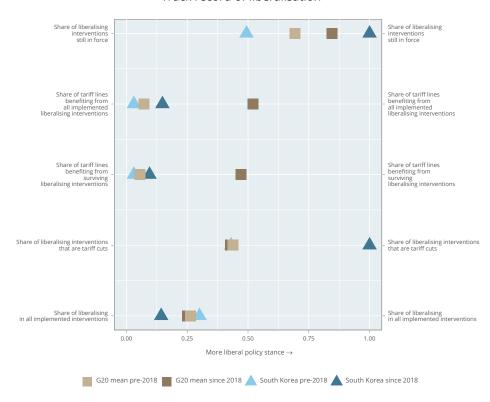


DISCRIMINATORY INTERVENTIONS HARMING SOUTH KOREA'S INTERESTS



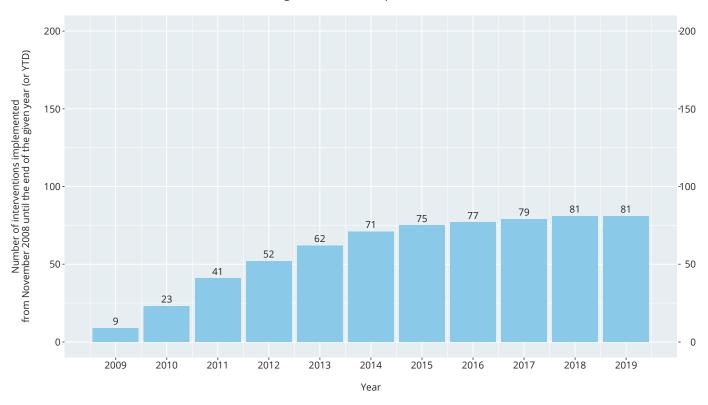
SOUTH KOREA

Track record of liberalisation



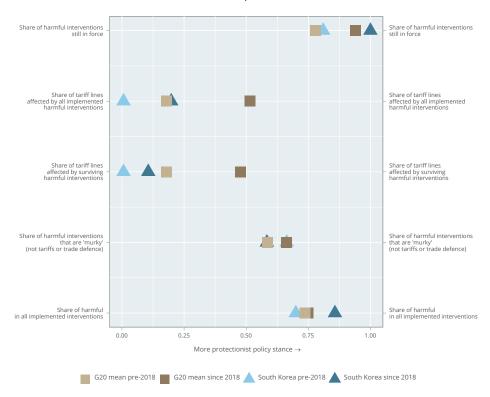
SOUTH KOREA

Number of liberalising interventions imposed since November 2008



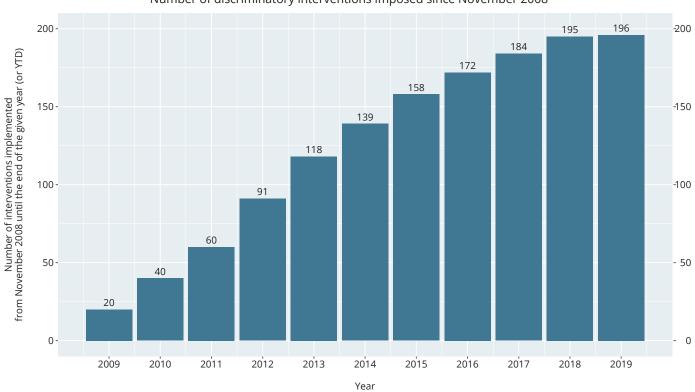
SOUTH KOREA

Track record of protectionism



SOUTH KOREA

Number of discriminatory interventions imposed since November 2008

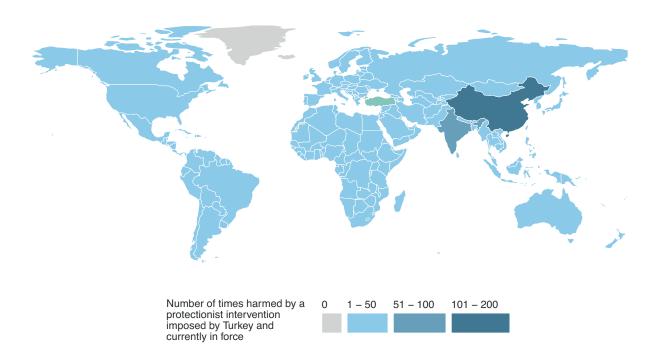


TURKEY

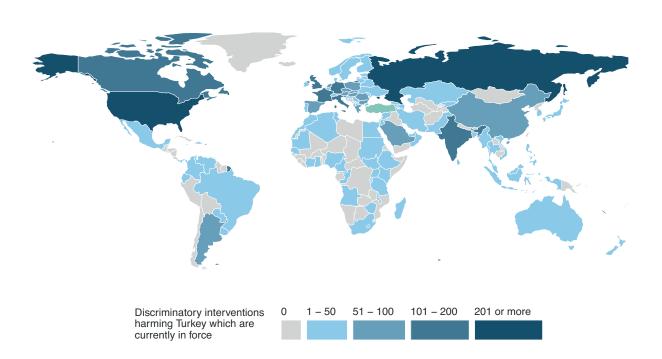
What is at stake for Turkey's exporters?

UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s G20 m	ember':	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	52.87	64.26	66.92	69.68	76.92	76.33	73.50	74.59	76.39	77.51	77.50
D	Contingent trade protection	0.68	0.67	0.76	0.77	0.89	1.31	1.50	1.63	1.71	3.22	4.81
E	Non-automatic licensing, quotas	0.03	0.11	0.66	0.86	0.88	0.88	1.04	2.66	3.33	3.49	3.48
F	Price control measures	0.43	0.46	0.46	0.46	0.46	0.56	0.59	0.60	0.60	0.99	1.03
G	Finance measures	0.53	0.50	0.51	0.51	0.51	0.51	0.72	0.79	0.79	0.79	0.79
1	Trade-related investment measures	0.48	2.14	2.39	2.42	2.46	2.97	3.46	3.47	3.48	3.46	3.49
L	Subsidies (excluding export subsidies)	7.19	10.05	7.13	8.36	48.10	49.07	22.68	24.54	25.84	27.36	27.55
M	Government procurement	0.94	1.84	1.82	1.87	1.92	2.11	2.47	2.70	2.88	2.96	2.96
Р	Export measures	46.86	57.44	60.44	63.10	65.21	64.30	62.85	64.89	66.06	66.70	67.57
	Import tariff increases	0.31	1.03	1.28	2.37	3.46	3.42	6.68	6.58	7.41	9.12	9.37
	Instrument unclassified	0.00	0.46	0.66	0.70	0.71	0.75	0.81	0.90	0.92	1.08	1.31

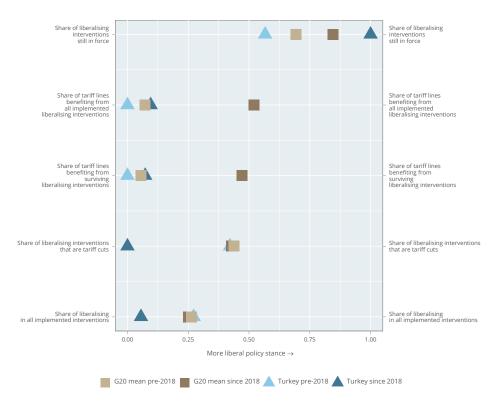
COUNTRIES HARMED BY TURKEY'S DISCRIMINATORY INTERVENTIONS



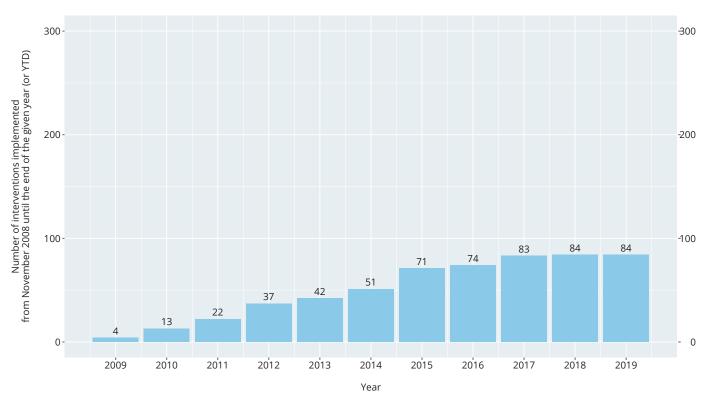
DISCRIMINATORY INTERVENTIONS HARMING TURKEY'S INTERESTS



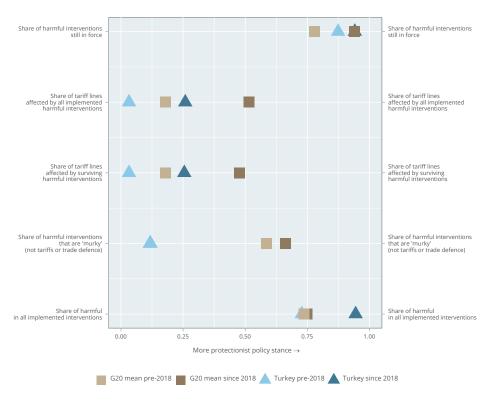
TURKEY Track record of liberalisation



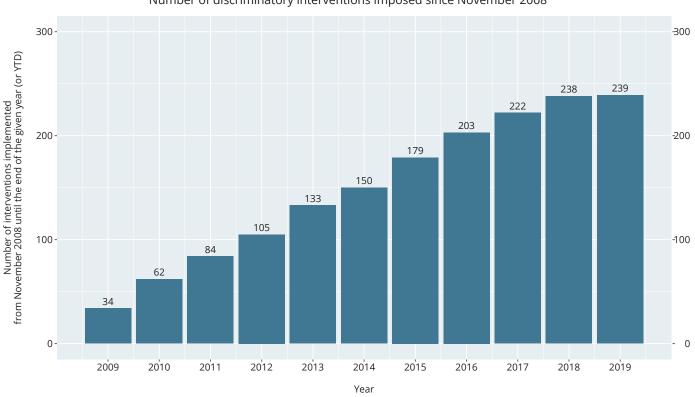
TURKEY Number of liberalising interventions imposed since November 2008



TURKEYTrack record of protectionism



TURKEYNumber of discriminatory interventions imposed since November 2008

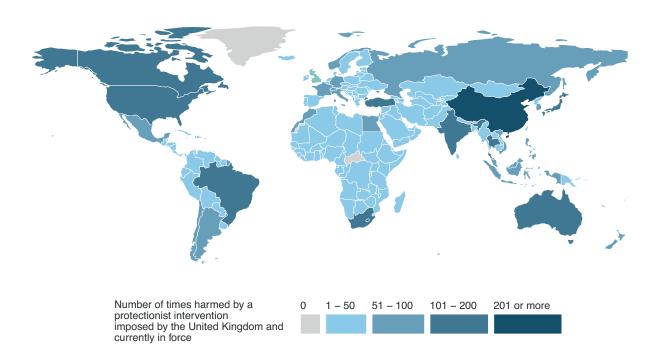


UNITED KINGDOM

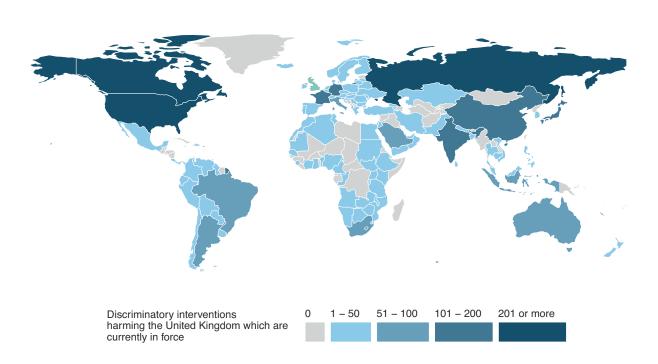
What is at stake for the United Kingdom's exporters?

												_
UN	Foreign		Po	ercenta	ge of thi	s G20 m	nember'	s export	s at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	34.61	45.02	50.83	57.43	60.10	61.06	61.80	64.06	67.82	69.28	70.20
D	Contingent trade protection	0.01	0.03	0.07	0.12	0.15	0.16	0.16	0.22	0.23	0.28	0.32
E	Non-automatic licensing, quotas	0.10	0.17	0.47	0.54	0.64	0.66	0.81	0.78	1.26	2.15	2.17
F	Price control measures	0.00	0.00	0.02	0.05	0.04	0.06	0.14	0.18	0.27	1.01	1.09
G	Finance measures	0.40	0.46	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
1	Trade-related investment measures	0.33	1.17	1.29	1.31	1.32	1.52	1.74	1.89	1.93	1.91	1.91
L	Subsidies (excluding export subsidies)	3.75	6.03	7.88	10.96	12.17	15.10	14.62	15.70	17.51	20.30	22.34
М	Government procurement	0.37	0.71	0.80	1.16	1.26	1.38	1.74	1.81	1.82	1.85	1.95
Р	Export measures	30.32	39.06	45.62	53.29	55.73	53.09	53.87	56.37	60.74	62.42	63.19
	Import tariff increases	0.83	1.21	1.32	1.61	2.25	2.66	2.72	2.98	3.12	3.69	3.81
	Instrument unclassified	0.02	0.29	0.41	0.42	0.50	2.07	3.51	3.59	3.70	3.84	3.84

COUNTRIES HARMED BY THE UK'S DISCRIMINATORY INTERVENTIONS

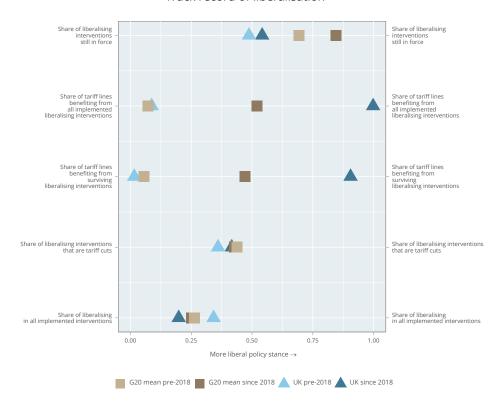


DISCRIMINATORY INTERVENTIONS HARMING THE UK'S INTERESTS



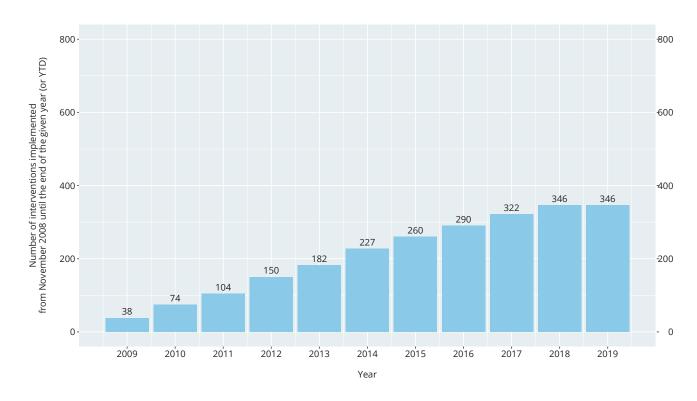
UNITED KINGDOM

Track record of liberalisation



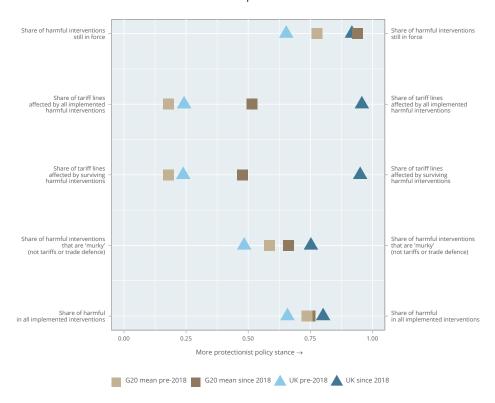
UNITED KINGDOM

Number of liberalising interventions imposed since November 2008



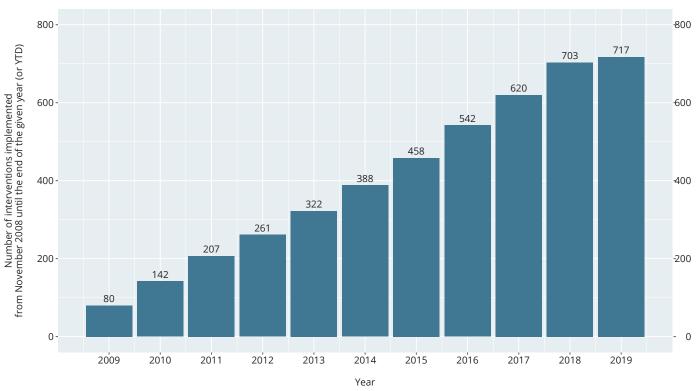
UNITED KINGDOM

Track record of protectionism



UNITED KINGDOM

Number of discriminatory interventions imposed since November 2008

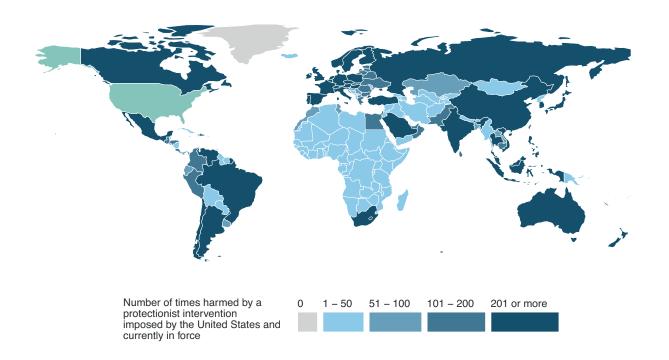


UNITED STATES

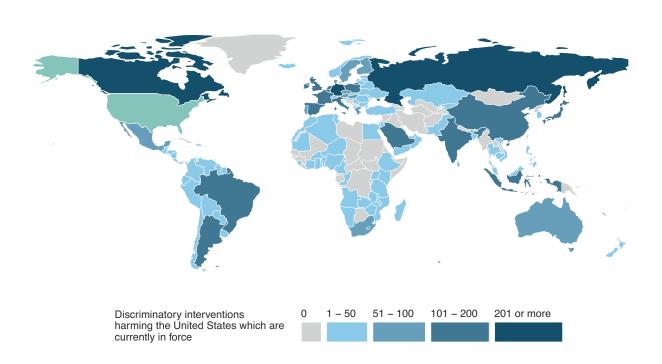
What is at stake for the United States' exporters?

										ı		
UN	Foreign		P	ercenta	ge of thi	is G20 m	nember':	s export	ts at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	41.04	51.62	58.22	64.28	72.38	74.62	73.71	75.40	77.25	79.17	80.68
D	Contingent trade protection	0.30	0.47	0.51	0.63	0.68	0.67	0.67	0.72	0.83	1.35	1.42
Е	Non-automatic licensing, quotas	0.41	0.78	1.84	2.45	3.53	3.32	4.79	5.00	5.11	5.27	5.27
F	Price control measures	0.08	0.08	0.12	0.18	0.31	0.62	0.87	1.02	1.09	1.50	1.57
G	Finance measures	0.34	1.03	1.10	1.10	1.10	1.10	1.11	1.11	1.11	1.11	1.11
1	Trade-related investment measures	0.36	0.77	0.45	0.49	0.50	0.57	1.24	2.86	2.58	2.50	2.50
L	Subsidies (excluding export subsidies)	4.06	6.04	5.05	5.60	24.61	26.38	19.13	20.42	23.81	27.30	29.22
М	Government procurement	0.08	0.36	0.36	0.57	0.85	1.30	1.87	1.76	1.77	1.89	1.89
Р	Export measures	36.50	44.93	52.37	58.34	61.21	62.70	62.17	64.43	66.63	67.16	67.87
	Import tariff increases	0.61	1.59	1.75	2.67	4.97	5.37	7.24	8.19	11.42	14.73	17.57
	Instrument unclassified	0.10	0.24	0.32	0.42	0.57	1.53	1.88	1.95	1.96	2.40	2.75

COUNTRIES HARMED BY THE US' DISCRIMINATORY INTERVENTIONS

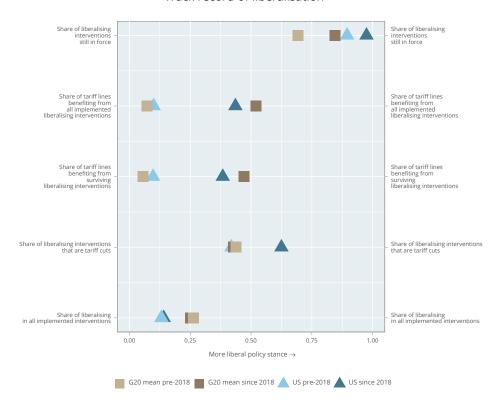


DISCRIMINATORY INTERVENTIONS HARMING THE US' INTERESTS



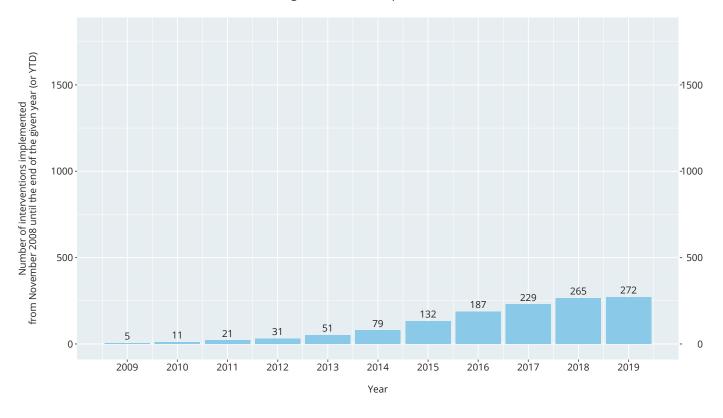
UNITED STATES

Track record of liberalisation



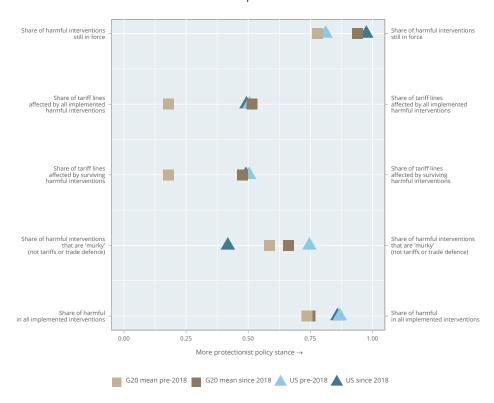
UNITED STATES

Number of liberalising interventions imposed since November 2008



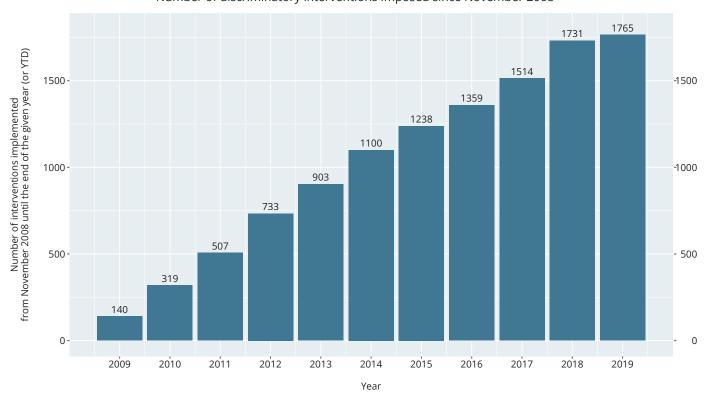
UNITED STATES

Track record of protectionism



UNITED STATES

Number of discriminatory interventions imposed since November 2008



G20 Leaders are due to discuss options to revive the moribund WTO at the upcoming Osaka Summit. The purpose of this Global Trade Alert report is to identify WTO reform options that directly address the first-order problems that have built up over the past decade. Our approach ties prescription to diagnosis.

Since the last WTO Ministerial Conference in December 2017, trade officials have been struggling to take forward a number of unrelated, incremental initiatives. There is no apparent organising logic, nor any systemic perspective. Worse, the Sino-US trade war has absorbed bandwidth that could have been usefully deployed elsewhere.

Our evidence-driven approach identifies initiatives that, if taken forward, would reform substantial amounts of world trade. While these initiatives would not require each WTO member's participation, a data-driven approach that picks the right sectors to reform delivers benefits to the majority of WTO members, drawn from every continent and across levels of development.

A meaningful reset for the WTO requires a new work programme that reverses the build-up in discrimination against foreign commercial interests witnessed since the global financial crisis began. With this in mind, this report first diagnoses the current woes of the world trading system and then identifies which initiatives could elicit critical mass among the WTO membership.

CEPR Press

Centre for Economic Policy Research 33 Great Sutton Street London EC1V 0DX

Tel: +44 (0) 20 7183 8801 Fax: +44 (0)20 7183 8820 Email: cepr@cepr.org Web: www.cepr.org