

Going It Alone? Trade Policy After Three Years of Populism

The 25th Global Trade Alert Report by Simon J. Evenett and Johannes Fritz





MAX SCHMIDHEINY FOUNDATION



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

Going It Alone? Trade Policy After Three Years of Populism © CEPR Press, 2019

TABLE OF CONTENTS

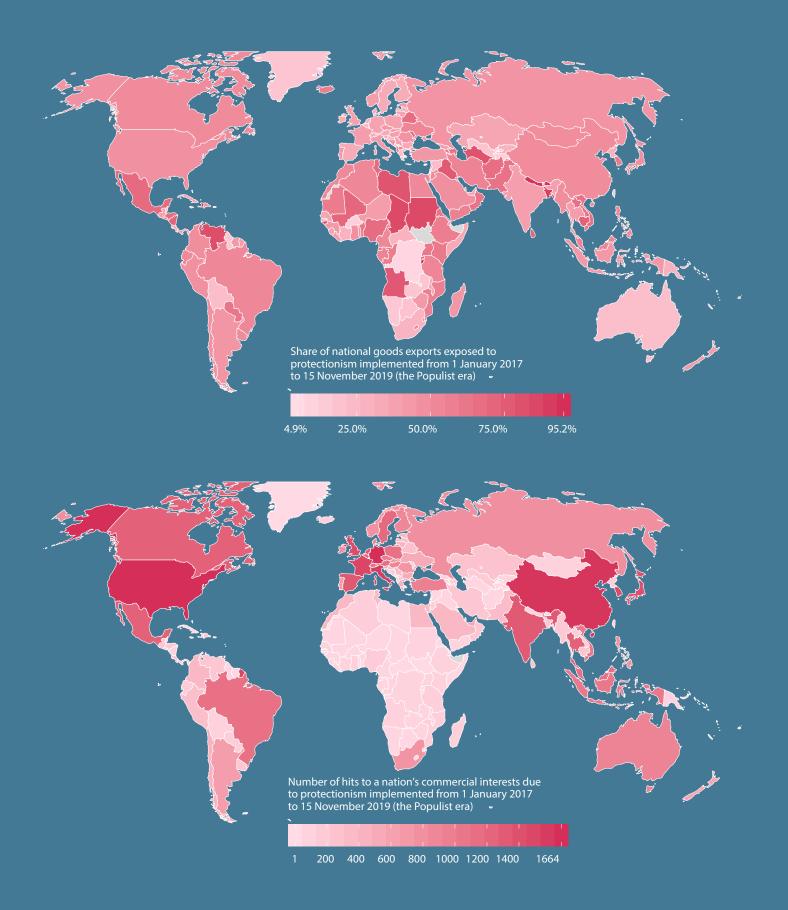
Executive Summary	6 HC TH
SECTION 1: GLOBAL PERSPECTIVES	Ar
CHAPTER 1	Au
Why a global assessment of Populist era protectionis is still needed, a "phase one deal" notwithstanding	sm 11 ^{Br}
CHAPTER 2	Ca
Commercial policy trends during the Populist era	15 Ch
CHAPTER 3	Fra
Populist era trade discrimination did not translate into larger shares of world trade affected	18 ^{Ge}
CHAPTER 4	Ind
Jumbo protectionism during the Populist era	22 Inc
CHAPTER 5 G20 exposure to commercial policy changes by the	lta
major trading powers	25 Jap
CHAPTER 6	Me
Developing country exposure to commercial policy change during the Populist era	Ru 30
CHAPTER 7	Sa
Corporate reaction to Populist era protectionism and	d So
its selective support for a liberal trading system	32 So
SECTION 2: SECTORAL PERSPECTIVES	Tu
CHAPTER 8	Ur 37
Trade in Apparel	37 Un
Trade in Leather Products and Footwear	44
CHAPTER 10	
Trade in General-Purpose Machinery	52
CHAPTER 11 Trade in Special-Purpose Machinery	60
CHAPTER 12 Trade in Electrical Machinery	68
CHAPTER 13	08
Trade in Communication Equipment	76
CHAPTER 14 Trade in Transport Equipment	84
CHAPTER 15 What's new in the GTA database?	92
What is the Global Trade Alert?	95
Acknowledgements	95

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

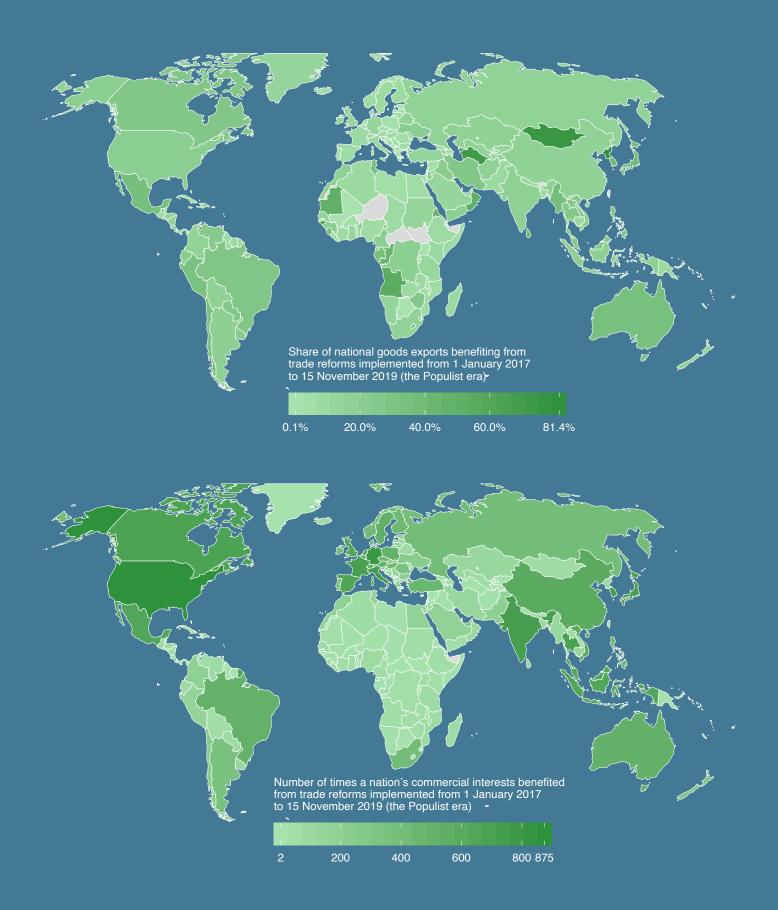
97

Australia	101
Brazil	105
Canada	109
China	113
France	117
Germany	121
India	125
Indonesia	129
Italy	133
Japan	137
Mexico	141
Russia	145
Saudi Arabia	149
South Africa	153
South Korea	157
Turkey	161
United Kingdom	165
United States	169

HOW DID YOUR NATION'S COMMERCIAL INTERESTS FARE DURING THE POPULIST ERA?



HOW DID YOUR NATION'S COMMERCIAL INTERESTS FARE DURING THE POPULIST ERA?



EXECUTIVE SUMMARY

Based on analysis of 6,755 changes to public policy affecting cross-border trade, investment, data flows, and labour migration implemented since 1 January 2017, this report confirms that the political rhetoric more critical of a liberal trading system witnessed in recent years has translated into greater protectionism and less trade liberalisation worldwide. This commercial policy shift is not confined to China and to the United States. Nor is it across-the-board, nor uniform across governments. Moreover, no account of trade policy in the Populist era would be complete without reference to significant pockets of tariff cutting and subsidy reduction seen during the past three years. Still, as the maps on the preceding pages showed, almost every nation saw export exposure to protectionism rise by more than exposure to trade reforms. World trade is less free today than it was at the dawn of the Populist era.

The turn towards populism and nationalism over the past three years is taking its toll on the world trading system, not just on Sino-U.S. trade. Full implementation of the "phase one deal" between Beijing and Washington won't unwind all Populist era tariff hikes on Sino-U.S. trade, let alone the shift towards protectionism seen elsewhere. To the extent that corporate leaders curtail investment on account of protectionism worldwide—as opposed to focusing on Sino-U.S. trade tensions—then the policy dynamics documented here imply a sustained drag on global economic growth.

The focus of this report is on policies affecting all forms of cross-border commerce implemented from 1 January 2017 to 15 November 2019. To be clear, protectionism introduced before the Populist era does not contribute to these statistics. The principal findings of this report are:

- During the Populist era governments worldwide introduced 2,723 new trade distortions, the cumulative effect of which was to distort 40% of world trade by November 2019.
- China and the United States were responsible for "only" 23% of new trade distortions introduced by governments during the Populist era.
- Counting the European Union as one, a total of 15 governments enacted policies that distorted more than \$10 billion of trade on 73 occasions during the Populist era. President Trump's trade wars and foreign reaction to them were responsible for "only" 14 instances of such jumbo protectionism.

- Resort to protectionism accelerated in 2018 and 2019. In 2017 a total of 625 additional trade distortions were introduced by governments. That total of new protectionism jumps to 1050 in 2018 and 1048 in 2019. Us-versus-them rhetoric took time to translate into action.
- Trade reform dynamics evolved during the Populist era. The year 2017 saw 240 new trade reforms introduced, up 27 on the total for 2016. 2018 saw a jump to 332 additional trade reforms but momentum was lost in 2019, with a total of new 258 tariff cuts, subsidy reductions, and other reforms being introduced this year. Not since 2012 has such a large fall in new market opening been witnessed.
- Correcting properly for duration in force, by November 2019 2.1% of world trade was affected by tariff hikes implemented since 1 January 2017 that target a single country. All tariff increases during the Populist era implicate 5.8% of world trade, which pales when compared to the world trade shares affected by subsidies. Import-competing firms benefiting from state largesse during the Populist era implicate 9.2% of world trade. By November 2019 state-provided export incentives affected even more trade (28% of world trade).
- In assessing net changes in access to the markets of the major trading powers, taking account of the amount of trade implicated by reforms is important. Remarkable as it may seem, once account is taken of commercial policy reforms, six G20 members saw their share of exports to the U.S. market benefit more from tariff cutting and the like than from American resort to trade distortions during the Populist era.
- Such is the range of industries affected by 521 Chinese subsidy reductions that no G20 trading partner of Beijing, including the United States, saw their export exposure to Chinese trade distortions exceed their exposure to Chinese trade reforms.
- G20 export exposure to reforms and trade distortions undertaken by the European Union (EU) is smaller than for China and for the United States and more balanced.
- Least Developed Country and African Union export exposure to Chinese reforms far exceeds that to Chinese trade distortions. The opposite is true for the rest of the BRICS. Meanwhile, less than an eighth

of both groups of developing countries' exports were exposed to EU and U.S. commercial policy changes during the Populist era. Lower and upper middleincome countries follow the same pattern except that the latter had greater export exposure to Populist era American trade distortions than to trade reforms.

More detail on the varied exposure of G20 members and of seven major tradable sectors to trade distortions and reforms implemented during the Populist era is given later in this Executive Summary.

Useful perspective is added by comparing commercial policies imposed during this Populist era with those implemented during two recent periods of equal length (35 months), one just before the Populist era (1 January 2014 to 15 November 2016) and one at the start of the global economic crisis (1 January 2009 to 15 November 2011). Doing so reveals:

- The share of world trade affected by the protectionist build-up during the current Populist era is ten percentage points less than the comparable shares associated with the immediate Pre-populist era (starting on 1 January 2014) and that at the beginning of the global economic crisis (starting on 1 January 2009).
- That most reports on Chinese subsidies awarded in 2019 won't become available until 2020 likely accounts for part of this shortfall, but a careful review finds no evidence that to date the scale of Populist era protectionism exceeded that of the two alternatives.
- Putting these findings on trade implicated by Populist era protectionism with the totals on resort to new protectionism above indicates how the past three years differ from earlier times: *more new trade distortions have been imposed during the Populist era on a smaller share of world trade.*
- Yet Populist era protectionism has a higher profile, probably on account of the salience of far-reaching tariff increases over the past three years and President Trump's brazen rejection of the tenets of liberal trade. As in earlier times, more world trade is distorted by different types of subsidies, but these do not generate the same degree of corporate ire as large tariff hikes.
- That many corporate leaders have spoken out much more against the tariff increases of recent years than against subsidies is intriguing and worrying. When foreign rivals receive a subsidy perhaps it easier for local firms to quietly seek subsidies from their government than it is to campaign against foreign largesse. If so, corporate support for reversing Populist era subsidies won't match their zeal for reversing tariff hikes, even though subsidies distort much more global trade.

Ultimately, companies are both the victims and beneficiaries of Populist era trade distortions. Given the relative ease of securing state largesse as compared to sustaining a successful public campaign against large tariff increases, there may not be enough support among corporate leaders for a reversal of all Populist era trade distortions. In this regard, it is worth noting that 2,431 of 6,755 public policy interventions affecting global commerce during the Populist era were increases in trade-distorting subsidies. Where will the pressure to reverse Populist era protectionism come from?

Once the full measure of policies distorting trade is taken and, bearing in mind that the "phase one deal" between China and the United States only partially reverses the tariff hikes on Sino-U.S. trade, then the findings of this report imply that heightened trade policy uncertainty, associated dampening of business confidence and corporate investment, and their adverse macroeconomic implications are almost certain to endure.

Adverse export implications for G20 members during the Populist era (2017-2019)

- The share of **Argentina**'s exports competing against subsidised import-competing rivals rose just under eight percentage points. By 2019 less than a quarter of Argentina's exports trade freely abroad.
- The share of Australia's exports competing against rivals in third markets benefiting from state-provided export incentives rose just under 11 percentage points. Overall, the share of Australia's exports facing any trade distortions abroad rose three percentage points.
- The share of **Brazil's** exports competing against any trade distortion abroad rose five percentage points. The export share competing against rivals in third markets benefiting from state-provided export incentives rose 12 percentage points. In contrast, the export share of Brazil facing tariff increases rose three percentage points. By 2019 less than a quarter of Brazil's exports trade freely abroad.
- The share of Canada's exports competing against subsidised import-competing rivals rose six percentage points. Meanwhile, the export share facing tariff increases rose five percentage points. By 2019 less than 15% of Canada's exports trade freely abroad.
- The share of **China**'s exports facing tariff increases rose just under 14 percentage points. Overall, the share of China's exports facing any trade distortions abroad rose four percentage points. By 2019 less than 30% of Chinese exports trade freely abroad.

- The share of France's exports competing against subsidised import-competing rivals rose seven percentage points. Overall, the share of France's exports facing any trade distortions abroad rose four percentage points.
- The share of **Germany**'s exports competing against subsidised import-competing rivals rose just under six percentage points. The export share competing against rivals in third markets benefiting from stateprovided export incentives rose five percentage points. Overall, the share of Germany's exports facing any trade distortions abroad rose just under five percentage points.
- The share of India's exports facing tariff increases rose just under eight percentage points. The export share competing against rivals in third markets benefiting from state-provided export incentives rose just under six percentage points. The share of India's exports competing against subsidised importcompeting rivals rose just under five percentage points. By 2019 less than a quarter of India's exports trade freely abroad.
- The share of **Indonesia**'s exports facing tariff increases rose four percentage points.
- The share of Italy's exports competing against subsidised import-competing rivals rose five percentage points. Overall, the share of Italy's exports facing any trade distortions abroad rose four percentage points.
- The share of **Japan**'s exports competing against rivals in third markets benefiting from state-provided export incentives rose just under six percentage points. The share of Japan's exports facing tariff increases rose just under four percentage points. By 2019 less than 20% of Japan's exports trade freely abroad.
- The share of **Mexico**'s exports facing tariff increases rose five percentage points. The export share competing against rivals in third markets benefiting from state-provided export incentives rose seven percentage points. The share of Mexico's exports competing against subsidised import-competing rivals rose just 10 percentage points. By 2019 less than seven percent of Mexico's exports trade freely abroad.
- The share of **Russia**'s exports competing against rivals in third markets benefiting from state-provided export incentives rose 19 percentage points. Overall, the share of Russia's exports facing any trade distortions abroad rose 15 percentage points.
- The share of **Saudi Arabi**a's exports competing against rivals in third markets benefiting from state-provided export incentives rose just under

six percentage points. Overall, the share of Saudi Arabia's exports facing any trade distortions abroad rose seven percentage points.

- The share of **South Africa**'s exports competing against rivals in third markets benefiting from state-provided export incentives rose six percentage points.
- The share of **South Korea**'s exports facing tariff increases rose just under nine percentage points. By 2019 less than 15% of South Korea's exports trade freely abroad.
- The share of **Turkey**'s exports competing against subsidised import-competing rivals rose just under five percentage points. The share of Turkey's exports facing tariff increases rose four percentage points. By 2019 less than a quarter of Turkey's exports trade freely abroad.
- The share of the U.K.'s exports competing against subsidised import-competing rivals rose six percentage points. The export share competing against rivals in third markets benefiting from state-provided export incentives rose just under seven percentage points. Overall, the share of U.K.'s exports facing any trade distortions abroad rose six percentage points.
- The share of U.S. exports facing tariff increases rose eight percentage points. The export share competing against subsidised import-competing rivals rose seven percentage points. Overall, the share of U.S. exports facing any trade distortions abroad rose just under five percentage points. By 2019 less than a fifth of U.S. exports trade freely abroad.

Although rising trade distortions dominate, no account of heavilytraded sectors during the Populist era (2017-19) should overlook tariff cuts

- The development-sensitive apparel sector saw the share of exports competing against rivals benefiting from state-provided tax breaks and other export incentives rise by just under seven percentage points. This sector, which was responsible for \$420 billion of trade in 2018, also saw the share of exports facing tariff increases rise by eight percentage points. Meanwhile, tariff cuts in this sector during the Populist era benefited 15 percent of sectoral trade. Such is the build-up of protectionism over time that, by 2019, less than 12 percent of this sector's exports are on trade routes where commerce is undistorted by policy.
- Tariff increases during the Populist era in the **leather products and footwear** encroached upon another

six percentage points of sectoral trade. Worldwide, the total value of trade in these products exported by many Least Developed Countries totalled \$217 billion in 2018. By the end of 2019 less than 13% of crossborder sales of leather products and footwear traded freely.

- Governments cutting tariffs on imports of generalpurpose machinery benefited exports equivalent to seven percent of the global total for this sectoral (which was \$974 billion in 2018). Meanwhile, the expansion of subsidies to import-competing firms during the Populist era implicated five percentage points of sectoral trade. Four percentage points of sectoral trade were also exposed to more generous state incentives to exporters. Tariff increases in this sector affected one-and-a-half percent of sectoral trade. By 2019 less than 15 percent of global trade in general-purpose machinery traded freely.
- Special-purpose machinery, a sector where \$766 billion was traded in 2018, had a mixed experience during the Populist era. On the one hand, nine percent of trade in this sector benefited from tariff cuts. On the other, tariff increases and expansions in state-provided export incentives each distorted three percent of trade in special-purpose machinery. Such is the build-up of protectionism in this sector that approximately one-quarter of trade in special-purpose machinery traded freely in 2019.
- The electrical machinery sector fared worse than special-purpose machinery. This sector, where the total value of trade worldwide was \$757 billion in 2018, saw tariff increases affecting six percent of cross-border sales. Increased subsidies to importcompeting firms distorted another three percent

of sectoral trade during the Populist era. Tariff cuts were felt in trade routes accounting for eight percent of sectoral trade. By 2019 the protectionist build-up in this sector had reached the stage that less than 15 percent of trade in electrical machinery traded freely.

- On net, trade in **communication equipment** became more distorted during the Populist sector. Tariff cuts were felt on trade routes accounting for 12 percent of total sectoral trade, which amounted to \$1.543 trillion in 2018. However, higher tariffs imposed during the Populist era affected a similar amount of trade in communication equipment. On top of this, five percent of sectoral trade was distorted by new or higher state-provided export incentives. Furthermore, the share of sectoral trade that competes against subsidised import-competing rivals rose three percentage points during the Populist era to end, remarkably, over 50% in 2019. At this time, less than 12 percent of communications equipment trade worldwide faces no trade barriers or other policy-induced trade distortions.
- Transport equipment, a sector where the total value of trade was \$1.734 trillion in 2018 equivalent to 9.9% of world trade, saw a significant expansion of trade distorted by subsidies during the Populist era. The share of sectoral trade that involved competition against subsidised import-competing rivals rose just under 14 percentage points. The share of transport equipment trade facing exporters subsidised to sell in third markets rose five percentage points. In contrast, the sectoral share facing tariff increases rose three percentage points. Less than a quarter of transport equipment trade worldwide competed freely in 2019.

SECTION 1 GLOBAL PERSPECTIVES

CHAPTER 1 WHY A GLOBAL ASSESSMENT OF POPULIST ERA PROTECTIONISM IS STILL NEEDED, A "PHASE ONE DEAL" NOTWITHSTANDING

Double-digit increases in tariff rates on imports. Trade policy shifts announced over Twitter. Pervasive uncertainty concerning access to foreign markets. On again, off again deals between China and the United States to contain trade tensions. Alarming headlines and unsettled financial markets around the globe. No longer can trade relations be regarded as a backwater of global economic governance that, through some alchemy of mind-numbing acronyms, have been tamed by enforceable world trade rules.

It seems evident that something profound changed in policies towards cross-border commerce since populism asserted itself in 2016 and 2017. This matters as evidence of falling business confidence during the past two years has been linked repeatedly to the disruption to world trading system. Moreover, while the recent announcement of a potential "phase one deal" between China and the United States may well forestall further trade restrictions being implemented and lower some tariffs previously imposed by the Trump Administration, by no means does it restore trade relations to where they were before the present U.S. administration took office. The sense that commercial policies have fundamentally altered in recent years is not dispelled by this deal, the precise terms of which have yet to be published, let alone implemented.

Now that almost three years have passed since President Trump was inaugurated, does a global assessment point to a marked shift by many governments in their policies towards foreign firms, investors, owners of intellectual property, data, and workers? Have many governments turned their back on globalisation as we once knew it? Or is any retrenchment more selective, affecting certain sectors or economies more than others?

This report investigates whether the Populist era has witnessed a significant departure from global trends in crisis-era commercial policy. For our purposes the Populist era is taken to be from January 2017, the month the Trump Administration took office, through to 15 November 2019 (when the data collection on commercial policy changes for this report stopped). The aim here is to complement analyses of trade tensions between the China and the United States with an evidence-based assessment of commercial policy trends around the globe.

To be clear, no assumption is being made here that during the Populist era changes in the commercial policies of other governments were entirely a reaction to President Trump's *America First* policies. While there have certainly been instances of retaliation to the U.S. tariff hikes of recent years, at times like these more subtle mechanisms could be at work that spread bad policy from government to government.

For instance, in an era when other governments are tilting national markets towards local firms, sometimes dressed up as industrial policy for the technologies and sectors of the future, defenders of freer trade and a level commercial playing field may be mischaracterised as naive in criticising proposals for similar initiatives at home. Holding the line against protectionism in national capitals is harder when trading partners are stacking the odds against foreign commercial interests.

Moreover, since there are so many ways by which governments can favour local firms, defenders of a liberal national commercial policies will have to fight in many domestic policy fora. National responses to foreign protectionism will likely differ, requiring a comprehensive approach to tracking commercial policy changes during the Populist era. The database employed in the preparation of this report is one that monitors policy changes covering all forms of cross-border commerce found in the 21st century.

This report draws upon information on over 6,750 public policy interventions that affect international commerce both liberalising and harmful to foreign commercial interests—and that have been implemented since 1 January 2017.¹ We know of no other analysis that is based on as much evidence of policy changes affecting international business since the UK referendum on leaving the European Union and the election of President Trump.

Three reasons why a global assessment of trade policy dynamics is needed

First, the brazen nature of U.S. trade policy seems to have been executed precisely to capture the attention of voters, the business community, the media, and foreign governments. Consequently, plenty has been written and said about the rounds of tariff increases imposed on Sino-U.S. trade. Although important, it is worth recalling that this bilateral trade flow accounts for less than 5% of world trade in goods, begging the question as to what is happening to the other 95%? A global perspective rounds out the picture, augmenting the intense focus on Sino-U.S. rivalry, of which commercial policy is one part.

Second, suppose other countries had held the line against protectionism since the Trump Administration took office in January 2017. This would imply that in the future should a more enlightened U.S. administration revert to the *status quo ante* commercial policies, then the Populist era may eventually be seen as a scary, but temporary, aberration. However, whether for retaliatory reasons, copy-cat reasons, or other motives, if other governments have extensively tilted the commercial playing field in favour of domestic firms as well, then restoring the *status quo ante* may be more difficult and less likely.

The third reason why shifting global trade policy dynamics could matter is that trade restrictions and uncertainty over future trade policy changes are thought by more and more observers to be encouraging firms to postpone or cancel investment plans, in turn causing drags on global economic growth, on the growth in world trade in goods, and on the global manufacturing sector in particular.

Recently, Gary Cohn, former Chief Economic Advisor to President Trump, argued U.S. companies "are not spending money in the United States, and I totally get why." He went on to argue:

"I think a prudent CEO or prudent board would say hey, let's wait a couple of years. And we could probably make that investment in the future, or worse, we can make an investment in another country, and import those products," he added.²

Similar sentiments have been expressed outside of the United States. For example, in its November 2019 *Monetary Policy Report* the Bank of England argued that the indirect effects of Populist era trade protectionism on business confidence and investment may have been larger than the direct effect on trade flows, import prices, and supply chains:

"Growth is also likely to have been dampened by the decline in global business confidence and associated pickup in uncertainty, which are likely to be related to the increase in trade protectionism. Surveys of investor confidence have fallen since mid-2018, and are below their historical averages. In turn, four-quarter business investment growth across G7 countries (excluding the UK) has slowed from around 6% to less than 2% over the past year. Capital goods orders for the US and euro area continue to weaken."³

The International Monetary Fund in their October 2019 *World Economic Outlook* nailed their colours to this mast, although officials pointed out that trade tensions were only one factor weighing on the global economic outlook. The Fund observed:

"A notable feature of the sluggish growth in 2019 is the sharp and geographically broad-based slowdown in manufacturing and global trade. A few factors are driving this. Higher tariffs and prolonged uncertainty surrounding trade policy have dented investment and demand for capital goods, which are heavily traded" (IMF 2019, page xiv).⁴

The Fund goes on to estimate the impact of Sino-U.S. trade tensions as cumulatively reducing the level of global GDP in 2020 by 0.8%. That may not seem a lot, however, it should be borne in mind that from 2018 to 2020 the IMF expects the world economy to grow by 10.3% (IMF 2019, Table 1.1). Consequently, the global GDP loss associated with the bilateral trade war is equivalent to one-fourteenth of forecast global growth over the same timeframe. Alternatively put, the IMF estimates that global GDP is currently \$86.6 trillion. A 0.8% loss in global GDP is equal to a loss in income of \$692 billion, equivalent to 40% of the GDP of Sub-Saharan Africa.⁵ Losses on this scale can be ill afforded.

5 Relevant statistics obtained from https://www.imf.org/external/datamapper/NGDPD@WE0/OEMDC/ADVEC/WE0WORLD

For reference the World Trade Organization's Trade Monitoring Database contains 906 entries of commercial policy changes introduced from 1 January 2017 to 31 December 2019. The United Nations' Conference on Trade and Development (UNCTAD)'s Investment Policy Hub contains information on 299 policy changes over the same timeframe. As the data source used in this study (the Global Trade Alert) does not report on changes in health and safety standards nor on the signing of new regional trade agreements, summary statistics assembled by the international organisations on policy changes on these matters are not reported here.

^{2 &}quot;Cohn blames Trump tariffs, uncertainty for weak capital spending," Politico, 4 December 2019 available at https://www.politico.com/news/2019/12/04/cohn-trump-tariffs-capital-spending-075760.

³ The relevant section of this Monetary Policy Report can be accessed at https://www.bankofengland.co.uk/monetary-policy-report/2019/november-2019/in-focus-tradeprotectionism-and-the-global-outlook. To support its argument the Bank cites evidence from the Global Trade Alert, the same database that underpins the findings of this report.

⁴ This argument is elaborated in chapter 1 of IMF (2019) see, for example, the statements made at the bottom of the first column of page 7.

Suppose that it could be demonstrated that the greater resort to trade distortions was not confined principally to China and the United States. To the extent that trade policy dynamics worldwide have shifted in a more discriminatory direction—or that the momentum behind trade liberalisation is waning—then commercial policies in the Populist era represent a bigger threat to global economic prospects.

Such a finding would also influence assessments of the recent phase one deal between China and the United States. While the successful implementation of this deal would provide some welcome respite, it would not return the world economy to the commercial policies seen before the Populist era.

Contents of this report

Our findings are presented in the three sections of this report.

We begin by calling attention to a puzzle: Even though 2018 and 2019 witnessed spikes in the total number of new protectionist measures implemented worldwide, the share of global trade implicated by protectionism during the Populist era is certainly no larger than in the years that immediately preceded it. Yet, only recently did the private sector react so adversely to distortive commercial policies with business confidence suffering and investment being postponed, which in turn is said to have contributed to a global manufacturing slowdown. Chapters 2 and 3 establish the facts on changing commercial policy stance and provide conservative estimates of the shares of world trade affected during the Populist era and in the years before.

For some, however, what really matters is the "big ticket" protectionism by China and the United States. But that observation begs the question whether other governments have resorted to far-reaching trade distortions during the Populist era. Chapter 4 details the instances of what we term "jumbo protectionism" taken worldwide and demonstrates that in total 15 jurisdictions have put in place 73 trade distortions affecting over \$10 billion of goods trade during the Populist era. The systemic implications of these findings for the "phase one deal" between Beijing and Washington DC are discussed.

Our analysis then shifts from the global to the national. Chapters 5 and 6 focus on the export exposure of G20 and developing countries, respectively, to the trade distortions imposed by governments in major destination markets during the Populist era. These two chapters indicate in quantitative terms what is at stake for countries at different levels of development, not least because exports have often proved to be an important source of economic growth. Section one concludes with a chapter that discusses four reasons why, when compared to earlier times, there appears to be a stronger link between disruptions to the world trading system and corporate investment decisions during the Populist era. Since many corporate leaders have been more vocal about the trade disruptions witnessed during the Populist era this, in turn, raises the deeper question of what types of globalisation corporate leaders are more likely to defend and which policyinduced distortions to global commerce corporates they are more likely to turn a blind eye to.

On the basis of the evidence presented in this report, and without implying that all corporate leaders see matters the same way, on net corporates appear to take greater exception to trade disruptions caused by tariff hikes rather than by subsidies. This has important implications in a global trading system where much more trade has been distorted by subsidies than by higher taxes on imports, during both the Populist era and over the past decade. Should corporate pressure focus only on unwinding part of the trade distortions introduced during the Populist era then other means will be needed to get rid of the rest.

The second section of the report takes a sectoral perspective on the resort to discrimination against foreign commercial interests during the Populist era and before. Evidence on the scale and form of policy changes worldwide affecting cross-border trade in seven of the world's largest tradeable goods sectors is presented. These chapters shed light on the extent to which commercial policies in the Populist era represent a break with the past.

These sectors were chosen in the following manner. Two sectors that account for significant shares of the exports of the Least Developed Countries were included in the analysis— apparel and leather footwear. This introduces a further development dimension to this report. The other five sectors were chosen because they are among the largest sectors in terms of the value of global goods trade. It would have been desirable to include a discussion of the exposure of certain service sectors' exports to Populist era protectionism but the absence of detailed data on trade flows in the service sector precluded this.

The third section of the report includes a chapter that highlights what is new in the Global Trade Alert database, the source used extensively in this report. That is followed by country annexes, one for each member of the G20. Although the G20 abandoned its no protectionism pledge in 2018, we continue to report summary statistics on commercial policy intervention by these large trading nations so that they can be held accountable. These summary statistics can be compared to those published by the World Trade Organization for each of its members (available here).

This global assessment draws upon a rich database of policy changes relevant to 21st century cross-border business

In characterising the commercial policy stance of governments this report draws upon the extensive, ongoing evidence collection initiative, the Global Trade Alert, to which we are both affiliated. This initiative has collected information on over 25,000 public policy interventions affecting different types of international commerce that have been announced or implemented since November 2008. Almost all of those interventions (well over 95%) have been documented using official sources or company declarations (typically concerning the receipt of subsidies). Each policy change is thoroughly investigated and reviewed twice before being published on the Global Trade Alert website.

As will become clear, evidence is collected on state acts that improve the access of foreign firms to local markets as well as measures frustrating that access. Web-scraping and other automated tools are used along with human interventions to identify potential policy changes of interest. More information on the most recent developments in this evidence collection initiative can be found in Chapter 15. An extensive account of the methodology employed by the Global Trade Alert team can be found in Evenett (2019). Given the focus of this report is on commercial policy choices during the Populist era, taken here to be from 1 January 2017 to 15 November 2019, the data collected during that time interval is of particular interest. A total of 6,755 public policy interventions affecting different types of global commerce have been documented to date for the Populist era. Of that total 73%, or 4,986 policy interventions, worsened the treatment of foreign firms, workers, investors, or owners of intellectual property compared to their local rivals. China and the United States together are responsible for implementing 2,146 of the global total of 6,755 policy interventions, implying that over 4,600 policy changes were undertaken by other countries.

A total of 4,158 policy interventions recorded were implemented by national governments, another 1,411 by other national agencies (such as the largesse provided by export credit agencies), 328 by subnational government bodies, and 441 by supranational organisations (such as the European Commission).

In terms of policy instruments implemented during the Populist era, over 60% (in fact, 3,009) were forms of subsidies unrelated to exporting, a total of 1,080 involved standard tariff changes (increases and decreases), 987 involved changes to incentives to export, and 515 involved changes to duties on dumped imports, subsidised imports, or on import surges. As these statistics show, the global picture of trade policy developments since the start of 2017 is considerably more varied than the bilateral tariff war between China and the United States.

CHAPTER 2 COMMERCIAL POLICY TRENDS DURING THE POPULIST ERA

The purpose of this chapter is to demonstrate that resort to new protectionism and reforms affecting global commerce have changed markedly during the Populist era as compared to prior years. However, comparing resort to commercial policy across years requires care.

It is important to take into account that there has been more time to document government measures implemented in earlier years. Governments do not always publish their commercial policy changes immediately and some try to bury controversial announcements on their websites. Not surprisingly, then, there are lags in reporting public policy intervention, both reforms and distortions to commerce. Correcting for such reporting lags is vital otherwise the false impression can arise of falling resort to protectionism over time simply because there has been less time to find material on more recent years.

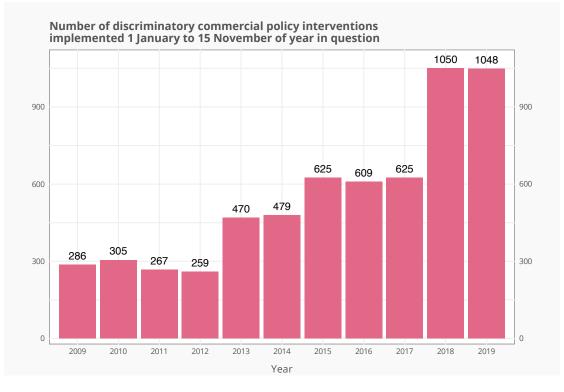
One way to fix this problem is to ask in the case of monitoring protectionism, for each year, how many policy interventions that discriminate against foreign commercial interests were implemented since the start of the year and documented by a common end date. Here we take 15 November as our end date, reflecting the completion of the latest phase of data collection by the Global Trade Alert team. For each year 2009 to 2019, Figure 1 reports the total number of discriminatory policy interventions implemented since 1 January and documented by 15 November of the corresponding year.

Discrimination against foreign business spiked in 2018 and 2019

The first year of the Populist era (2017) does not appear to be that different from 2015 and 2016 and may reflect the fact that the Trump Administration had to get its feet under the table. Plus investigations were initiated by that Administration that they believe provided the justification for policy intervention in 2018 and 2019. The total for 2017 also suggests that governments elsewhere did not increase their overall resort to protectionism just because the Trump Administration took office.

FIGURE 1

Discrimination against foreign firms, investors, service providers, and workers spiked in 2018 and 2019



The 25th Global Trade Alert report | 15

The two years that followed, however, are very different. During 2018 and 2019 a clear jump of over 400 discriminatory measures can be found in the global totals. In both years approximately 1,050 policy interventions were implemented that tilted the commercial playing field against foreign firms. This represents a sharp break with the past. Indeed, the resort to protectionism in 2018 and 2019 is running at levels three times the rate documented at the onset of the global financial crisis.

The contribution of China and the United States to the global totals of new discriminatory measures differs between the Populist era and before. During 2017-19 China and the United States together were responsible for 23% of the world's newly implemented protectionist measures. Before the Populist era, China and the United States were responsible for "only" 12% of global totals for discrimination against foreign commercial interests.

The doubling of this percentage is noteworthy, but it does imply that the lion share of new protectionist interventions during the Populist era involved governments of other countries. In fact, during 2018 and 2019 a total of 1,617 public policy interventions that harmed foreign commercial interests were not implemented by the Chinese or American authorities.

Meanwhile commercial policy reform momentum was lost

When it comes to knitting together national markets, commercial policy reforms matter. Contrary perhaps to expectations—not least given populist rhetoric against trade, investment, and migration reforms of the past—at least as far as worldwide trends are concerned, there has been no abrupt break at the start of the Populist era concerning the number of commercial policy reforms implemented. Indeed, the total number of such reforms implemented during 2018 was 38% higher than in 2017. However, that upward momentum was almost entirely reversed in 2019.

While the first two years of the era of populist trade policy saw increases in the total number of commercial policy reforms, the total implemented during 2019 fell by almost a quarter. Figure 2 compares the total number of tariff cuts, investment policy reforms, and other steps that improved the relative treatment of foreign firms, workers, and investors implemented from 1 January to 15 November for each year from 2009 to 2019. During 2019 a total of 258 commercial policy reforms were implemented, in comparison to a total of 332 over the comparable timeframe in the previous year, 2018.

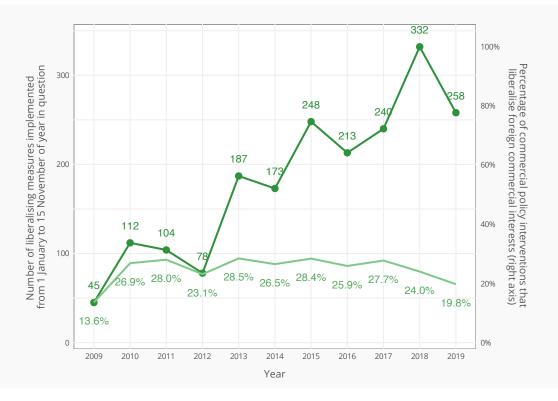


FIGURE 2 This year saw the largest percentage fall in new trade reforms since 2012

While generally following an upward trend over time, 2019 joins 2012 as a year when there have been significant falls in the total number of commercial reforms undertaken. Put differently, after six years of growing momentum behind unilateral commercial policy reforms, in 2019 matters went into reverse. It will be interesting to see in 2020 whether this is a temporary set back (as it was in 2012) or reversal of the trend, which would raise the question of whether the era of populist trade policy has diminished government interest in integrating their national markets further into regional and global markets.

Compared to 2018, the total number of tariff cuts implemented unilaterally by governments during 2019 fell from 144 to 103. Likewise, the total number of reforms to export policies (incentives and restrictions) fell from 33 to 24. The total number of reforms to foreign direct investment reforms implemented between 1 January and 15 November fell from 30 in 2018 to 23 in 2019.

Over the same timeframe the liberalisation of visa regimes for immigrant (non-refugee-related) workers picked up: in 2018 a total of 8 reforms were found whereas the total has increased to 20 during the same period in 2019. Overall, then, governments slowed down the pace of reforms to trade in goods and investment regimes but, perhaps surprisingly given the rhetoric of many populist politicians, have relaxed somewhat access for foreign workers to national labour markets.

Taken together, the evidence presented in this chapter on the frequency of public policy interventions that affect international business suggest that there has been a significant evolution in government behaviour during the Populist era. Moreover, that change is not accounted for solely by changed commercial policies of China and the United States. Since the start of 2017 other governments were responsible for three-quarters of the policy changes affecting international business that harmed foreign workers, investors, traders, and owners of data and intellectual property.

CHAPTER 3 POPULIST ERA TRADE DISCRIMINATION DID NOT TRANSLATE INTO LARGER SHARES OF WORLD TRADE AFFECTED

This chapter investigates whether the increased resort to protectionism of the Populist era affects larger shares of world trade than before. To compare the scale of crossborder commerce implicated by different types of policy intervention and over time, we calculated the appropriate trade coverage statistics.

Here we report on the shares of world goods trade that are covered by goods trade-related policy interventions in the Global Trade Alert database that treat foreign traders worse than their domestic rivals. We have developed and refined a conservative methodology⁶ that uses the most finely-grained global trade data available⁷ to estimate the shares of world goods trade affected by different types of harmful policy interventions implemented from 1 January 2017 to 15 November 2019.

To provide meaningful benchmarks, we compare the findings for trade coverage during the Populist era with two earlier eras of comparable length. As our benchmark periods we chose the years immediately preceding the Populist era (1 January 2014 to 15 November 2016) and the beginning of the macroeconomic policy response to the global economic crisis (1 January 2009 to 15 November 2011). We will be interested in whether the trade covered by Populist era protectionist measures exceeds those of earlier eras.

Our trade coverage estimates differ in one important respect to those reported by others—our estimates are

duration adjusted. That is, if a tariff increase comes into force on 1 December and remains in force for the rest of the year, then we would weigh the annual observed trade flow by 31/365, reflecting the fact that the tariff was in effect for 31 of the 365 days of the year. This implies that our estimates of trade coverage are lower than the headline numbers frequently reported in the media, which tend not to be duration adjusted. We believe that in terms of better capturing actual trade affected in any given year, our approach is more accurate.

Targeted import tariff increases are a distinctive feature of the Populist era

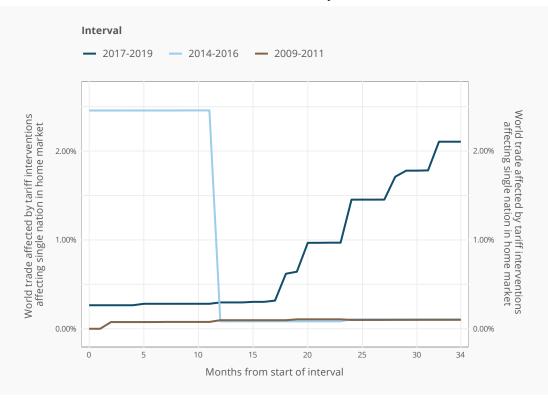
We start our analysis with the most prominent trade policy tool of the Populist era: tariff increases targeted at a single country. Figure 1 confirms that the build-up of the Sino-U.S. trade war distinguishes the Populist era from the other periods. In the months from January 2017 on, the share of world goods trade covered by tariff increases that singled out one trading partner rose steadily over time (see the dark blue line.) No such dynamic was found during the earlier two eras. Targeting with tariffs, then, is confirmed as a feature of the Populist era. The total amount of global goods trade so affected just exceeded 2% in November 2019.

⁶ An explanation of this and other matters relating to the construction of the Global Trade Alert database can be found in Evenett (2019). One pitfall to avoid in computing trade coverage statistics is double counting. A particular trade flow may be hit by multiple policy interventions that discriminate against foreign commercial interests. The statistics presented here and in other Global Trade Alert publications were specifically calculated to avoid double counting. However, it does imply that the simple sum of the trade covered across multiple protectionist policy instruments is typically greater than the trade covered by any protectionist policy intervention, as will be evident when interpreting Figure 5 below.

⁷ Specifically, we use the United Nations' COMTRADE database at the six-digit level of disaggregation.

FIGURE 1

Adjusted properly for time in force, Populist era targeted tariff increases affected around 2% of world trade by the end of 2019



40% of world trade faces trade distortions imposed during the Populist era

A build-up in the world goods trade affected by tariffs targeting China and the U.S. won't surprise anyone. Since our goal is to provide a global perspective, has there been a build-up during the Populist era in the trade covered by other forms of protectionism? In short, the answer is yes, as Figure 2 makes clear. In this figure, we focus on the Populist era and depict the trade covered by targeted and untargeted interventions for various policy instruments, not just import tariffs.

Inspection of Figure 2 leads to several findings. First, during the Populist era protectionism targeting single nations accounts for very small percentages of global goods trade across all policy instruments depicted.

Second, non-tariff distortions affecting exporters from mutiple nations have grown throughout the Populist era and by the end of 2019 affect an eighth of world goods trade. Further investigation revealed that, as far as trade covered is concerned, these non-tariff policy distortions are dominated by subsidies to import-competing farmers and manufacturers. These subsidies help the latter defend their market share at the expense of foreign traders.

Third, by the end of 2019 over a quarter of global goods trade was influenced by new export incentives offered by governments since the start of 2017. Ten times as much goods trade was affected by Populist era attempts to ginger up exports than the headline-grabbing steps by Washington DC to reduce imports from China and Beijing's retaliation.

Fourth, protectionism during the Populist era has built up so much that by the end of 2019 two-fifths of world goods trade is affected by policy measures that harm foreign exporters. To the extent that the Global Trade Alert team has missed any relevant Populist era protectionist measures, then this overall finding of the scale of Populist era protectionism is an underestimate.⁸

⁸

Recall also that the Global Trade Alert team uses a conservative methodology which will tend to depress calculated trade coverage shares. For example, subsidies whose total value fall below \$10 million are not documented by the Global Trade Alert team and so are not included in either the counts of trade distortions or the associated trade coverage totals. To the extent that this de minimis level is too restrictive then the true trade coverage shares will be higher than those reported here. Recall also that that Global Trade Alert team does not ordinarily include health and safety standards. To the extent that some such standards are masquerading as protectionism, then the true trade coverage shares for Populist era protectionism will be even higher.

FIGURE 2

Over a third of world trade is affected by trade distortions imposed since the start of the Populist era

tervention type and target

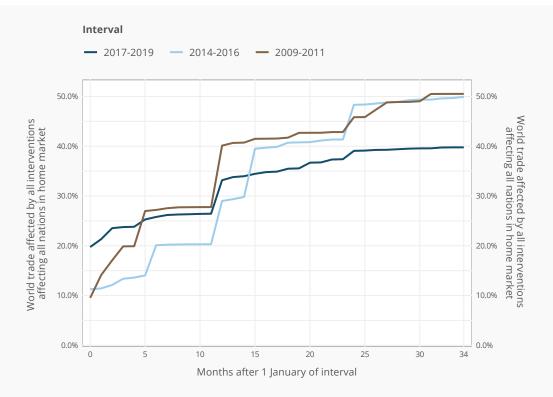
- all interventions affecting all nations
- export incentive interventions affecting multiple exporters
- non-tariff interventions affecting multiple exporters

non-tariff interventions affecting single exporter
tariff interventions affecting multiple exporters
tariff interventions affecting single exporter



FIGURE 3

Reporting lags notwithstanding, the build-up of trade distortions was larger before the Populist era



In terms of world trade implicated, the Populist era is no worse than earlier eras

Remarkable as this may seem, the build-up of goods trade covered worldwide caused by Populist era trade distortions is actually less than that during 2014-16 and 2009-11 (see Figure 3). At the end of both of the latter periods, over half of global goods trade was covered by recently implemented trade distortions, typically but not exclusively state-provided export incentives. This finding calls into question whether the Populist era of trade policy is exceptional. Taking an intertemporal perspective on global developments leads to a different assessment than an exclusive focus on the Sino-U.S. trade war.

Before discounting the Populist era, however, it is worth noting that for the first 20 months or so in Figure 3 the goods trade coverage shares for the Populist era track those of earlier two periods. Only in later months is there a divergence. There may be a straightforward reporting reason for this—information on Chinese subsidies to import-competing firms only becomes available with a lag of one year, implying that the 2019 data on such subsidies has not been incorporated into the totals for the Populist era but it has for the other two earlier eras. While it is unlikely that such 2019 data on Chinese subsidies will narrow all of the gap from month 20 on, the divergence in the total reported trade coverage shares will be smaller than found in Figure 3.

A cautious interpretation is that, to date, there is no evidence that the share of global goods trade affected by protectionism during the Populist era exceeded that seen during the years before Donald Trump took office and that seen at the start of the global economic crisis. The higher global totals of the counts of new instances of discrimination against foreign commercial interests did not translate in the Populist era into higher shares of global goods trade affected by protectionism.

CHAPTER 4 JUMBO PROTECTIONISM DURING THE POPULIST ERA

What makes the Populist era of trade policy stand out for some is the resort to policy interventions that curtail large swathes of imports. On this view the defining characteristic of recent years are big ticket policy announcements—such as threats to raise import tariffs on hundreds of billions of dollars of trade—and not the cumulative impact of thousands of protectionist measures reported in earlier chapters. With this perspective in mind, the purpose of this chapter is to summarise the resort to policy interventions during the Populist era that harm massive amounts of goods trade.

One question addressed here is the degree to which China and the United States are responsible for the big ticket announcements made since the Populist era began, taken for the purposes here to be from 1 January 2017. The working assumption of some analysts seems to be that Beijing and Washington DC are responsible for the biggest threats to world trade implemented in recent years. In which case getting these two trade behemoths to change direction is the first order challenge facing supporters of a liberal trading order. To the extent that this working assumption is wrong and responsibility for big ticket protectionism is more widely shared, then the nature of the challenge changes.⁹ Again, only a global perspective can get to the bottom of this matter.

Defining jumbo protectionism

In previous reports we have referred to policy interventions that distort vast amounts of international trade as "jumbo protectionism." Specifically, we have referred to a policy intervention as a form of jumbo protectionism if every one of the following five conditions are met:¹⁰

1 The *implementation* of the policy intervention *almost certainly* or *likely* resulted in *worse treatment*

of foreign commercial interests compared to their domestic rivals located in the jurisdiction where the intervention came into force.¹¹

- 2 The policy intervention in question was implemented by a *national level* state ministry or agency (thereby excluding interventions by sub-national governments) or by a supranational official body (such as the European Commission).
- 3 The policy intervention in question did not favour a single firm (thereby excluding single-firm bailouts).
- 4 The trade covered by the intervention was calculated conservatively to be at least \$10 billion.
- 5 For subsidy interventions (both to import-competing firms and to exporters), the estimate of the trade covered was less than 100 times the budgetary outlay on the subsidy.

Some may find this approach too conservative—after all, Airbus and the European governments that own Airbus may find excluding firm-specific subsidies to its U.S. rival, Boeing, unsatisfactory. Moreover some subnational authorities, such as the state of California or the constituent states of India, have economies and government budgets larger than some nation states. These considerations imply that the results presented in this chapter are likely to understate the scale of jumbo or big ticket protectionism.¹²

The 4,986 discriminatory public policy interventions in the Global Trade Alert database that were implemented between 1 January 2017 and 15 November 2019 were assessed according to the five criteria outlined above. A total of 73 instances of jumbo protectionism were identified. As of December 2019, twelve of those 73 jumbo protectionist measures are no longer in force.

⁹ By the way, finding that China and the United States are not alone in engaging in big ticket protectionism does not diminish the harm their trade distortions are doing. Nor does it diminish any adverse impact on the credibility of the world trade rules that were supposed to discourage such protectionism in the first place.

¹⁰ In addition to these filters each candidate jumbo protectionist measure was reviewed separately. Where there are doubts that the measure affects more than \$10 billion of trade when implemented in full, then the candidate was excluded from the list of final jumbo measures. No policy intervention was included on that final list that did not pass through the five filters listed in the main text.

¹¹ That is, the implemented policy intervention in question is classified amber or red in the Global Trade Alert database.

¹² Given the absence of fine-grained service sector trade data, the jumbo protectionist measures identified in this chapter relate only to international trade in goods. Service sectorrelated jumbo protectionism would be in addition to that reported here.

As to the total value of goods trade covered by jumbo protectionism, we estimate that the jumbo protectionist measures that came into force in 2017 affected \$2.64 trillion of trade. Populist era jumbo protectionist measures covered \$3.7 trillion and \$3.0 trillion of goods trade in 2018 and 2019, respectively.¹³

Twenty-five of the jumbo protectionist measures found during the Populist era involved some type of import restriction. Another 25 jumbo measures were government measures to expand exports, 15 of which were tax-based export incentives. Ten further measures involved different types of subsidies to import-competing firms. Seven jumbo measures involved the implementation of discriminatory public procurement measures. During the Populist era, jumbo protectionism comes in multiple forms.

Fifteen jurisdictions were responsible for jumbo protectionism during the Populist era

Map 1 reveals the identities of the jurisdictions responsible for implementing jumbo protectionist measures during the Populist era. Counting the European Union as one jurisdiction, a total of 15 jurisdictions were responsible for implementing the 73 instances of jumbo protectionism imposed during the Populist era.

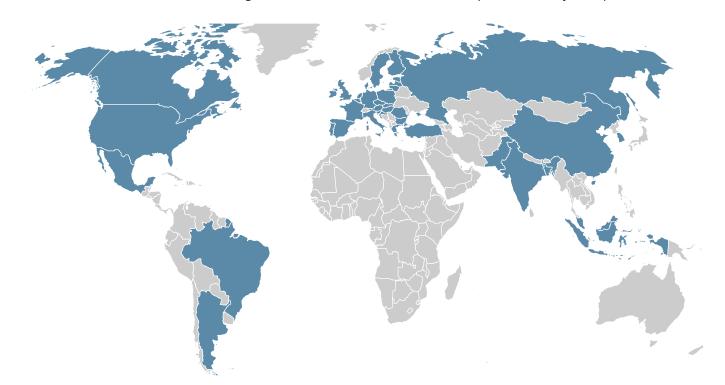
The United States was responsible for implementing the largest number of jumbo protectionist measures, eighteen in total. China was responsible for implementing six large scale trade distortions, fewer than Canada and the Russian Federation (seven jumbo measures each). During the Populist era India was responsible for implementing 14 jumbo trade distortions.

Counts of interventions are again somewhat misleading. The cumulative effect of China's six jumbo measures was to affect just under \$837 billion of goods trade in 2019. Whereas, by 2019, the cumulative effect of the U.S. jumbo measures still in force was to cover just over \$542 billion of goods trade.

Whether the metric used are counts or goods trade covered, China and the United States do not contribute the lion share of jumbo protectionism imposed during the Populist era. The responsibility for the big ticket policy interventions distorting the world trading system cannot be entirely laid at the doors of Beijing and Washington DC. Whether the trade conflict between these two behemoths encouraged resort by others to jumbo protectionism has yet to be established. If so, then these two giants culpability goes beyond their own actions.

MAP 1

The Sino-U.S. trade war notwithstanding, China and the United States are not responsible for all jumbo protectionism



Note: Jurisdictions marked in blue have implemented at least one jumbo protectionist measure.

13 These reported totals avoid double counting those trade flows at the six -digit level of disaggregation affected by two or more jumbo protectionist measures.

What contribution of America's trade wars?

Another way to frame this discussion is to ask to what extent the jumbo protectionism of recent years has been the result of the trade wars launched by the Trump Administration, bearing in mind that China has not been the only target of tariff hikes imposed by Washington DC. After all, the United States has imposed higher import tariffs on imported aluminium and steel on national security grounds. In the works are possible tariff increases on imported cars and car parts, although those potential tariffs are not included in the statistics and charts presented in this chapter.

To investigate this matter we reviewed the factors reported to be responsible for the imposition of each of the 73 jumbo protectionist measures to see if a trigger was the *America First* policies of the Trump Administration. We classified jumbo measures according to whether they were trade restrictions associated with the U.S.-China trade war, America First policies affecting U.S. trading partners other than China, subsidies to mitigate import restrictions associated with the U.S. trade war against China or others, or other unrelated policy interventions. Moreover, we ranked the jumbo protectionist measures according to their estimated trade coverage, so as to examine whether certain types of jumbo measure were associated with larger or smaller amounts of trade coverage. The results can be found in Figure 1. We estimate that less than a fifth, 14 to be precise, of the jumbo protectionist interventions implemented during the Populist era of trade policy can be linked to President Trump's trade wars and foreign reaction to them. Moreover, of the jumbo protectionist measures with the largest estimated goods trade coverage, only three of the 10 largest are associated with the Sino-U.S. trade war. President Trump's trade war are contributing to global totals of jumbo protectionism, but they are only part of the story.

Implications of these findings for the reception of a "phase one deal" between Beijing and Washington DC

Again, a global perspective sheds light on sizeable Populist era trade distortions that go beyond the trade tensions between China and the United States. Focusing on the latter tensions miss important threats to the liberal trading order.

In turn, this raises the question as to how much of the observed slowdown in investment, in particular in tradable goods sectors such as manufacturing, was due to the Sino-U.S. trade war or due to the big ticket protectionism of other governments? The answer to this question is important as it could influence the extent to which corporate investment plans are reinstated should a "phase one deal" between China and the United States be implemented in the coming months.

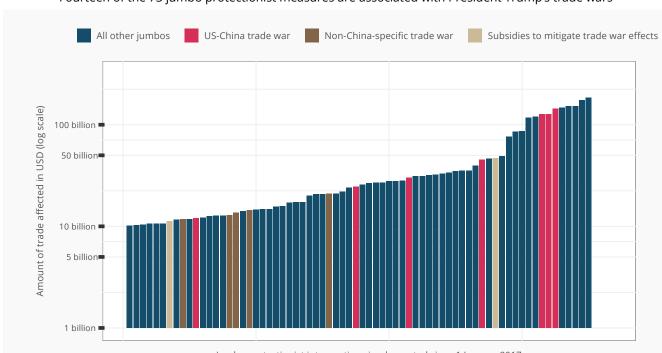


FIGURE 1

Fourteen of the 73 jumbo protectionist measures are associated with President Trump's trade wars

Jumbo protectionist interventions implemented since 1 January 2017

CHAPTER 5 G20 EXPOSURE TO COMMERCIAL POLICY CHANGES BY THE MAJOR TRADING POWERS

Countries differ considerably in the products that they export and in their dependence on the large markets of China, the European Union (the EU), and the United States. Consequently, the stakes that governments have in the trade reforms and trade discrimination undertaken by these major three trading powers need not be the same potentially affecting the macroeconomic repercussions from commercial policies adopted during the Populist era.

Indeed, some heavily export-dependent nations, such as Germany, are often reported as having suffered more from the lurch towards protectionism witnessed in recent years in key foreign markets. Commodity exporters, on the other hand, may be dependent more on the overall health of the global economy, rather than on the trade policies affecting their particular exports.

While the aggregate statistics presented in the last two chapters helped paint the overall picture of exposure to commercial policy changes during the Populist era, in this chapter and the next we explore the exposure of specific countries, or groups of countries, to the policy interventions affecting goods trade undertaken by the three major powers of the world trading system. Specifically, we examined the exposure of individual G20 countries' goods exports to the commercial policy changes implemented between 1 January 2017 and 15 November 2019 by China, the European Union, and the United States.

First, we plotted the share of each G20 member's national income that is sold in each of these three large markets against the percentage of their exports to these destination markets that face trade discrimination implemented during the Populist era. This plot is represented in the upper panels of Figures 1 to 3. These panels reveal the degree of *absolute* exposure of a G20 member's exports to discriminatory policy changes in the three major trading powers.

Second, for each of the three large destination markets, we plotted the percentage of each G20's bilateral exports exposed to discriminatory trade policies against the percentage exposed to trade reforms. This plot is represented in the lower panels of Figures 1 to 3. These panels reveal the degree of *relative* exposure of a G20 member's exports to policies that change the market access to the trading powers.

In both panels the variation across the G20 membership reveals the potential for *asymmetric* effects of Populist era commercial policy changes by China, the European Union, and the United States. As the focus here is on the policy changes by these trading powers towards imports, none of the evidence presented in this chapter relates to policy changes that seek to boost exports in third markets.

Net improvements to G20 access to the Chinese market

Unlike the other two destination markets that we shall consider, no G20 member ships more than 10% of its national income to the Chinese market (see the upper panel of Figure 1). However, there is considerable variation across the G20 membership to Chinese policies that harm their bilateral exports. Both Argentina and the United States have seen more than half of their exports to China suffer from worse treatment implemented during the Populist era. Arguably, this finding for the United States is not surprising given the ongoing bilateral trade war.

There appears to be no relationship across China's G20 trading partners between absolute levels of export exposure and the percentage of bilateral exports suffering worse treatment during the Populist era, as given by the very low explanatory power of the former on the latter.¹⁴

¹⁴ Specifically, a simple ordinary least squares regression was run on the latter with the former being the only independent variable other than a constant.

What may have been overlooked is the degree to which China has taken steps during the Populist era to effectively improve foreign access to its markets (see lower panel of Figure 1). This is not just a matter of cutting import tariffs, quotas, and licenses (which China has done 46 times from 1 January 2017 to 15 November 2019) but also reducing subsidies paid to import-competing firms (undertaken on 521 occasions over the same timeframe). The consequences of these reforms can be found in the bottom panel of Figure 1. For every G20 member, including the United States, the percentage of their bilateral exports benefiting from Populist era commercial policy reform by China exceeds the percentage of their bilateral exports facing worse treatment.

Mixed changes in access to the United States market, in absolute and relative terms

The upper and lower panels of Figure 2 reveal the degree to which access to the United States market has deteriorated during the Populist era, in absolute terms and relative to the degree of trade reform. Ten G20 members saw 30% of more of their bilateral exports to the United States face new trade distortions implemented by the federal government or by state governments (that can offer subsidies to firms facing import competition, including those firms making investments in a state).

In contrast, six G20 members saw their bilateral export exposure to American import reforms exceed the comparable exposure to American policy changes limiting imports. These six G20 members are those that lie on or below the 45-degree line in the lower panel of Figure 2. Broadly speaking, there is a (weak)¹⁵ positive correlation between a G20 member's exposure to new American import restrictions and better access to American markets, indicating the potential importance of the product composition of a nation's exports in determining the net effect on its exports of American commercial policy changes during the Populist era.

Smaller exposure to changing EU market access

In contrast to China and the United States, during the Populist era no G20 member saw more than a quarter of their exports to the EU suffer from worse treatment (see the upper panel of Figure 3). This takes account of policy changes that affect extra-EU access to its markets by the European Commission and by EU member states (that can offer subsidies to import-competing firms, amongst other trade distortions).

Moreover, as bottom panel of Figure 3 makes clear, those G20 members that saw higher levels of bilateral exports exposure to EU limits on market access during the Populist era also tended to benefit from greater bilateral exposure to EU commercial policy reforms. The latter reforms involved 29 cuts in import tariffs, 21 cuts to subsidies to import-competing firms, and seven improvements to import quotas and licensing regimes implemented from 1 January 2017 to 15 November 2019 which affect imports from outside the European Union.

The perils of generalising

One key takeaway from the findings presented in this chapter is that generalising about changes in market access to China, the European Union, and the United States is unwise. There is considerable variation across G20 export exposure to policy changes in these three trading powers, both in terms of the degree of exposure to import restrictions and to trade reforms. If anything, reductions in the subsidies received by import-competing firms in China has improved access to that nation's markets more than many may have appreciated. An exclusive focus on import tariff changes would have missed this finding.

¹⁵ The p-value on the relevant independent variable (percentage of bilateral exports to the United States benefiting from import policy reforms) is 0.072.

FIGURE 1

Exposure to Chinese commercial policy change during the Populist era

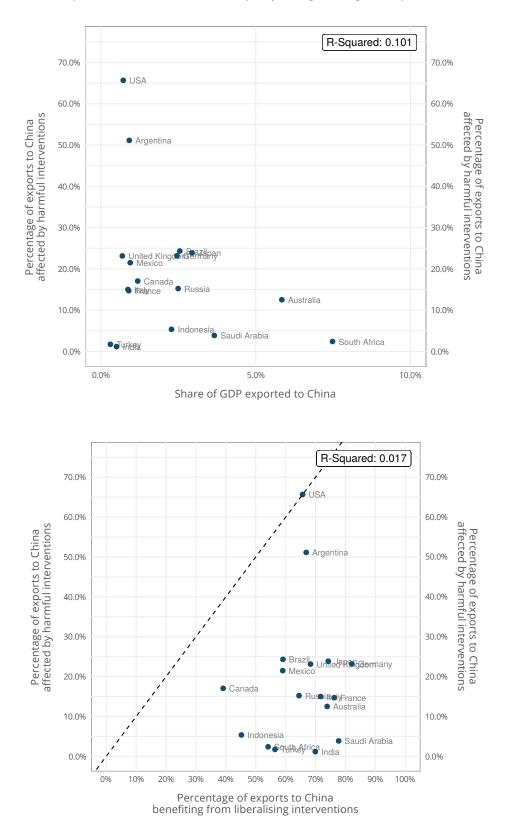


FIGURE 2 Exposure to US commercial policy change during the Populist era

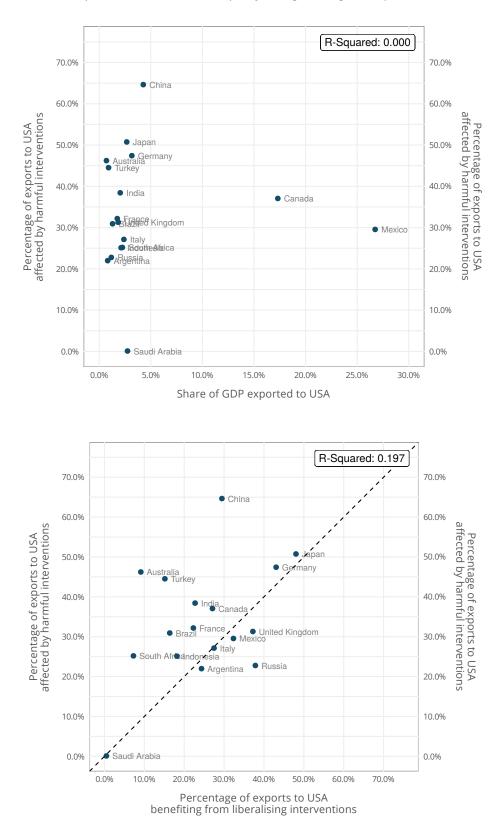
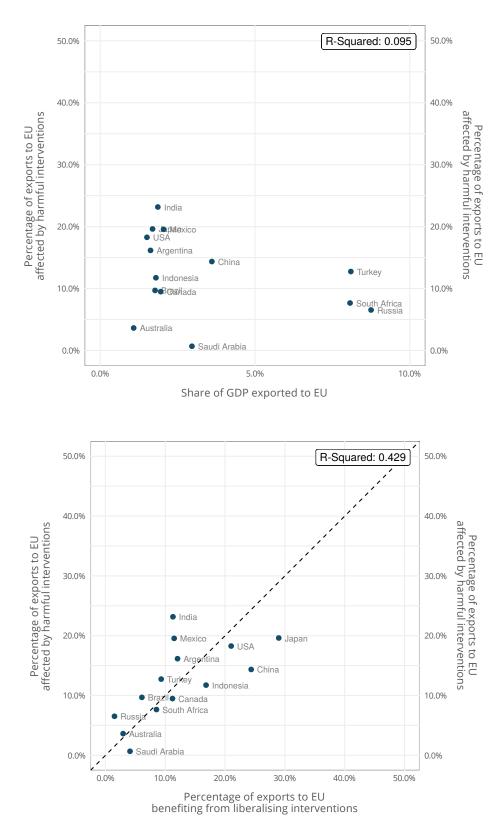


FIGURE 3

Exposure to European Union commercial policy change during the Populist era



CHAPTER 6 DEVELOPING COUNTRY EXPOSURE TO COMMERCIAL POLICY CHANGE DURING THE POPULIST ERA

In this chapter we explore whether developing country access to the large overseas markets changed considerably during the Populist era. While such market access is often conditioned by special schemes for imports from (typically selected) developing countries, such as national schemes for Generalised Systems of Preferences, other policy changes can influence the commercial opportunities of exporters from developing nations and need to be taken into account as well.¹⁶

Considering developing country market access also to the largest emerging markets, and not just the biggest industrialised country economies, may reveal the degree to which commercial policy change during the Populist era affected so-called South-South trade flows as well as North-South trade flows.

Specifically, we consider four groups of developing country exporters: the Least Developed Countries, the members of the African Union, and the countries the World Bank deems as lower-middle income and uppermiddle income. Evidently, membership of these grouping is not mutually exclusive, still it is useful to summarise the average exposure of each group's goods exports to commercial policy changes undertaken in destination markets from 1 January 2017 to 15 November 2019.

For these purposes we take the following to be the destination markets of interest: China, the European Union, the United States, the rest of the BRICS group of large emerging markets¹⁷, and the larger G20 grouping. For each group of developing country exporters and each destination market, we calculated the percentage of the former's bilateral goods exports to the latter that are in products where policy reforms easing imports and where policy interventions impeding imports were implemented during the Populist era. As in earlier chapters, such

calculations use the latest finest grain international trade data available worldwide.

The top panel of Figure 1 summarises the findings for the Least Developed Countries and for the African Union group. The lower panel of Figure 1 plots the findings for the lower- and upper-middle income developing country groups. Large differences in the percentages of exports facing trade reforms and trade distortions in any destination market indicate a change in relative goods market access to that economy during the Populist era. Differences in reported percentages of export exposure across destination markets may reveal to degree to which North-South and South-South goods trade have been influenced by Populist era commercial policy changes.

Mixed outcomes for South-South trade

All four groups of developing countries saw market access improve on more than half of their exports to China (see the first columns of both panels of Figure 1). Moreover, the balance of export exposure to Chinese trade reforms and to Chinese trade distortions leans heavily tilted towards the former, which overall is likely to be supportive of South-South trade.

However, when the destination markets are the rest of the BRICS, the large trading powers of the emerging markets, the situation is reversed. More than half of the Least Developed Countries, African Union, and both groups of middle-income developing nations' exports faced trade distortions implemented by this residual BRICS groups during the Populist era. Exposure to their trade reforms was much lower. Among the large emerging market members of the G20, China is different.

¹⁶ As a unilateral trade policy intervention, changes in national systems of trade preferences towards developing countries fall are within scope for monitoring by the Global Trade Alert.

¹⁷ Taken to include South Africa as well as Brazil, China, India, and Russia.

US commercial policy towards upperincome developing nations soured during the Populist era

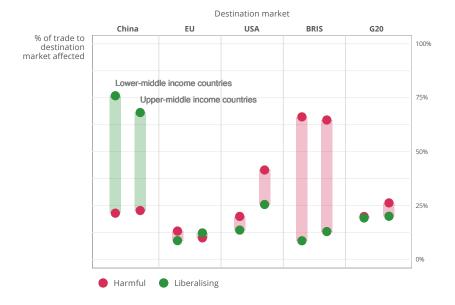
Comparing the data presented in the columns relating to the U.S. as a destination market in both the upper and lower panels of Figure 1 reveals that during the Populist era the United States has eroded the market access of the upper middle-income developing countries. The gap between these developing countries' export exposure to U.S. trade reforms and to trade distortions is some 15 percentage points. This finding is indicative of a policy shift on the part of Washington, DC, and is consistent with its claims that some higher-income developing countries cling, inappropriately in their view, to developing country status at the World Trade Organization.

Changing EU commercial policy treatment of developing country exports is, by contrast, relatively symmetric. That is, those developing country groupings whose exports were exposed more to Populist era import curbs also tended to have greater exposure to steps that open European markets. There is no suggestion here that this was the outcome of a deliberate choice made by policymakers in Brussels and European capitals. It just turned out that way.

FIGURE 1

Significant changes in market access to China, the BRICs in general, and to the European Union—less so for the United States





CHAPTER 7 CORPORATE REACTION TO POPULIST ERA PROTECTIONISM AND ITS SELECTIVE SUPPORT FOR A LIBERAL TRADING SYSTEM

The previous chapters in this section have established that there is a lot of business at stake for corporate and public policy decision-makers. Firm and national economic interests are often adversely affected by discrimination undertaken by governments—their own and foreign. How have corporate leaders reacted?

The Populist era has evidently worried corporate decisionmakers so much that they have cut back on investment outlays on account of new protectionism. Indicators of business confidence have deteriorated in leading economies see, for example, evidence from the OECD's Business Confidence Index in Figure 1. In the case of China and the United States, their indices of business confidence are at their lowest levels since the bounce back from the global economic crisis in 2010 and 2011.



FIGURE 1

Business confidence has been falling for well over a year in each of the major trading economies

Moreover, during the Populist era there appears to be a perceptible macroeconomic impact that links rising protectionism to falling private sector investment and a synchronised manufacturing sector slowdown across leading economies (recall the discussion of the IMF's latest *World Economic Outlook* in chapter 1). Compounding this dynamic is a macroeconomic policy feedback loop as leading central banks eased monetary policy during 2019 to reduce the risk of national economies tipping into recession.

However, there is still a puzzle to be resolved. Given that the scale of recent protectionism as measured by the shares of world trade affected is certainly no larger than in the years before the Populist era, it is a puzzle why corporate decision-makers have worried so much more about protectionism this time around. What could account for this?

In raising this question, we do not want to be misunderstood. We are not arguing that business was unconcerned about protectionism in earlier years. Rather that the corporate reaction to governments imposing trade distortions was more critical and more pronounced in recent years and we want to understand why.

Nor are we arguing that the entire global business community took a common position on government commercial policymaking during the Populist era. Presumably some interests—largely import-competing gained from the discrimination governments were evidently prepared to impose on foreign suppliers. Our particular interest is in the corporate critics of Populist era protectionism, the specific policies they have criticised, and the potential explanations why.

We see four potential explanations for this puzzle, which are not necessarily mutually exclusive. As we will argue, this puzzle is not merely of academic interest—effectively it speaks to the type of globalisation that business is prepared to stand up and fight for.

Tariff hikes have greater salience

The first explanation could be that, despite trade policy experts analysing non-tariff barriers for decades, corporate decision-makers and policymakers still more readily recognise tariff increases as protectionism.

We would normally discount this argument—on the grounds that sophisticated business people and political leaders have understood the importance of trade distortions other than tariffs and in some cases have campaigned for including disciplines on them in trade agreements—but the fact that tariffs are more transparent and easier to explain than most other trade distortions may account for the greater attention given to new import taxes.

Given the media coverage of tariff hikes in recent years and we should not forget that at least one protagonist has taken to social media to whip up support for their tariff hikes—a time-pressed decision-maker might be forgiven for thinking that there has been a material shift in trade policy dynamics in recent years and adjusted their plans accordingly.

A variant of this first argument contrasts the visibility of tariff increases with that of subsidies. A firm may not so easily spot when their foreign rivals have received state subsidies. Although they may suspect their rivals of receiving state support, there may be no "smoking gun" as there is with significant publicly-announced increases in tariff rates. This argument may be particularly relevant for the past decade as some of the most far-reaching subsidies likely to influence exports are found in the details of national tax legislation

Moreover, the beneficiaries of such tax breaks and other reductions in payments to the state may not be given as much prominence by governments as the declarations of direct financial grants made by the public sector. In sum, the salience of subsidy-related trade distortions before the Populist era may not have been as great as the significant tariff increases of recent years.

Salient ends not just salient means

A distinct, but related salience argument is that the Populist era saw the election of several political leaders who had openly campaigned against existing international trade arrangements and, having taken office, were determined to follow through on their campaign pledges. On this argument the tariffs are the salient means to a salient end. Furthermore, the possibility of further disruptive tariff increases across a wide range of products and trading partners could have led private sector managers to distinguish recent years from earlier eras.

Such managers may have sensed that, although the total value of trade affected now is not as great as in earlier times, it is impossible to rule out that, with further campaigns and possible retaliation by other governments, the total value of trade affected in the near to medium term could be so much larger. In which case, the combination of fear, salient ends, and salient means differentiated the Populist era from prior years.

It's the jump in height of trade barriers that matters

The third possible explanation for this puzzle is that, while the trade covered by protectionism imposed during the Populist era may be comparable to the size of the trade barriers erected during the Populist era is larger. This may be true. What is true is statistics on the shares of world goods trade covered by policies that discriminate against foreign commercial interests reveal nothing about the "height" of the trade distortions imposed.

The difficulty with advancing this "barriers are higher now" argument is that it has not been possible to compare rigorously over time the aggregate size of trade distortions across the range of discriminatory policies deployed by governments. For sure, attempts have been made by researchers to develop measures of aggregate trade policy stance. Anderson and Neary 1996 is a leading example but their approach can only be applied to trade restrictions and not to other trade distortions, such as subsidies to import-competing firms. As of this writing, we know of no demonstration of the proposition that, when all relevant policies that distort trade in goods are taken into account, overall commercial policy stance has become more distortive during the Populist era than before.

In this regard it is also worth recalling that the headlinegrabbing jumps in tariff rates applied to Sino-U.S. bilateral trade cover less than 5% of world goods trade, whereas the share of world goods trade affected by state-provided export incentives is seven times larger during the Populist era. Even if the *ad valorem* equivalent of those export incentives is not as large in percentage terms as the increase in *ad valorem* tariff rates, then if the correct calculation involves some trade-weighted average of the harm done to welfare by each type of trade distortion, it is unclear that the tariff hike component would dominate the calculation.

Reporting as some have done that average aggregate tariff rates show significant increases since 2017 for the United States and China is insufficient. The effect of growing subsidisation of exports and bailouts of importcompeting firms must be taken into account. There is definitely work here for analysts to do. Until such work is properly done, caution is needed when inferring overall policy stance from changes over time in one trade barrier, however salient.

None of this is to deny that, seen from the perspective of integrating national markets, policy during the Populist era has tended to shift in the wrong direction. Rather it is to argue that, conceptual arguments about measuring national policy stance notwithstanding, the unexpected sharp increases in tariff rates on hundreds of billions of US dollars of Sino-U.S. trade easily expressed in percentage terms may have persuaded influential corporate leaders that the liberal trading order faced unprecedented threats during the Populist era.

Copy-cat behaviour is a much more effective "fix" for subsidies but not for tariffs

A fourth possible explanation relates to the mix of trade distortions used during the Populist era as compared to earlier times, with the latter being associated with fewer tariff hikes and more global trade affected by different types of state largesse. Seen from the perspective of a firm seeking to maintain its international operations, the best response to a subsidy may be different from that of a tariff hike.

If a firm's foreign rival obtains some form of state largesse then that may be matched—possibly bettered—by the firm in question seeking state support from a government as well. Critically, the firm need not act in concert with local rivals—in fact, the bigger the subsidy obtained the better the firm's relative position compared to all rivals, domestic and foreign.

Moreover, the more confident the firm is of obtaining state support the lower the willingness to grumble in public about the spread of subsidies abroad. In many situations, then, a firm may find it better to quietly join a subsidy race than to fight it. Having done so then the old adage—that people who live in glasshouses should not throw stones—comes into play, further muting criticism of subsidies at home and abroad.

With the exception of seeking a firm-specific exemption to a tariff hike, reversing the tariff increase will inevitably involves collective action with other firms. Since tariff increases are relatively transparent, such collective action will encounter opposition from the its beneficiaries and almost certainly involve public statements critical of the implementing government, which in turn may create other risks.

Until removed, a large tariff hike may substantially reduce, even eliminate, profit margins from a firm's existing international corporate strategy, resulting in investment plans being put on hold. While some firms may choose to acquiesce to the tariff increase, others may choose to fight the higher tax on imports, mostly likely through an industry association that provides some cover for member companies and their executives.

This argument too would account for the puzzle that, although relatively similar shares of world trade affected were affected by trade distortions during and before the Populist era, the corporate sector cut back on investment plans more aggressively during the Populist era when tariff hikes forced a rethink of their international corporate strategy. In contrast, the subsidies of the earlier eras forced a rethink of their lobbying strategy for state largesse.

Implications for corporate support for a reformed world trading system

That many corporate decision-makers were critical of the more transparent forms of protectionism imposed in recent years is likely to have implications for their support for unwinding trade tensions and the potential future reform of the world trading system. Corporate leaders seemed far more concerned about the removal of overt trade barriers such as import tariff increases than the phasing out of subsidies.

For sure, some sectors have complained about the subsidisation of foreign rivals by their governments. The Chinese government is frequently accused by foreign firms and their influential business associations of subsidising its steel sector thereby, so the critics contend, contributing to global excess capacity. This sectoral campaign for subsidy reduction pales when compared to the scale of the campaign to reverse the tariff increases imposed by the Trump Administration on hundreds of billions of US dollars of imports into the United States.

The recent "phase one deal" between the China and the United States is a case in point: if implemented, it makes some progress on unwinding the sharp tariff increases of recent years and but is silent on Chinese subsidy reform, which was a stated goal of the Trump Administrator's negotiators. Perhaps China will reform its subsidies as part of a "phase two deal"--perhaps it won't.

Since the phase one deal keeps in place tariffs on at least \$200 billion of Chinese imports, the affected members of the U.S. business community are likely to keep up the pressure for further unwinding of taxes on imports. Whether U.S. corporate pressure put much weight behind Chinese subsidy reform is another matter, not least because many U.S. firms benefit from domestic subsidies as well.

Using Global Trade Alert data on the subsidies awarded to U.S. firms by the federal and state governments, combined with fine-grained United Nations trade data, we estimate that by the end of 2019 48.2% of imports into the United States compete against at least one subsidised local firm. Those corporate beneficiaries of American state largesse may not be that keen on demanding that their Chinese rivals be denied subsidies if Beijing makes similar demands of Washington, DC.

Similar considerations are likely to be at play at the global level.Using the most fine-grained international trade data available from the United Nations, our best estimate is that 12.6% of world goods trade is currently affected by tariff increases that were imposed over the past decade and that are still in effect. In contrast, 26.6% of world goods trade is currently affected by different types of subsidies to import-competing manufacturers and farming interests.¹⁸ In terms of the total value of trade covered, subsidies are by far the larger problem, even though so much attention in recent years has been on tariff hikes.

If corporate support is stronger for tariff barrier removal then there is a risk that the significant build-up of subsidyrelated trade distortions before and during the Populist era will not be adequately addressed. Selective corporate pressure to reform commercial policies would have two important implications. First, the world trading system would still remain heavily distorted by subsidies even if all of the high-profile tariff increases of the Populist era were reversed. Second, other influential players in national policy debates, such as Finance Ministries that may want to rein in state largesse, would have to be persuaded to throw their weight behind subsidy reform initiatives if they are to stand any chance of success.

```
18 Subsidies and incentives to exporters are not counted towards the latter total and are in addition.
```

SECTION 2 SECTORAL PERSPECTIVES

CHAPTER 8 TRADE IN APPAREL

The purpose of this chapter is to size up the policy developments affecting international trade in apparel during the Populist era. What share of apparel exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming apparel exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of apparel exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in apparel was \$420 billion, accounting for 2.4% of world goods trade. The latter percentage may be small but this sector is one of the most important exports of the Least Developed Countries. Changing trading conditions faced by apparel exporters can have important consequences for their commercial prospects, their employees, their families, their suppliers. and the communities they operate in. Technically, this chapter relates to all of the trade associated with the products in Division 28 of the Central Product Classification version 2.1 of the United Nations. That sector is formally known as "Knitted or crocheted fabrics; wearing apparel" and covers a wide range of clothing items.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the apparel sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

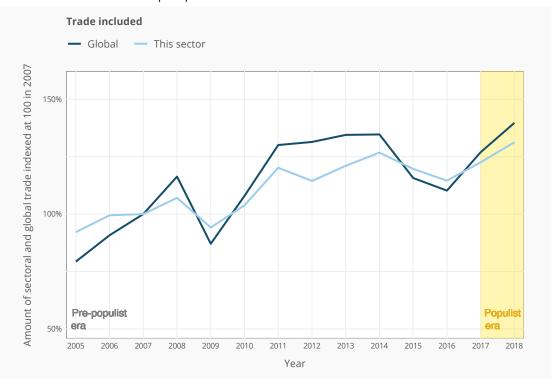


FIGURE 1 Sectoral export performance relative to world trade since 2005

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of apparel trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of apparel and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of apparel trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the apparel sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).¹⁹

In the top left-hand panel of Figure 2 the share of world trade in apparel that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of apparel trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is decomposed into the number of times each trade flow has

been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

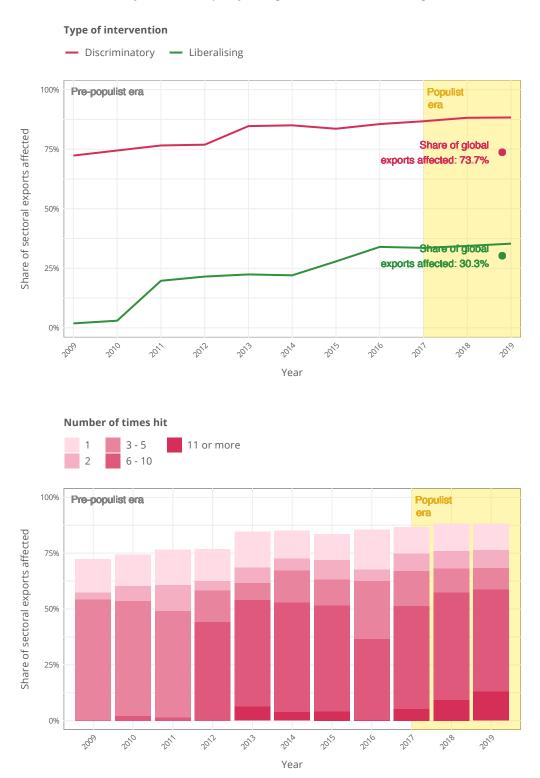
The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

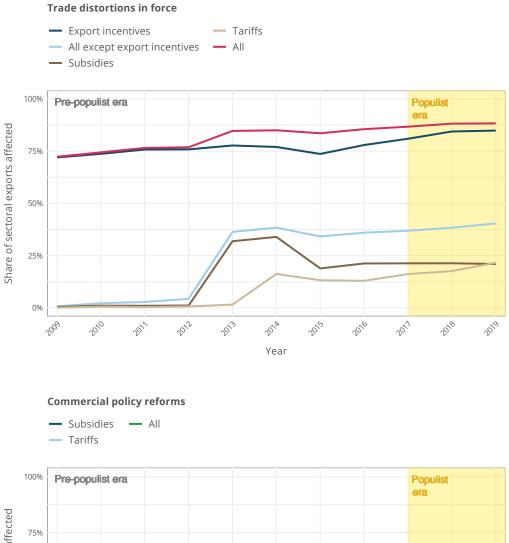
The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

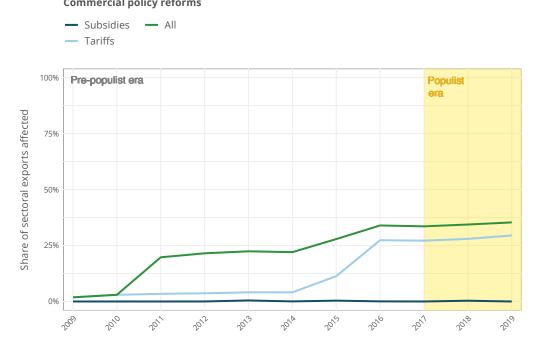
19 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

Sectoral trade affected by commercial policy changes since the onset of the global economic crisis









Year

Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the Apparel sector

While the total value of apparel traded internationally moves broadly in line with the totals for world trade in all goods, the former is markedly less volatile than the latter. Apparel trade contracted proportionally less than world trade at the start of the global economic crisis and during 2014-6. Correspondingly, apparel trade increased less in percentage terms during the rebound of 2009-11 and in the first two years of the Populist era.

With respect to the percentages of apparel trade affected by protectionism and liberalisation, the former is twice the size of the latter (see Figure 2). Around 87% of the apparel trade faced one or more trade distortions imposed over the past decade that was still in force in 2019. Since 2013 about half of sectoral trade has been hit by at least six trade distortions, reinforcing the sense that sustained resort to protectionism has occurred in the apparel sector. In contrast, approximately 30% of apparel trade benefited from some type of reform that is still in effect. The Populist era does not appear to have affected these percentages much.

Interestingly, from the start of the global economic crisis around three-quarters of apparel trade faced some form of trade distortion, a fraction that has grown slowly. In contrast, the share of apparel trade benefiting from trade reforms has edged up over time.

In terms of the policies responsible for distorting apparel trade, state-provided export incentives affect by far the largest share of sectoral trade. Still, by 2019 threeeighths of sectoral trade were affected by other trade distortions, suggesting that unwinding crisis-era export incentives would not eliminate all of the trade distortions undertaken in this sector over the past decade. Subsidy grants and tariff increases each currently affect a fifth of sectoral trade.

With respect to policies easing apparel trade, most of the action is in tariff reductions which now affect more than a quarter of apparel trade worldwide.

The impression that there has been little fundamental change in commercial policies towards apparel is reinforced by considering the evidence in Figure 3. Among the G20 members, only Mexico, Russia, and the United States have taken steps that compromise the market access of several G20 trading partners. Both China's and the United States' exports are targeted by several G20 members (and by each other). With respect to market access improvements, China and the United States again stand out as reforming more, implying ambiguity in their overall policy mix towards apparel trade.

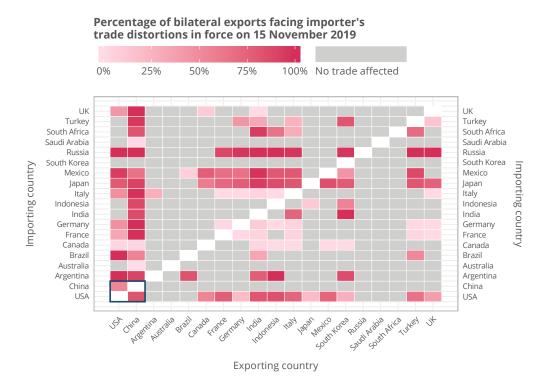
Comparing Figures 3 and 4 further reinforces the impression that few G20 members have taken measures either liberalising or protectionist—that affect the export opportunities of several G20 trading partners. China's apparel exporters have faced worsened market access conditions in many G20 trading partners but the same exporters have benefited from plenty of reforms as well. Indian apparel exporter exposure to reforms in G20 trading partners is considerable, its exposure to foreign protectionism less.

G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)

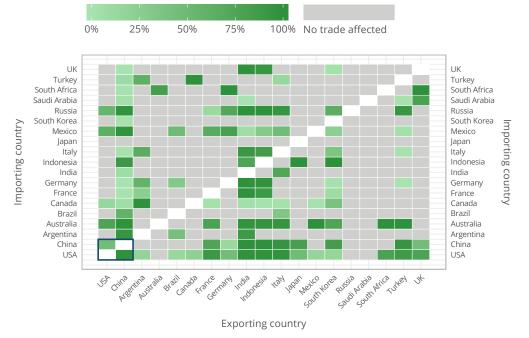


Exporting country

G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 9 TRADE IN LEATHER PRODUCTS AND FOOTWEAR

The purpose of this chapter is to size up the policy developments affecting international trade in leather products and footwear during the Populist era. What share of leather products and footwear exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming leather products and footwear exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of such exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in leather products and footwear was \$217 billion, accounting for 1.3% of world goods trade. The latter percentage may be small but this sector is one of the most important exports of the Least Developed Countries. Changing trading conditions faced by leather products and footwear exporters can have important consequences for their commercial prospects, their employees, their families, their suppliers. and the communities they operate in.

Technically, this chapter relates to all of the trade associated with the products in Division 29 of the Central Product Classification version 2.1 of the United Nations. That sector is formally known as "Leather and leather products; footwear" and covers leather hides, leather products, luggage, and various types of footwear.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the leather products and footwear sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

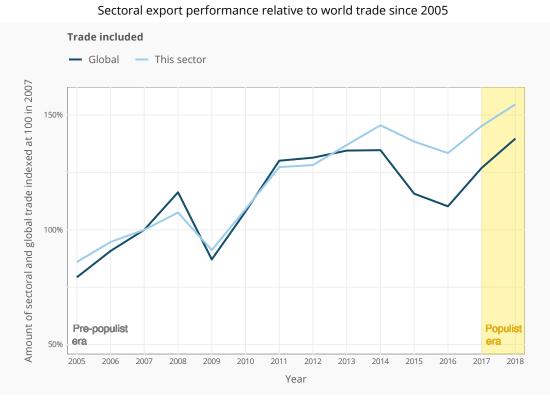


FIGURE 1

The 25th Global Trade Alert report | 44

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of leather products and footwear trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of leather products and footwear and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of leather products and footwear trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the leather products and footwear sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).²⁰

In the top left-hand panel of Figure 2 the share of world trade in leather products and footwear that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of leather products and footwear trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is

decomposed into the number of times each trade flow has been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

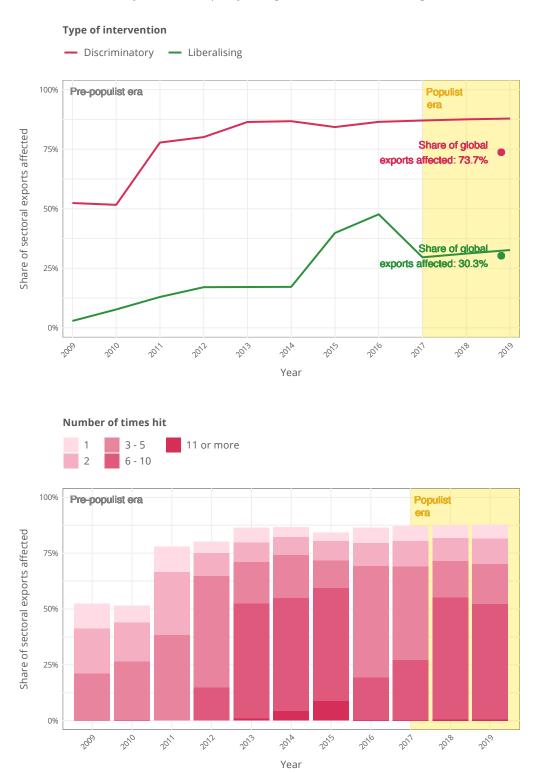
The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

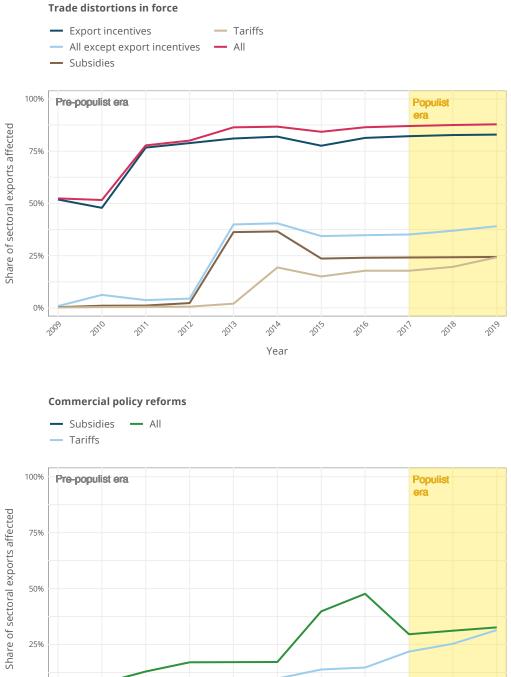
The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

20 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

Sectoral trade affected by commercial policy changes since the onset of the global economic crisis







0%

Year

Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the Leather Products and Footwear Sector

Having tracked the growth of world trade in goods closely from 2005 to 2013, the total value of trade in leather products and footwear expanded considerably faster in 2014, contracted proportionally less during 2014 to 2016, and recovered similarly since. The upshot is that by 2018, the latest year for which a full set of global trade data is available, the total value of international trade in leather products and footwear had risen just under 55% in nominal terms since 2007, as compared to 40% for world goods trade. Having written this, however, during the first two years of the Populist era leather goods trade grew 16% whereas world trade in all goods grew a quarter in nominal terms, implying some degree of catching up.

Compared to the global average, by 2019 the leather products and footwear sector faces more trade distortions when selling abroad. Less than 13% of this sector's exports traded unimpeded in 2019, whereas globally the average was twice as high. In addition, the share of sectoral exports facing trade distortions (0.877) was more than double the share of such exports facing better trading conditions abroad (0.327). In short, distortions to trade in this sector are pervasive. But, as Figure 2 shows, they were pervasive before the Populist era.

Plenty of trade routes in leather products have faced multiple trade distortions. There was a substantial buildup in sectoral trade hit six or more times from 2012 to 2015 and between 2017 to 2019. For much of the past decade 70% of this sectors trade has competed in foreign markets against three or more trade distortions.

While the harmful trade policy implicating the most sectoral trade are state-provided export incentives (that have affected over three-quarters of such trade since 2011), by 2019 other trade distortions affected three-eighths of sectoral trade. The share of sectoral trade facing tariff increases has risen over six percentage points since the start of the Populist era.

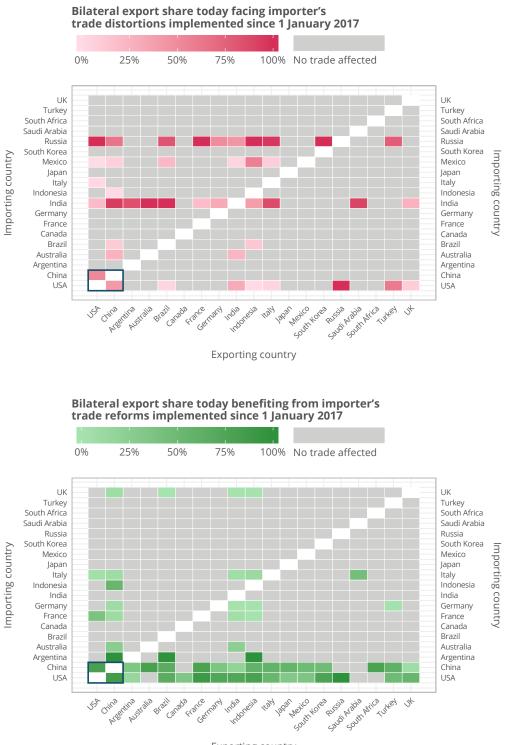
Tariff reductions are central to the improvements in market access faced by exporters of the leather products and footwear over the past decade. By 2019 over 31% of all such exports benefited from at least one tariff reduction implemented over the past decade that is still in force. That percentage has risen sharply during the Populist era from just under 22% in 2017. It would seem, then, that the Populist era has been a mixed blessing for manufacturers of leather goods and shoes. The evidence presented in the heatmaps in Figure 3 suggest that only a few G20 members have altered their commercial policies towards leather products and footwear during the Populist era. Russia has taken steps that harm the market access of 10 G20 trading partners. India's policy changes have worsened access for 11 G20 trading partners, but in only six cases is foreign export exposure significant. The U.S. and China have hit each other's exports but American trade restrictions have affected other G20 members as well.

With respect to trade reforms in this sector during the Populist era, only China and the United States have taken steps that enhance trade opportunities for significant numbers of G20 members. This is again a reminder that some of the nations that impeded a lot of trade have also taken steps to liberalise trade in the same products. In such cases, a comprehensive assessment of all relevant policy changes is needed.

Comparing the heatmaps for the Populist era (Figure 3) with those for decade since the onset of the global economic crisis (Figure 4), unsurprisingly the build-up witnessed over the latter is larger. Chinese exporters stand out as being adversely affected by many G20 members' policy changes. The cumulative effects of the discriminatory policies undertaken by China, Italy, Russia and the United States in this sector have harmed a significant number of G20 members.

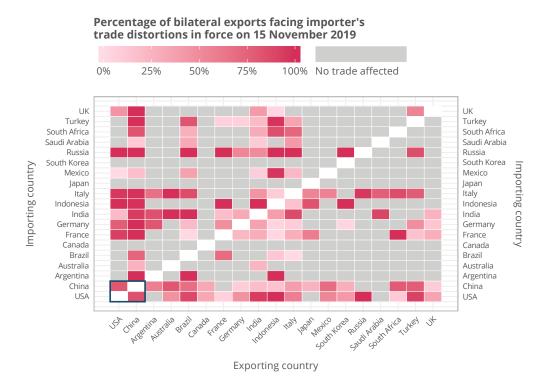
In contrast, Mexico joins China and the United States in improving trading conditions for foreign suppliers. The overall impression, though, is of selective as opposed to across-the-board commercial policy moves by most of the G20 membership over the past decade.

G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)

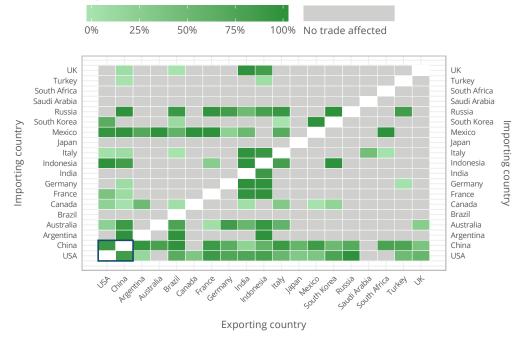


Exporting country

G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 10 TRADE IN GENERAL-PURPOSE MACHINERY

The purpose of this chapter is to size up the policy developments affecting international trade in generalpurpose machinery during the Populist era. What share of general-purpose machinery exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming generalpurpose machinery exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of general-purpose machinery exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in generalpurpose machinery was \$974 billion, accounting for 5.6% of world goods trade.

Technically, this chapter relates to all of the trade associated with the products in Division 43 of the Central

Product Classification version 2.1 of the United Nations. That sector is formally known as "General-Purpose Machinery" and covers a wide range of products including engines, turbines, pumps, compressors, bearings, gears, ovens, furnaces, lifting equipment, gas generators, and parts of these products.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the generalpurpose machinery sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

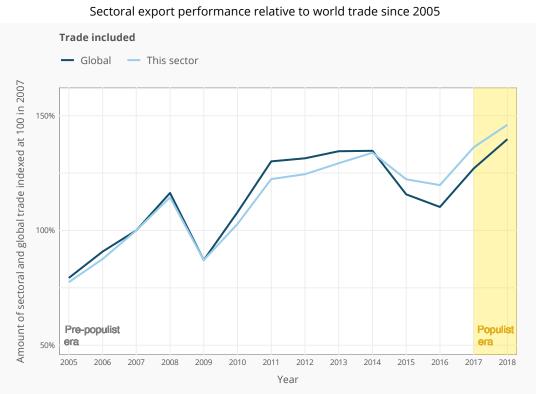


FIGURE 1

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of general-purpose machinery trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of general-purpose machinery and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of general-purpose machinery trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the general-purpose machinery sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).²¹

In the top left-hand panel of Figure 2 the share of world trade in general-purpose machinery that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of general-purpose machinery trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is

decomposed into the number of times each trade flow has been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

21 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

Sectoral trade affected by commercial policy changes since the onset of the global economic crisis

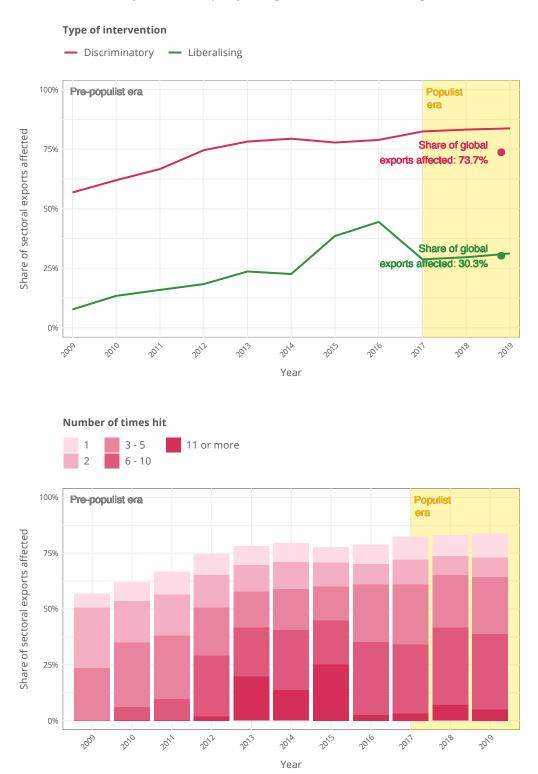
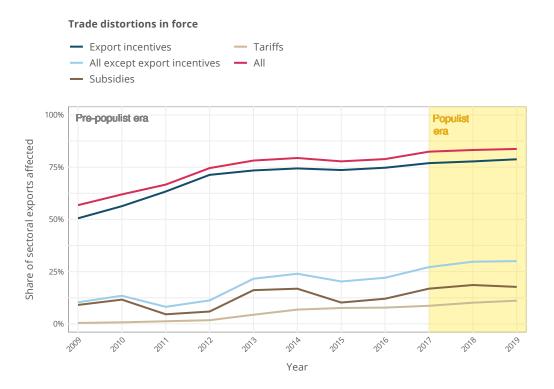


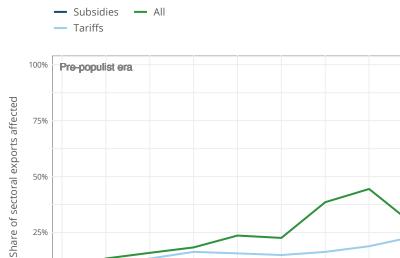
FIGURE 2 (contd.)



Populist era



0%



Year

Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the Generalpurpose Machinery sector

The total value of international trade in general-purpose machinery tracks that of overall world trade in goods from 2005 until 2014. After that, general-purpose machinery contracts by less than world trade and recovers as quickly in 2017. During 2018 the total value of general-purpose machinery trade grows slower than world trade but the growth differential is not enough for the latter to catch up with the former's overall growth since 2005. The key finding is that this sector's trade growth departs from global trends from 2015 (Figure 1).

For much of the past decade only small shares of trade in general-purpose machinery have escaped trade distortions implemented by governments. By 2012 only a quarter of sectoral trade competed freely in foreign markets—the rest faced one or more trade distortions. The fraction of freely traded general-purpose machinery falls further and by 2019 this had fallen to one-sixth. In contrast, less than a third of sectoral trade in 2019 benefited from one or more trade reforms still in effect (Figure 2).

In terms of the build-up of protectionism in this sector, the shares of sectoral trade competing against rivals receiving export incentives, import-competing rivals receiving other subsidies, and tariff increases steadily rose over time. For sure the largest share of sectoral trade was affected by new crisis-era export incentives. The shares of sectoral exports affected by export incentives and tariff increases also rose during the Populist era.

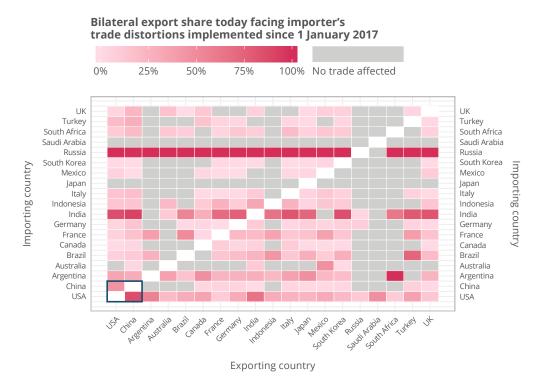
Commercial policy reforms, in particular tariff cuts, affected growing shares of trade in general-purpose machinery over time. By 2019 a quarter of sectoral trade benefited from tariff cuts that was still in force. Subsidy reduction or elimination contributed little to improving trading conditions in this sector over the past decade.

During the Populist era access to G20 markets by other G20 members deteriorated. Only Japan and Saudi Arabia did not introduce any trade distortions harming fellow G20 members' exports (Figure 3). In contrast, Russia and to a lesser degree India took steps that disadvantaged large shares of exports from many other G20 members. Probably as part of the ongoing trade war, the United States targeted a large share of Chinese exports. Even if it did not target South Africa intentionally, Argentina took steps that harmed a large share of general-machinery exports from this G20 member. When it comes to commercial policy reforms during the Populist era affecting G20 members' exports, Argentina, China, and to a lesser degree Brazil and the United States have taken steps that benefit almost every other major trading power (Figure 3). Canada took steps that benefited only the United States, it seems. Japan, Mexico, Saudi Arabia, and South Africa took no reforming steps at all, at least as recorded in the Global Trade Alert database.

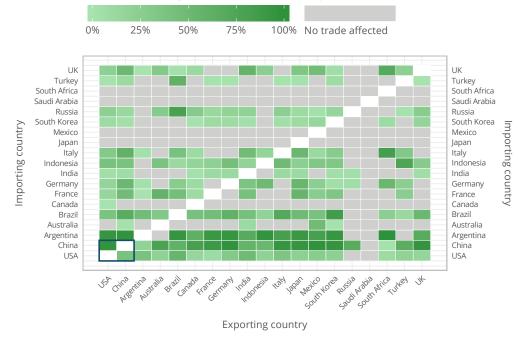
Looking back to the start of the global economic crisis, the significant build-up of trade distortions can be seen in the relevant heatmap in Figure 4. Argentina, Brazil, and in particular Russia stand out as taking across-theboard steps against large shares of almost every other G20 member. The build-up of trade distortions facing Sino-U.S. trade in general-purpose machinery is apparent and pre-dates the trade war. Since the onset of the global economic crisis, the protectionist build-up is such that very large shares of Chinese exports to most G20 destination markets face trade distortions implemented by the government of the importing nation.

With respect to commercial policy reforms since November 2008, the significant number of dark green cells in the relevant heatmap in Figure 4 shows that bilateral access to G20 markets has tended to improve in many cases. Argentina, Brazil, Indonesia, Mexico, Russia, and the United States have taken steps that improve access to their markets for almost all of their G20 partners. India and Japan, by contrast, have not. Meanwhile, China, Japanese, and American exports of general-purpose machinery have enjoyed significantly improved access to fellow G20 members' markets over the past decade.

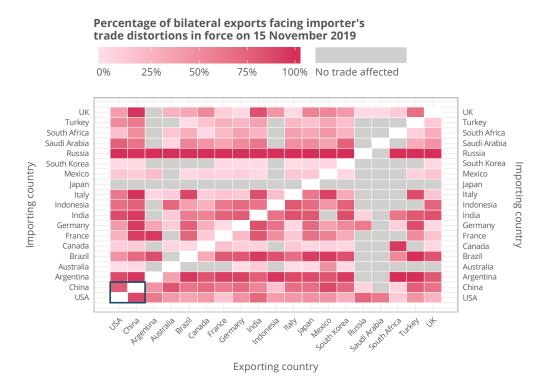
G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)



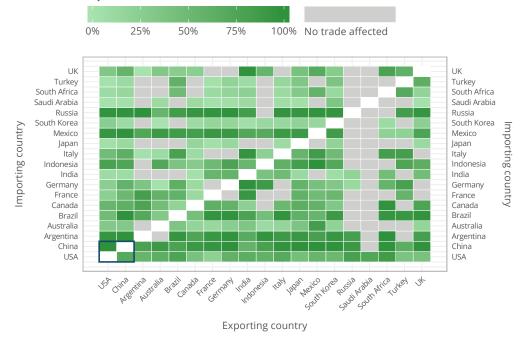
Bilateral export share today benefiting from importer's trade reforms implemented since 1 January 2017



G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 11 TRADE IN SPECIAL-PURPOSE MACHINERY

The purpose of this chapter is to size up the policy developments affecting international trade in specialpurpose machinery during the Populist era. What share of special-purpose machinery exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming special-purpose machinery exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of special-purpose machinery exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in special-purpose machinery was \$766 billion, accounting for 4.4% of world goods trade.

Technically, this chapter relates to all of the trade associated with the products in Division 44 of the Central Product Classification version 2.1 of the United Nations. That sector is formally known as "Specialpurpose machinery" and includes the following products: agricultural machinery, machine tools, mining equipment, machinery for food and beverage processing, machinery for apparel, leather, and textile production, weapons and ammunition, domestic appliances, and their parts and components.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the specialpurpose machinery sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

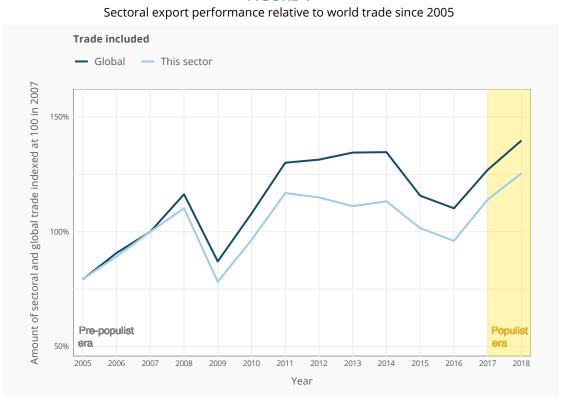


FIGURE 1

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of special-purpose machinery trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of special-purpose machinery and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of special-purpose machinery trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the special-purpose machinery sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).²²

In the top left-hand panel of Figure 2 the share of world trade in special-purpose machinery that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of special-purpose machinery trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is

decomposed into the number of times each trade flow has been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

22 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

Sectoral trade affected by commercial policy changes since the onset of the global economic crisis

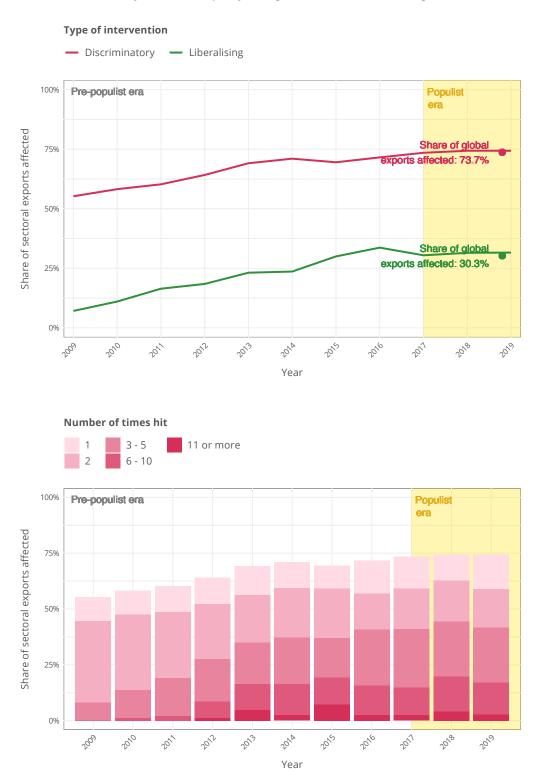
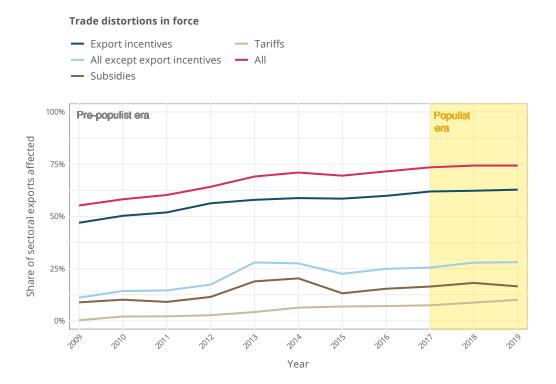
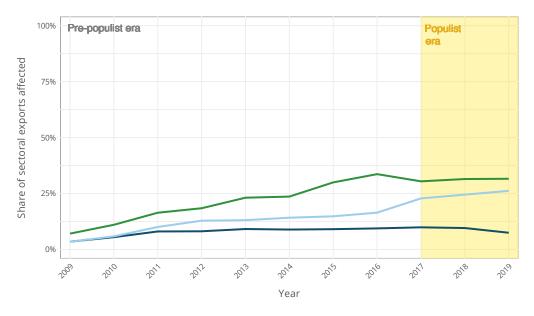


FIGURE 2 (contd.)









Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the Specialpurpose Machinery sector

Before the global economic crisis the total value of international trade in special-purpose machines rose in line with the global total for all trade in goods. This sector's trade contracted more than the global total from 2007 to 2009 and recovered by less from 2009 to 2011. While global trade grew from 2011 to 2014, the total value of sectoral trade fell (and in fact kept falling through to 2016). This sector's trade recovered from 2016, growing in percentage terms almost as much as the global total. Overall, for the past 10 years trade in special-purpose machinery departed from the pattern set by global trade in goods.

In terms of exposure to trade distortions, the global economic crisis hit this sector hard. Fifty-five percent of special-machinery trade faced one or more trade distortions imposed between November 2008 and December 2009 that were in effect at some point during 2019. This percentage rose steadily over time and now just under 75% of special-machinery exports face trade distortions in foreign markets. The current level of exposure to protectionism in this sector is in line with the global average (73.7%). Much smaller percentages of special-purpose machinery have benefited from commercial policy reforms. That percentage has risen over time to 31.5% in 2009, again close to the global average (30.3%).

In this sector, it is not just the total share of sectoral trade facing trade distortions that has risen—but also the shares of sectoral trade hit multiple times. The shares of sectoral trade hit 3 to 5 times and 6 to 10 times has risen progressively from 2009 to 2019. The fastest increases occurred from 2009 to 2013. By 2012 over half of sectoral trade had been hit by two or more policy-induced trade distortions.

State-provided export incentives which seek to shift market share away from foreign rivals are the policy instrument that distorts the largest share of trade in special-purpose machinery. From 2013 on between 15% to 20% of this sector's exports has competed against a subsidised import-competing rival. In contrast, the buildup of tariff increases over time is such that approximately 10% of sectoral trade now faces higher taxes when entering foreign markets.

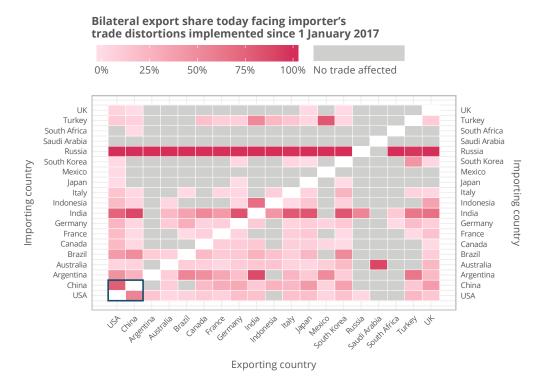
Special-purpose machinery trade has been facilitated by commercial policy reforms, principally in the form of tariff cuts. By 2019 a quarter of all sectoral trade benefited from one or more tariff reductions in foreign markets. Subsidy reform and elimination has affected much smaller shares of trade in this sector. With respect to trade distortions affecting intra-G20 trade in special-purpose machinery, during the Populist era only Russia has taken steps that disadvantage large shares of exports from G20 trading partners. India has done so to a lesser degree affecting large shares of bilateral exports from eight G20 members. The impact of the Sino-U.S. trade war is evident in the relevant heatmap in Figure 3. But other cases of potential targeting can be found as well—such as Argentina's policy measures affecting large shares of Indian exports as well as Australia's measures affecting plenty of special-purpose machinery exports from Saudi Arabia.

The Populist era has seen commercial policy reforms by several G20 members that ease conditions for traders in this sector. Argentina, Brazil, China, and to a lesser degree India and the United States have taken steps that affect significant shares of special-purpose machinery exports from almost all G20 members. China, Japan, and the United States have seen trading conditions for their exporters in this sector improve in many G20 counterparts. Such evidence suggests that market opportunities were created during the Populist era—policy developments during this era are not all bad news.

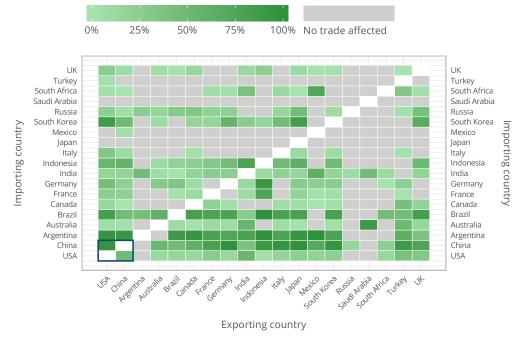
Taking a longer-term perspective, it is evident that over the past decade that Indonesia, Russia, and to a lesser degree Argentina, China, and India have taken steps to tilt the commercial playing field in favour of domestic producers of special-purpose machinery. The shares of G20 trading partners facing a deterioration in their market access in these countries is high (see the red heatmap in Figure 4). In contrast, Argentina, Brazil, China, Russia, and to a lesser degree Mexico and Indonesia have taken steps to improve access to their markets for imports of specialpurpose machinery (see the green heatmap in Figure 4).

Over the past decade large shares of China's exports of special-purpose machinery have been disadvantaged by the several G20 members, including the EU members of the G20, the United States, Russia, India, and several medium-sized emerging markets. Meanwhile, large shares of China's exports in this sector have benefited from reforms in Argentina, Brazil, Canada, Indonesia, Mexico, Russia, and the United States.

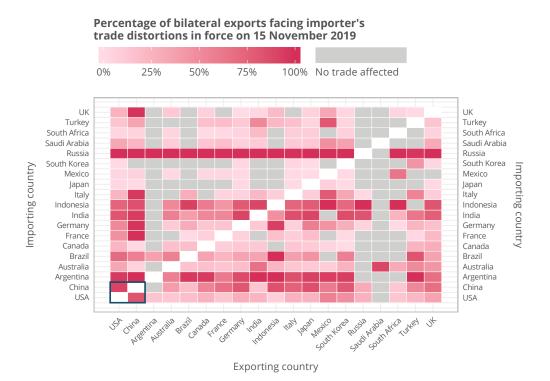
G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)



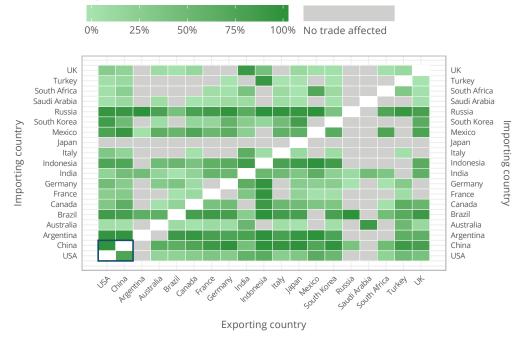
Bilateral export share today benefiting from importer's trade reforms implemented since 1 January 2017



G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 12 TRADE IN ELECTRICAL MACHINERY

The purpose of this chapter is to size up the policy developments affecting international trade in electrical machinery during the Populist era. What share of electrical machinery exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming electrical machinery exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of electrical machinery exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in electrical machinery was \$757 billion, accounting for 4.3% of world goods trade.

Technically, this chapter relates to all of the trade associated with the products in Division 46 of the Central Product Classification version 2.1 of the United Nations.

That sector is formally known as "Electrical machinery and apparatus" and includes the following products: electrical motors and generators, electrical distribution equipment, wires, cables, and optical fibres, batteries, lamps, and their parts and components.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the electrical machinery sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

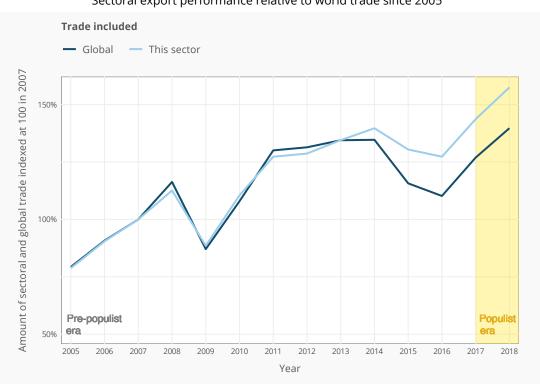


FIGURE 1 Sectoral export performance relative to world trade since 2005

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of electrical machinery trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of electrical machinery and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of electrical machinery trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the electrical machinery sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).²³

In the top left-hand panel of Figure 2 the share of world trade in electrical machinery that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of electrical machinery trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is

decomposed into the number of times each trade flow has been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

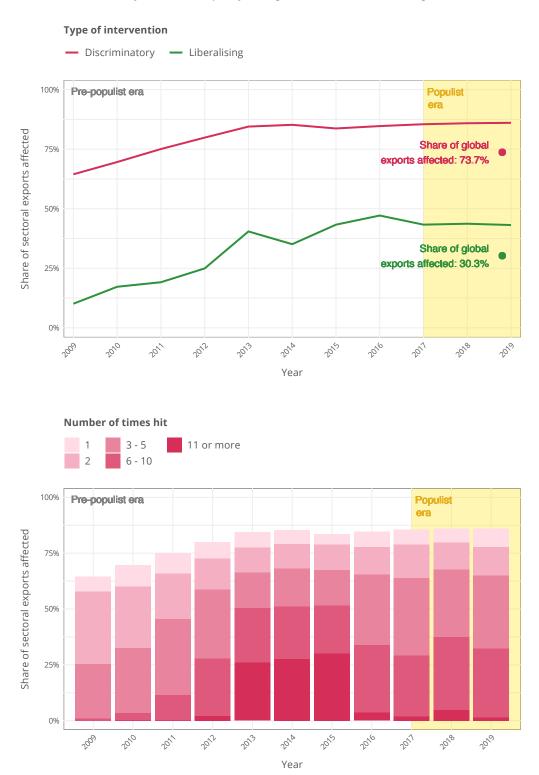
The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

23 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

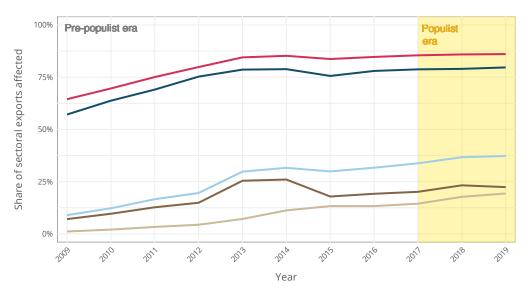
Sectoral trade affected by commercial policy changes since the onset of the global economic crisis

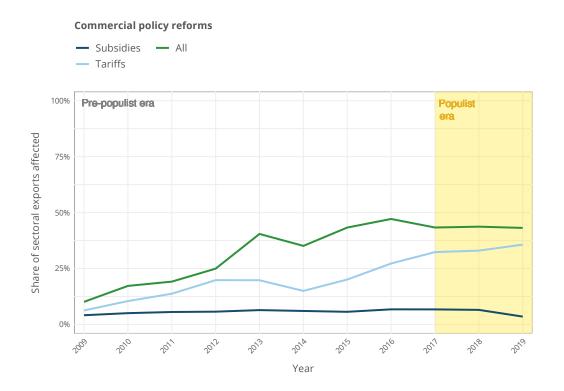












Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the electrical machinery sector

The total value of international trade in electrical machinery moved closely in line with that of global trade in goods from 2005 to 2014. This sector's trade did not contract as much as global trade from 2014 to 2016 and recovered as quickly as global trade during 2017 and 2018. The upshot is that the total value of trade in electrical machinery rose more than 57% in nominal terms since 2007, whereas overall world trade in goods rose less than 40%.

The exposure of electrical machinery trade to protectionism far exceeds that to commercial policy reforms. By 2013 the build-up of crisis-era trade distortions was such that 84% of sector trade faced one or more trade distortions. That percentage has changed little since and exceeds the global average exposure of 73.7%. In contrast, the crisisera commercial policy reforms covered by 2015 around 43% of sectoral trade, a percentage that has not changed much since. Again, this percentage exceeds the global average exposure to reforms (30.3%).

Since 2009 the shares of electrical machinery exports competing against rivals benefiting from state-provided export incentives, subsidies to import-competing firms, and import tariff increases have risen steadily over time. Export incentives distort the largest share of electrical machinery trade worldwide. Having written this, by 2019 such was the build-up of other trade distortions that three-eighths of the global trade in this sector was affected them as well. The Populist era witnessed a six percentage point increase in the share of sectoral trade facing tariff increases.

With respect to the sectoral trade coverage of commercial policy reforms, over time the contribution of tariff cuts grows significantly, including during the Populist era. By 2019 over 35% of sectoral trade had benefited from one or more reduction on taxes on imported electrical machinery. Subsidy reduction and elimination played little role in liberalising trade in this sector.

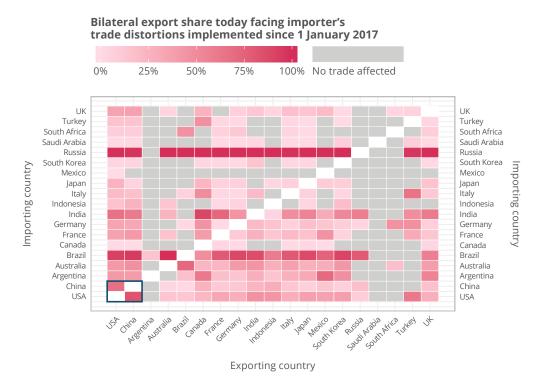
There is considerable variation across the G20 in the treatment of trade in electrical machinery during the Populist era. As far as resort to protectionism is concerned, Brazil and Russia have taken steps that harm many trading partners' export interests in this sector. Argentina, Australia, China, and the United States have taken protectionist steps too but the shares of the exports of G20 trading partners affected are smaller. The impact of the Sino-U.S. trade war is evident in the red heatmap in Figure 3. Having written this, American and Chinese exporters of electrical machinery faced worsening market access conditions in almost every G20 trading partner during the Populist era.

With respect to commercial policy reforms, Argentina, China, and the United States, and to a lesser degree France and Germany have taken policy measures that improve trading conditions for traders of electrical machinery from other G20 members. In contrast, Japan, Mexico, and Saudi Arabia have introduced no reforms and Australia's policy changes have benefited only one G20 member (China).

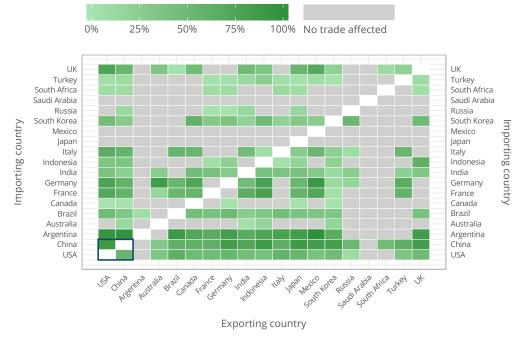
Looking back ten years (aided by Figure 4) the electrical machinery sector saw considerable exposure of bilateral G20 trade flows to both protectionism and commercial

policy reforms. If anything, there are more dark green cells in the respective heatmap than dark red cells in its counterpart, suggesting that there may have been greater exposure to commercial policy reforms. Looking across the rows of both heatmaps in Figure 4 it is evident that some countries are more likely to have taken across-theboard (or wide-ranging) steps than others, when it comes to protectionism and reform. On net, Mexico has resorted to liberalisation more than protectionism, whereas the opposite is true for Japan and Russia.

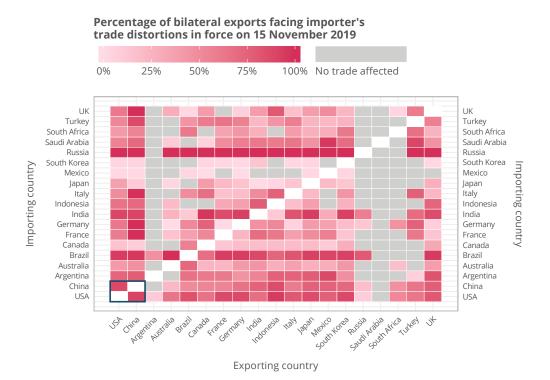
G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)



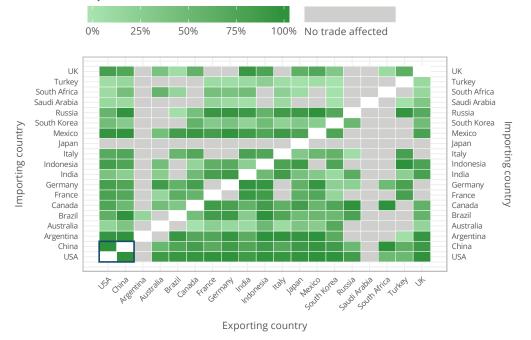
Bilateral export share today benefiting from importer's trade reforms implemented since 1 January 2017



G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 13 TRADE IN COMMUNICATION EQUIPMENT

The purpose of this chapter is to size up the policy developments affecting international trade in communication equipment during the Populist era. What share of communication equipment exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming communication equipment exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of communication equipment exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in communication equipment was \$1,543 billion, accounting for 8.9% of world goods trade.

Technically, this chapter relates to all of the trade associated with the products in Division 47 of the Central Product Classification version 2.1 of the United Nations.

That sector is formally known as "Radio, television and communication equipment and apparatus" and includes products such as electronic values and tubes, electronic circuits, television and radio transmitters, cameras, telephone sets, radio and television receivers, disks and tapes, packaged software, and cards with magnetic strips or chips.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the communication equipment sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

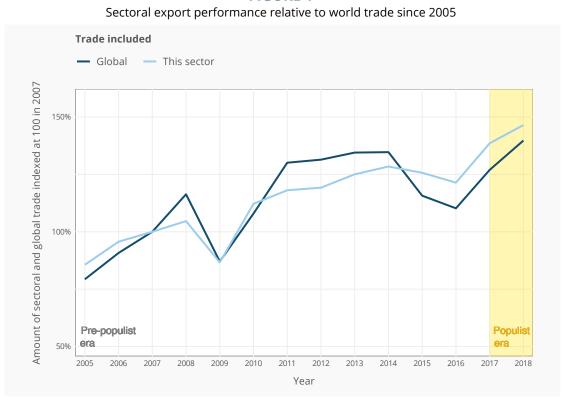


FIGURE 1

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of communication equipment trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of communication equipment and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of communication equipment trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the communication equipment sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).²⁴

In the top left-hand panel of Figure 2 the share of world trade in communication equipment that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of communication equipment trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is

decomposed into the number of times each trade flow has been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

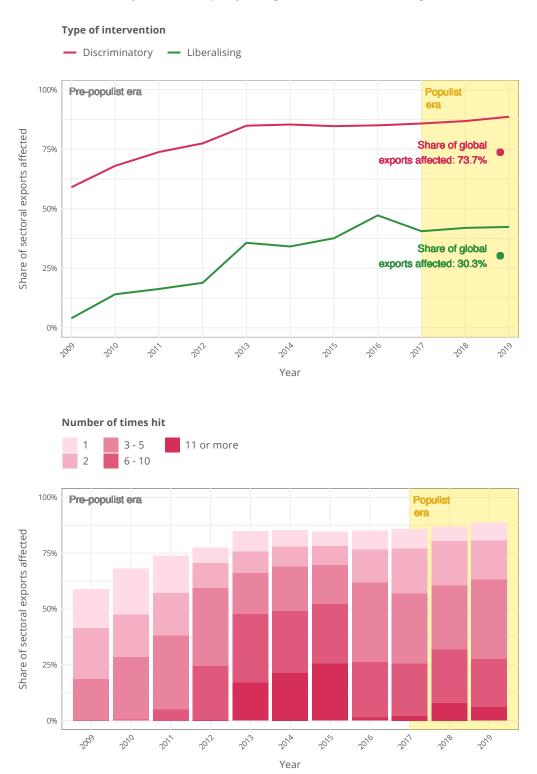
The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

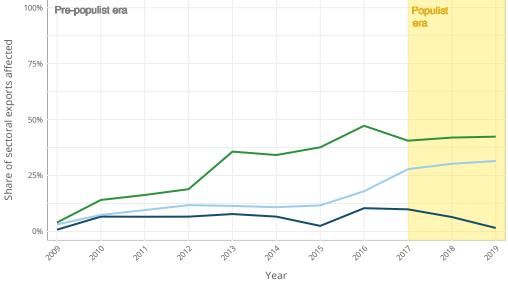
24 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

Sectoral trade affected by commercial policy changes since the onset of the global economic crisis









Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the Communication Equipment sector

Surprising as it may seem, the total value of international trade in communications equipment is less volatile than that for comparable total for trade in all goods from 2005 to 2018 (see Figure 1). During the Populist era trade in communication equipment has grown more slowly than global trade.

Following the start of the global economic crisis there were sharp increases in the shares of sectoral exports facing trade distortions and benefiting from commercial policy reforms (see Figure 2). After 2013 there were slower increments in the shares of trade exposed. By 2019 the protectionist build-up in this sector was so extensive that it covered over 88% of trade in communication equipment. That share is double the share benefiting from tariff cuts and other trade reforms, indicating the extent to which policy dynamics in this sector have lent in the discriminatory direction over the past 10 years. The share of sectoral trade affected by discriminatory policies rose three percentage points during the Populist era, whereas the share benefiting from commercial policy reforms rose two percentage points.

Trade in communication equipment is distorted, in order of commercial significance, by state-provided export incentives, subsidies to import-competing firms, and tariff increases. Since 2013 three-quarters or more of sectoral trade involves exporters competing against one or more rivals that have benefited from export incentives. By 2019 just under half of trade in this sector involved an exporter competing against one or more local rivals that received a subsidy. The share of sectoral exports facing tariff increases rose over time and is just less than one-quarter, having almost doubled during the Populist era. These statistics give a sense of how far from a level playing field global commerce in communication equipment has come.

As noted earlier, this sector has seen a fair amount of trade reform. Tariff cutting accounts for the lion share of the trade in communication equipment benefiting from commercial policy reforms. From the years 2015 to 2019 the percentage of sectoral trade benefiting from tariff cuts has risen twenty percentage points, with most of the gain occurring before the Populist era. In contrast, subsidy reduction and elimination has played a minor role.

Turning now to the exposure of intra-G20 sectoral exports to trade distortions and trade reforms during the Populist era (Figure 3), China, South Korea, and the United States saw large share of their bilateral exports experience worse access to the markets of other G20 members. Those exporters from China and the United States also benefited from many trade reforms abroad (see the relevant columns of the green heat map in Figure 3). Taken together, this implies a mixed picture for these two trading nations' exporters of communication equipment.

In terms of changing policies towards imports, Russia seems to have taken the most restrictive approach, affecting the exports of communications equipment from many G20 members. China, Brazil, France, Germany, India, Turkey, and the United States have taken steps that have harmed fewer G20 members than Russia, but still a significant number of trading partners' interests were harmed. According to the Global Trade Alert database, South Korea and Saudi Arabia took no measures that curtailed the access to their markets by exporters of communication equipment from other G20 members.

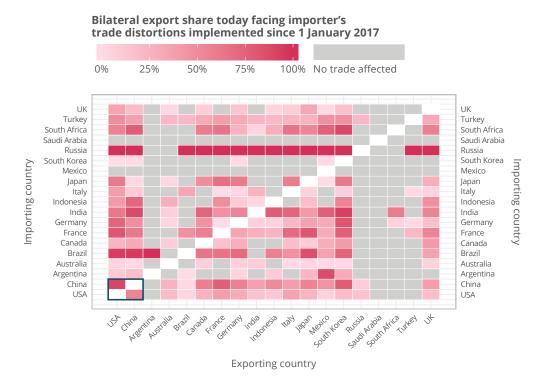
With respect to the exposure of G20 exporters to commercial policy reforms in other G20 members, the pattern revealed by the green heatmap of Figure 3 is uneven. China's reforms appear to benefit large shares

of the imports of Canada, France, Germany, Italy, Japan, Mexico, South Korea, Russia, the United Kingdom, and the United States. Only Indonesia's reforms benefit as many G20 trading partners. Australia, Japan, Mexico, and Saudi Arabia do not appear to have taken any reforms that benefit communication exporters in the rest of the G20, further adding to the mixed outcomes witnessed since the start of 2017.

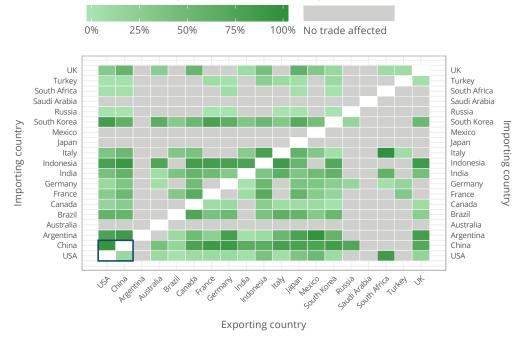
Going back to 2009, the beginning of the so-called crisisera, it is evident that from both heatmaps in Figure 4 that significant amounts of commercial policy intervention happened before the Populist era began and has persisted. Russia is now joined by the United States as having taken measures adversely affecting almost all G20 members. Mexico has taken no such measures. Apart from the Mexican market, South Korea's exports of communication equipment have been heavily exposed to protectionism in other G20 members.

With respect to trade reforms implemented since 2009 that have stuck, China, Japan, and the United States' exporters seem most exposed. Japan appears to have undertaken no policy changes improving market access for foreign sellers of communication equipment. Australia's unilateral commercial policy reforms have benefited only five other G20 members as well, which is below the average.

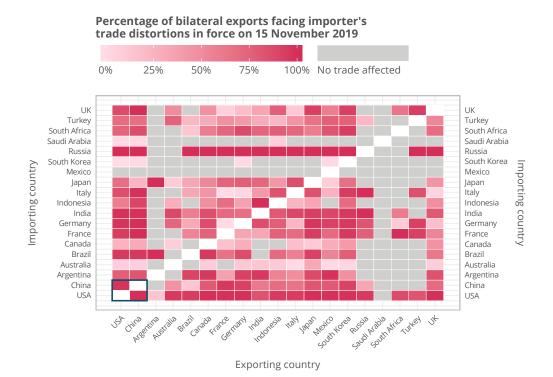
G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)



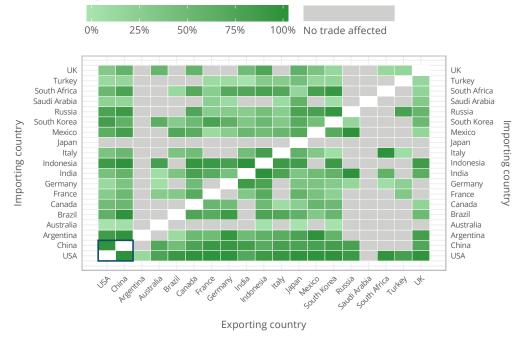
Bilateral export share today benefiting from importer's trade reforms implemented since 1 January 2017



G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 14 TRADE IN TRANSPORT EQUIPMENT

The purpose of this chapter is to size up the policy developments affecting international trade in transport equipment during the Populist era. What share of transport equipment exports suffered worse access to foreign markets since January 2017? What policies are most responsible for harming transport equipment exporters? And how does the Populist era compare to earlier years? Such questions, as well as parallel questions about the scale of transport equipment exports benefiting from trade reforms, are answered in this chapter.

In 2018, the latest year for which a full set of global trade data is available, the total value of trade in transport equipment was \$1,734 billion, accounting for 9.9% of world goods trade.

Technically, this chapter relates to all of the trade associated with the products in Division 49 of the Central Product Classification version 2.1 of the United Nations.

That sector is formally known as "Transport equipment" and includes the following products: motor vehicles, trailers, ships, pleasure and sporting boats, railway locomotives and rolling stock, motorcycles, bicycles, and their parts and components.

Having identified these products the associated United Nations Harmonized System six-digit product classification codes were used when extracting information from the United Nations COMTRADE database of international trade flows and from the Global Trade Alert database of policy interventions affecting international commerce.

To make sense of the policy developments in the transport equipment sector, several benchmarks were employed here and reproduced graphically in this chapter. Those interested in reading about the principal findings can readily skip the next section.

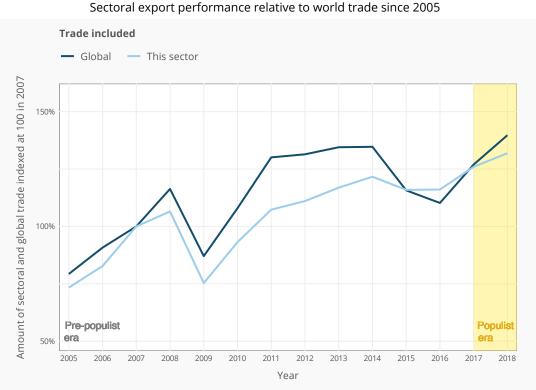


FIGURE 1

Benchmarks employed and the relationship to the figures presented in this chapter

First, the evolution of the total value of transport equipment trade in United States dollars during the Populist era was compared to those in the years from 2005 to 2016. A further comparison was made over the same timeframe with the total value of world trade in all goods. To aid comparability across series and over time, the total value of transport equipment and world trade was set to 100 in 2007, the year before the global economic crisis took hold. Figure 1 graphs the evolution over time of the total values of transport equipment trade and world trade.

Figure 2 contains four panels that summarise the scale of trade affected by discriminatory and liberalising policy interventions in the transport equipment sector that were implemented after November 2008 (when the Global Trade Alert database started recording policy interventions affecting trade).²⁵

In the top left-hand panel of Figure 2 the share of world trade in transport equipment that competes against one or more trade distortion is graphed out from 2009. Another line denotes the share of transport equipment trade benefiting from one or more trade reforms. Only the policy interventions in effect in a given year contribute to the reported totals. Data is also presented in this panel on the share of all goods exports facing discrimination and benefiting from reforms in 2019, allowing for a comparison between this sector and the global average in 2019.

In the bottom right-hand panel of Figure 2 the share of sectoral trade facing discrimination in markets abroad is

decomposed into the number of times each trade flow has been adversely affected by protectionism. This particular panel will reveal whether there has been a build-up of multiple hits on a sector's exports.

The top right-hand panel of Figure 2 reveals which policies that harm foreign commercial interests affect relatively more trade in this sector in each year. Taking account of when protectionist policies come into force and, where relevant, lapse, it is possible to graph out over time the share of this sector's trade that is affected by all forms of protectionism, by export incentives given by governments, by tariff increases, and by subsidies to import-competing firms.

As the share of sectoral exports competing against foreign rivals that received export incentives tends to be large, we also report the total share of exports affected by all forms of protectionism other than export incentives. The build-up of the latter share over time ought to discourage readers from drawing the erroneous conclusion that export incentives are the "only" problem and that market access has not been affected much during either the Populist era or since the onset of the global economic crisis.

The lower right-hand panel of Figure 2 is analogous to the upper-right hand panel with one exception: it graphs out the shares of sectoral trade that has benefited from commercial policy reforms. Specific attention is given in this panel to the contributions of tariff cuts and of subsidy reductions. Furthermore, comparing the evidence presented in two right-hand panels of Figure 2 enables readers to assess the relative scale of protectionism and liberalisation in this sector, as measured by the share of sectoral trade implicated.

25 Thus Figure 2 should be interpreted as indicating the shares of trade affected by policy changes undertaken since the onset of the global economic crisis. Often, we refer to this era as the crisis-era. This is to be distinguished from the period from 1 January 2017 on, which we refer to as the Populist era.

Sectoral trade affected by commercial policy changes since the onset of the global economic crisis

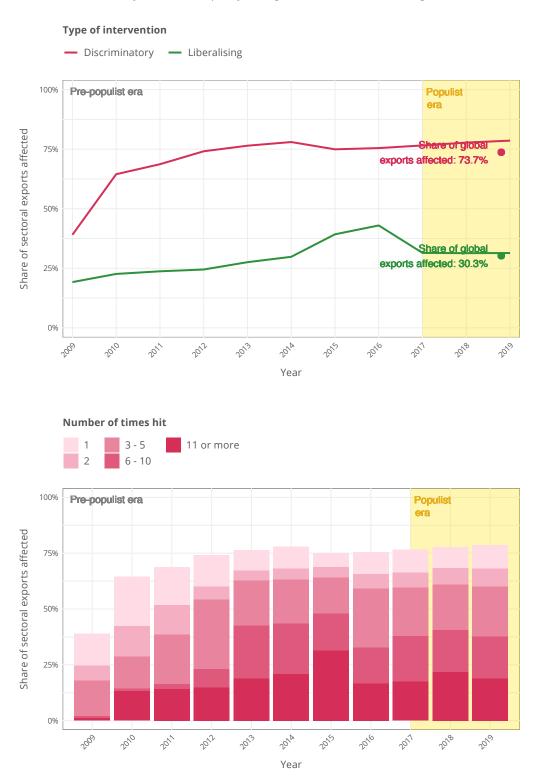
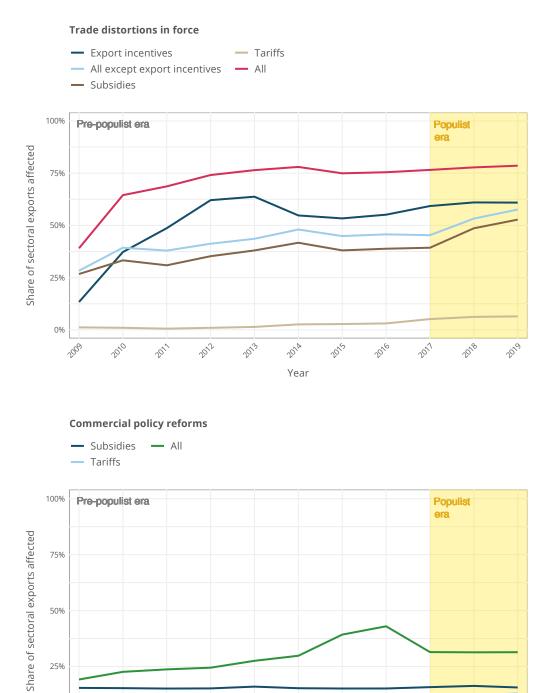


FIGURE 2 (contd.)



0%

Year

Having presented statistics on global developments in this sector in Figures 1 and 2, the focus shifts to the access of each G20 member's exporters in this sector to every other G20 market. To home in on the scale of sectoral goods trade affected by protectionism and liberalisation during the Populist era, Figure 3 presents two heat maps that show what percentage of each G20 member's exports are affected by policy changes by each importing nation.

The upper panel of Figure 3 refers to the shares of bilateral exports affected by protectionist policies implemented since 1 January 2017. Darker shades of red imply greater shares of bilateral trade affected. To compare the Sino-U.S. trade war with other bilateral developments, contrast the cells in the bottom left most corner (which relate to trade between China and the United States) with the other cells in this table.

If a G20 member has taken blanket, across-the-board measures against imports in this sector then this should be revealed by a row of red cells for that member. If a G20 member's exporters have been singled out, or otherwise adversely affected, by many other G20 members then that should be revealed by a column of red cells above the name of the relevant member.

The lower panel of Figure 3 is analogous to the upper panel but relates to the shares of bilateral exports benefiting from reforms in the importing nation. The same time frame applies, that is, reforms must be implemented on or after 1 January 2017 to count towards this panel. To highlight the difference between the two panels, this heatmap is in green and darker cells indicate more bilateral exports facing better conditions in the importing nation's markets.

Taken together the panels in Figure 3 shed light on the commercial significance of the policy changes in this sector affecting international trade undertaken by the world's largest economies. Moreover, those G20 members responsible for markedly changing the trading conditions of exporters from other G20 nations can be identified.

Further perspective can be found by comparing the panels in Figure 3 with the two presented in Figure 4. The panels in the latter Figure 4 extend the analysis back further to policy changes implemented since 1 November 2008, allowing the build-up of protectionism and trade reforms from 1 November 2008 to 15 November 2019 to be compared with that in the shorter Populist era (1 January 2017 to 15 November 2019). Other than the change in timeframe, every other feature of the panels in Figure 4 were constructed in the same way as those for Figure 3.

Principal findings for the Transport Equipment sector

Since the global economic crisis began international trade totals for transport equipment have not moved in line with changes in the overall goods trade. As Figure 1 shows, the total value of international trade in transport equipment fell proportionately more than world trade during 2009 and recovered more slowly from 2009 to 2014. Moreover, when world trade dipped in 2014 to 2016, cross-border trade in transport equipment barely fell. During the Populist era world goods trade has grown faster than trade in transport equipment.

Commercial policy changes over the past 10 years in the transport equipment sector have been heavily skewed towards discrimination. The accumulation of protectionist measures at the start of the crisis era was such that by 2012 just under three-quarters of trade in this sector was affected by policy steps that were imposed since November 2008 and that were still in effect. That fraction has grown slowly since and by 2019 just under fourth-fifths of trade in transport equipment competed against one or more trade distortions that were still in force. In contrast, less than a third of sectoral trade benefited from those commercial policy reforms in effect in 2019.

While state-provided export incentives distort the most trade in transport equipment (affecting 60% of sectoral trade since 2012), it is the rising share of trade that is affected by subsidies to import-competing producers of such equipment that is noteworthy. By 2019 over 52% of sectoral exports competed against a subsidised local producer. That percentage has risen sharply during the Populist era. Tariff increases play a very minor role in influencing trade in this sector. The build-up of protectionism in this sector is also indicated by the fact that by 2012 over half of the trade in transport equipment had been hit three times or more by protectionist policy interventions.

With respect to commercial policy reforms affecting trade in transport equipment, consistently a sixth of sectoral trade has benefited from reductions or the elimination of subsidies to import-competing firms. Over time, the fraction of sectoral trade benefiting from tariff cuts has risen to one-eighth. No major changes in reform dynamics were found in the Populist era. In terms of the quantum of intra-G20 trade affected by commercial policy changes during the Populist era, as demonstrated in Figure 3, Russia and the United States have taken steps that worsen trading conditions of transport equipment exporters in almost every other G20 member. To a lesser degree, Canada and Turkey have done likewise. South Korea took no adverse steps and Mexico and Saudi Arabia's trade discrimination in this sector only harmed U.S. commercial interests.

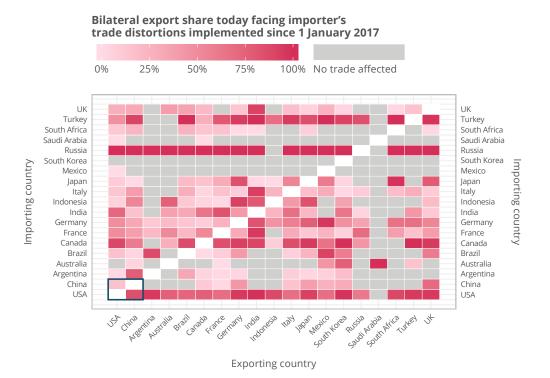
With respect to commercial policy reforms during the Populist era, policy interventions by Argentina, China, and the United States benefited many numbers of G20 members. In contrast, no commercial policy reforms benefiting G20 trading partners were undertaken by Japan, Mexico, South Korea, and Saudi Arabia. Steps taken by Canada and Turkey benefited only one G20 member, which happened to be the United States in both cases.

Looking back at intra-G20 trade since the onset of the global economic crisis (see the heatmaps in Figure 4), the protectionist build-up referred to above is apparent by the

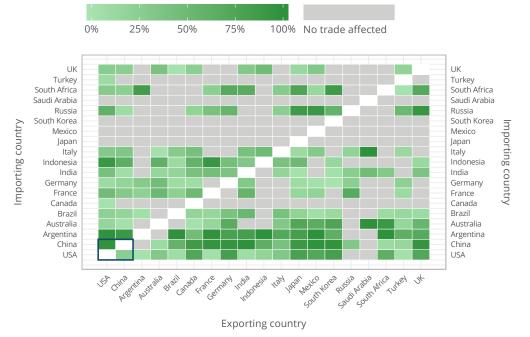
large proportion of bilateral trade relations represented by dark red (indicating close to 100% of bilateral trade has been exposed to harmful measures taken by the importing nation). Argentina, Russia, Turkey, and the United States have taken steps that narrowed commercial opportunities for transport equipment exporters from many G20 members. In contrast, Mexico and South Korea have crimped market access the least. China, Germany, and India's export opportunities appear particularly harmed (see the relevant columns of the "red" heatmap).

The heatmap in Figure 4 capturing commercial policy reform indicates an uneven pattern of G20 market access improvements over the past decade for transport equipment. The consequences of Mexican reforms have been to positively affect the commercial prospects of many G20 members. In contrast, at the end of 2019 the access of the G20 trading partners of Japan, Saudi Arabia, and South Korea to their transport equipment markets had not improved since 2009

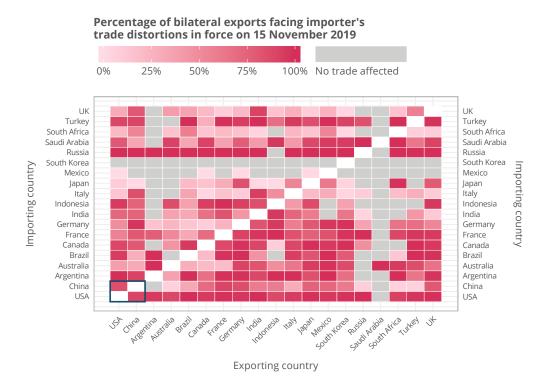
G20 bilateral exports affected by commercial policy changes from 1 January 2017 to 15 November 2019 (the Populist era)



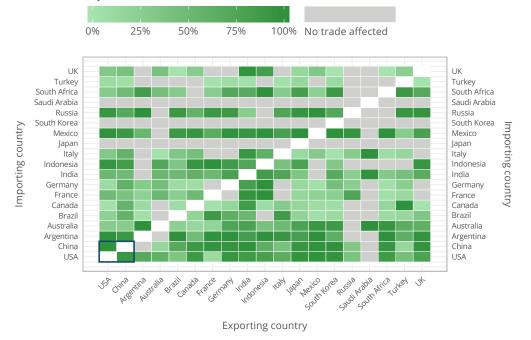
Bilateral export share today benefiting from importer's trade reforms implemented since 1 January 2017



G20 bilateral exports affected by commercial policy changes in force on 15 November 2017



Percentage of bilateral exports profiting from importer's reforms in force on 15 November 2019



CHAPTER 15 WHAT'S NEW IN THE GTA DATABASE?

A total of 6,168 public policy interventions were documented from 1 January 2019 to 15 November 2019. It is important to state that this total includes policy interventions from prior years, allowing us to update our assessment of commercial policy dynamics of earlier times.²⁶ Approximately, three-quarters of the new entries into the Global Trade Alert database in 2019 relate to public policy interventions from an earlier year.

This 2019 total represents more than a 50% increase over the total number of measures documented in 2018. As of 15 November 2019, the Global Trade Alert database contained 24,819 entries, each relating to a distinct public policy intervention that when implemented would alter the relative treatment of foreign commercial interests visà-vis their domestic rivals.

While ultimately the goal is to document public policy interventions using official sources of information, when identifying potential leads that may translate into entries into the Global Trade Alert database, team members consult a range of official and unofficial sources. Leads can be identified by human intervention (for example, by spotting a relevant news item) or though automated means (such as scraping government websites). Moreover, leads can be found in corporate declarations, often those made by publicly listed companies that typically have a legal obligation to report truthfully.

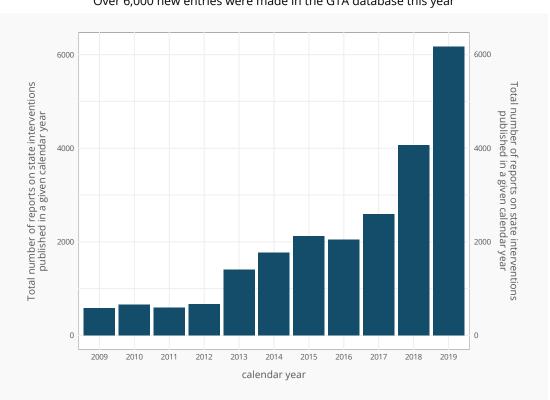


FIGURE 12.1 Over 6,000 new entries were made in the GTA database this year

26 Therefore, the high total number of policy interventions documented in 2019 does not necessarily reflect a higher level of commercial policy activity in 2019. It turns out that, as shown in Chapter 1, 2019 witnessed a large number of new discriminatory policy interventions and a reduction in the number of new trade reforms.

During 2019 each of these sources of leads provided a significant number of leads that were subsequently investigated and, where the standards for publication were met, translated into a new entry into the Global Trade Alert database. A significant extension of the Global Trade Alert database in 2019 is the coverage of Chinese subsidies based on corporate filings.

Adding evidence from corporate filings

Practicalities can stand in the way of developing a comprehensive database of government resort to commercial policy change. Not every government maintains a register of firms that have received state largesse. In addition, some states do not publish detailed information on the subsidies they give to commercial enterprises. Nor do they make informative submissions to the World Trade Organization in a timely manner.

So as to limit differential coverage of subsidy interventions across nations, the Global Trade Alert team goes to considerable lengths to identify whatever high-quality information it can concerning all of the recognised forms of subsidy.²⁷ This has become particularly relevant given the oft-heard accusations of widespread Chinese subsidisation of its industries and firms.

Over the past year or so, acting separately, we and the Organisation for Economic Co-operation and Development (OECD) have begun to use corporate declarations of the receipt of subsidies in our reporting and analysis. Specifically, the Global Trade Alert joined forces with a provider of high-quality information on Chinese publicly listed companies, Win.d, to extract as much relevant data as possible from company filings in their stock marketrelated filings and disclosures.

For over a decade now such Chinese publicly-listed companies have had a legal obligation to declare the receipt of subsidies from any government body. While there may be doubts that Chinese companies report every element of state largesse that they receive²⁸, the fact that they declare receiving subsidies at all is of interest. Moreover, changes in the total amounts of subsidies received by a firm are of interest to the Global Trade Alert initiative. In this manner, 3,725 new entries were recorded in our database, two-thirds of which involve increases in subsidies received by Chinese firms.

Including these entries on Chinese subsidies was not simply a matter of extracting the data from Win.d's database. The Global Trade Alert team also identified which sectors and which principal lines of business a subsidy recipient operates in, which in turn enabled the identification of China's trading partners that export the same goods to the Middle Kingdom. Consequently, the total number of times many countries' commercial interests have been affected by changing Chinese subsidies has risen markedly, along with the share of their exports facing subsidised importcompeting rivals abroad.

In 2019 a total of 5,093 subsidy interventions were documented. As were 478 changes in import tariff regimes and 441 changes in incentives to export. Given the huge number of Chinese subsidies entered into the database, it is unsurprising that together China and the United States account for just under 70% of the new public policy interventions documented this year.

Why updating the Global Trade Alert database matters

One important difference between monitoring initiatives on trade-related public policy intervention is whether earlier published totals are updated in light of new information about policy measures taken by governments. Given its desire to provide the most upto-date and comprehensive assessment of commercial policy dynamics since November 2008, and recognising the reality of reporting lags, the Global Trade Alert has taken the view that it will update earlier totals when new high-quality information becomes available. Doing so absorbs resources.

There are good reasons for believing that these resources are well spent on updating. Failure to update has two negative consequences. First, it means that published totals for a particular period show only a fraction, possibly a tiny fraction, of the quantum of public policy intervention undertaken during a given timeframe. During times of deteriorating trade relations this will give the impression that resort to protectionism is less than it actually is.

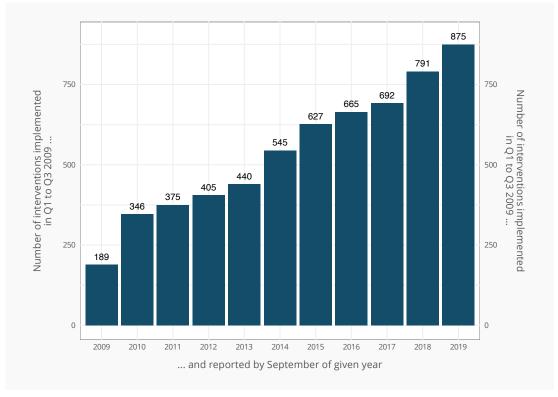
Second, to the extent that a monitoring initiative relies on state-provided information about its public policy interventions, then failure to update totals implicitly creates an incentive for governments to delay information sharing so as to ensure that published totals of resort to trade distortions are lower than they would otherwise be. Both outcomes compromise the transparency of the world trading system.

²⁷ Although what follows is a description of steps taken to improve our coverage of Chinese subsidies this year, the Global Trade Alert team has also identified databases of subsidies for other nations. In the future steps will be taken to prepare, where relevant, entries in the latter databases for inclusion in the Global Trade Alert database.

²⁸ After all, these companies may have a different understanding of what constitutes a subsidy. As debates over what constitutes state aid in the European Union, China may not be alone in having firms that overlook certain subsidies.

FIGURE 12.2

Ten years on the resort to protectionism during the first three quarters of 2009 looks a lot worse than at the time



But, numerically speaking, does updating really alter the qualitative interpretation of contemporary trade policy dynamics? Arguably the answer is "yes" if Figure 2 is anything to go by. This figure focuses on the total number of discriminatory policy interventions implemented by governments from January to September 2009, a time when prime ministers and presidents openly worried about a retreat inward and towards protectionism. By the time we published our report in September 2009 before the G20 Leaders' Summit in Pittsburgh, United States, the Global Trade Alert team had documented 189 discriminatory interventions worldwide.

Figure 2 also shows the total number of discriminatory interventions implemented from January 2009 to

September 2009 that were documented on every successive anniversary, that is, by September 2010, September 2011, September 2012, etc, through to September 2019. As is evident, the total number of protectionist measures had doubled by September 2011. By September of this year, a total of 875 measures that tilted the commercial playing field in favour of domestic commercial interests during the first nine months of 2009 had been documented.

At a minimum, this suggests that protectionist dynamics were considerably worse in 2009 than originally thought. Such findings caution against making instant, benign assessments of contemporary assessments of the resort to protectionism by policymakers. Those advising and informing decision-makers please take note.

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 December 2019, the GTA has been mentioned or its data used in 1,860 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 upon me to thank the committed team that identify, investigate, and document the public policy interventions found there. Let me take this opportunity to express my gratitude to Sara Ashour, Callum Campbell, Gunther Errhalt, Craig vanGrasstek, Halit Harput, Chintan Jadwani, Josse Jakobsen, 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 preparation of the large number of data entries on Chinese firm subsidies was led by Piotr Lukaszuk.

My colleague and co-author of this report, Johannes Fritz, deserves particular praise. The GTA's analysis and outreach rests on the high-quality data that our team assembles from different, largely official, sources. In a world where so much information about commercial policy is dispersed and unstructured, it takes sustained discipline and drive to bring it together in a consistent manner. Johannes has brought a unique blend of trade policy expertise, project management skills, and IT knowledge to this challenging task. The Global Trade Alert would be significantly poorer without his many contributions. The production and editing of this report was expertly handled by Anil Shamdasani under tight time constraints.

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 and in the years since. 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 at the University of St. Gallen, whose continued financial support and practical advice is greatly appreciated.

Simon J. Evenett, Coordinator

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

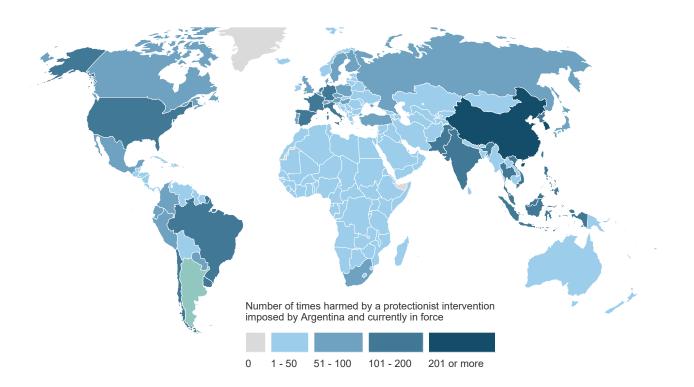
ARGENTINA

What is at stake for Argentina's exporters?

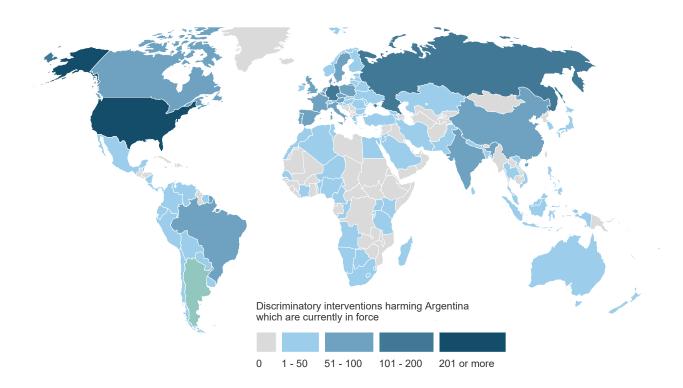
UN MAST	Foreign discriminatory policy instrument	Percentage of this G20 member's exports at risk due to										
chapter		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	15.82	34.68	47.88	57.21	68.07	71.83	71.05	73.73	76.45	76.67	77.49
D	Contingent trade protection	0.30	0.35	0.36	0.07	0.30	0.44	0.44	0.57	0.61	0.96	1.35
E	Non-automatic licensing, quotas	1.85	1.64	4.23	9.49	9.11	9.81	9.99	12.47	13.14	13.44	13.46
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
I	Trade-related investment measures	0.26	0.54	1.01	3.11	2.42	4.53	6.98	6.11	5.15	2.71	2.62
L	Subsidies (excluding export subsidies)	4.15	4.61	7.72	8.10	22.45	24.42	22.79	18.84	26.26	27.65	26.74
М	Government procurement	0.27	0.30	0.27	0.78	1.85	2.58	2.82	1.48	1.62	1.75	1.98
Р	Export measures	9.13	28.92	40.54	46.94	51.17	57.68	56.63	59.20	63.42	62.45	64.90
	Import tariff increases	1.19	1.51	3.16	5.42	15.90	18.17	17.70	18.00	18.34	18.68	19.65
	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

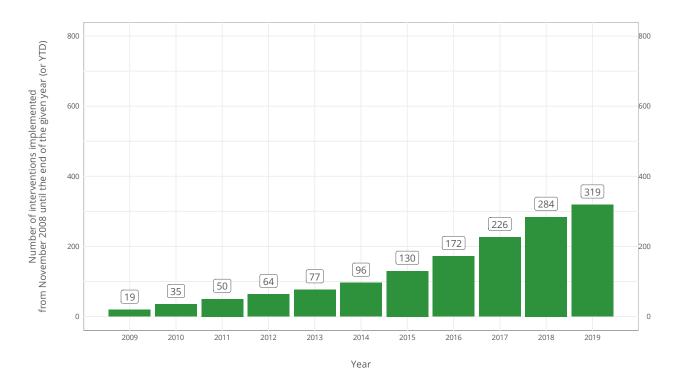


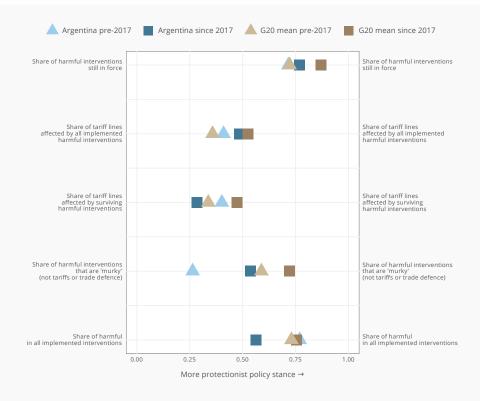


ARGENTINA Track record of liberalisation

ARGENTINA

Number of liberalising interventions imposed since November 2008

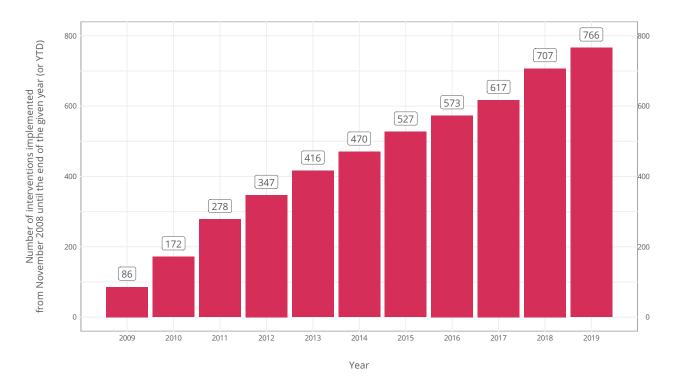




ARGENTINA Track record of protectionism

ARGENTINA

Number of discriminatory interventions imposed since November 2008



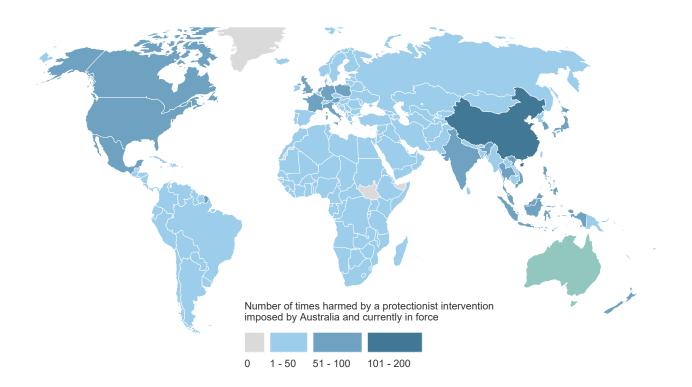
AUSTRALIA

What is at stake for Australia's exporters?

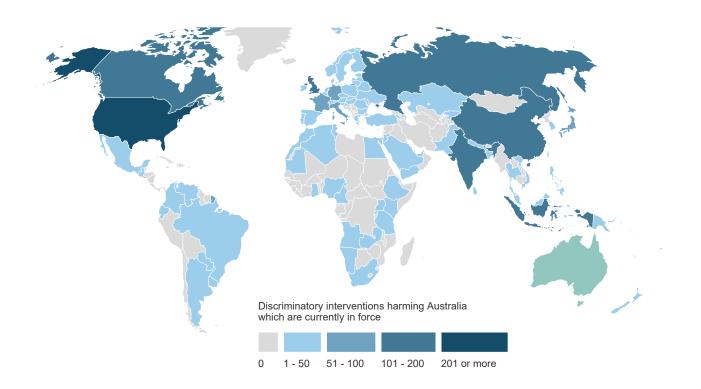
UN MAST	Foreign discriminatory policy instrument	Percentage of this G20 member's exports at risk due to										
chapter		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	23.50	29.75	34.86	40.68	49.23	57.12	55.74	57.44	59.06	60.94	60.56
D	Contingent trade protection	0.06	0.04	0.04	0.04	0.06	0.10	0.14	0.34	0.42	0.48	0.54
E	Non-automatic licensing, quotas	2.19	8.00	12.35	13.45	14.45	14.54	14.96	15.20	15.26	15.70	15.82
F	Price control measures	9.06	9.06	9.10	9.13	9.12	10.09	11.05	11.05	11.05	14.59	14.96
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
I	Trade-related investment measures	0.00	0.02	0.03	0.04	0.04	0.33	0.47	0.48	0.49	0.49	0.38
L	Subsidies (excluding export subsidies)	3.97	5.01	14.17	14.72	22.61	23.43	20.58	15.37	24.31	26.36	18.31
М	Government procurement	0.58	0.90	0.70	0.82	0.92	1.04	1.11	1.13	1.26	1.84	2.79
Р	Export measures	8.68	14.61	19.16	23.23	25.25	28.05	26.24	29.60	37.50	38.11	40.14
	Import tariff increases	0.31	0.54	0.58	2.38	9.78	13.36	13.53	13.47	13.89	14.37	14.39
	Instrument unclassified	0.20	0.39	0.40	0.96	2.42	3.16	1.26	1.21	1.59	2.46	2.60

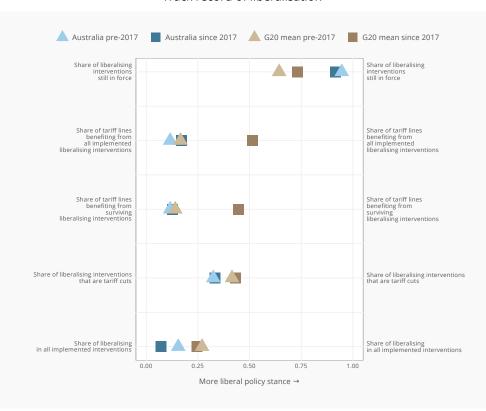
Note: This table presents estimates of the percentage of a nation's exports that face different harmful policy interventions in their export markets. Only those harmful interventions implemented after November 2008 count towards these totals-therefore, the estimates indicate the exposure of national 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

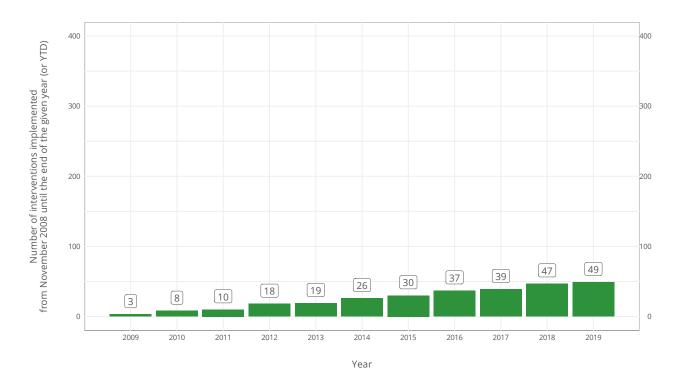


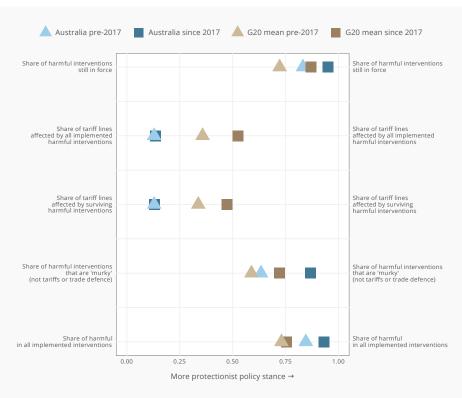


AUSTRALIA Track record of liberalisation

AUSTRALIA

Number of liberalising interventions imposed since November 2008

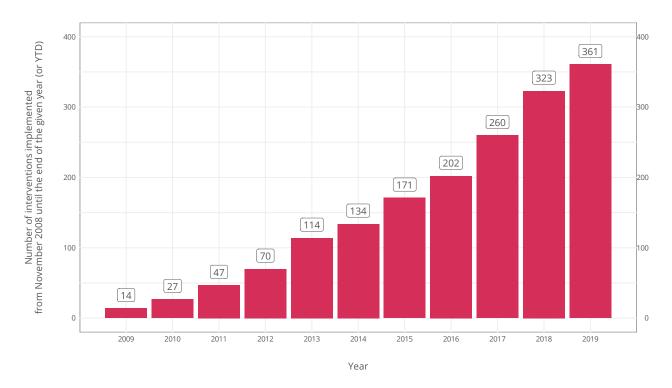




AUSTRALIA Track record of protectionism

AUSTRALIA

Number of discriminatory interventions imposed since November 2008



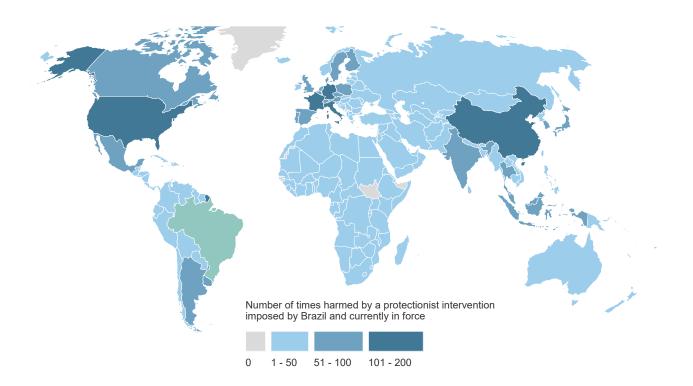
BRAZIL

What is at stake for Brazil's exporters?

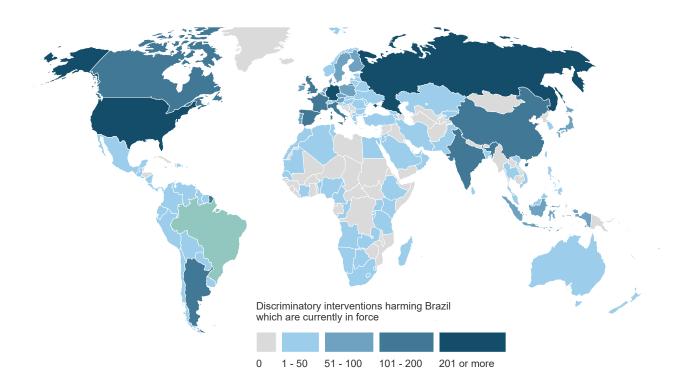
UN MAST	Foreign discriminatory policy instrument	Percentage of this G20 member's exports at risk due to										
chapter		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	34.44	43.59	46.59	54.50	67.34	68.01	67.84	69.53	71.52	74.25	75.23
D	Contingent trade protection	0.04	0.09	0.17	0.26	0.25	0.25	0.27	0.75	0.93	1.91	2.47
E	Non-automatic licensing, quotas	2.65	6.90	11.52	16.81	18.18	18.36	17.25	14.80	14.97	15.32	15.89
F	Price control measures	4.70	4.73	4.74	4.75	4.75	4.76	4.76	4.77	4.77	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
I	Trade-related investment measures	0.52	1.15	2.08	2.54	2.56	3.71	5.48	6.16	6.17	6.24	6.09
L	Subsidies (excluding export subsidies)	4.63	9.75	14.77	16.33	30.17	32.33	31.23	26.84	33.85	36.39	29.76
М	Government procurement	2.71	2.73	2.27	3.53	4.95	6.02	6.77	7.09	7.55	7.60	7.92
Р	Export measures	21.38	27.17	29.05	32.80	39.35	39.16	39.31	45.16	51.94	54.30	57.71
	Import tariff increases	1.52	2.18	3.42	4.01	7.91	8.80	9.97	12.42	13.71	14.93	15.44
	Instrument unclassified	0.02	1.30	1.44	1.48	3.81	4.48	6.08	6.25	5.99	5.54	5.65

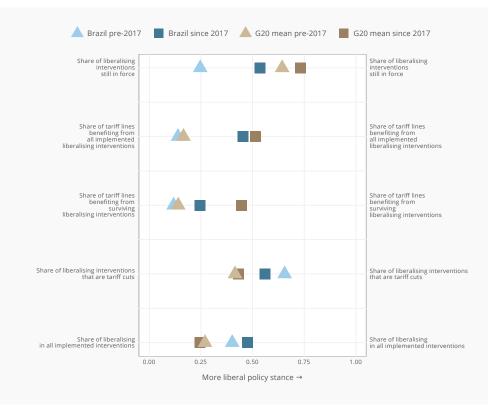
Note: This table presents estimates of the percentage of a nation's exports that face different harmful policy interventions in their export markets. Only those harmful interventions implemented after November 2008 count towards these totals-therefore, the estimates indicate the exposure of national 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

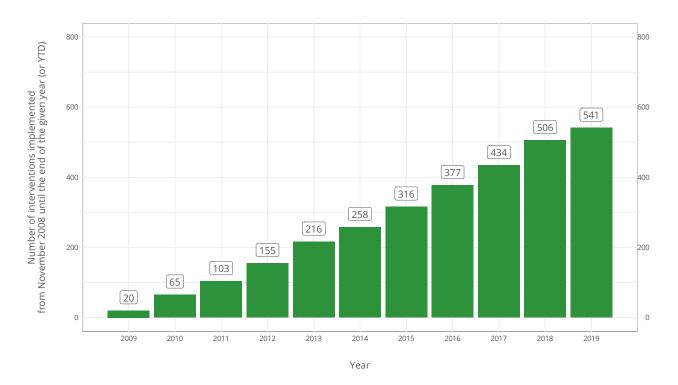


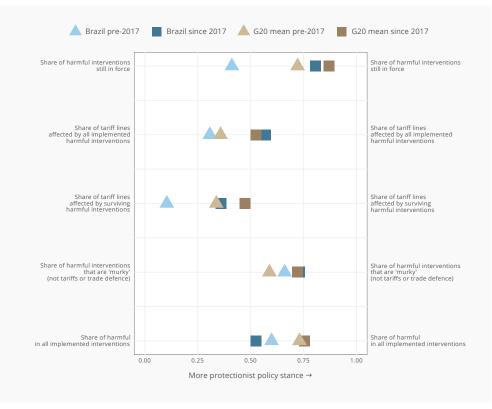


BRAZIL Track record of liberalisation

BRAZIL

Number of liberalising interventions imposed since November 2008

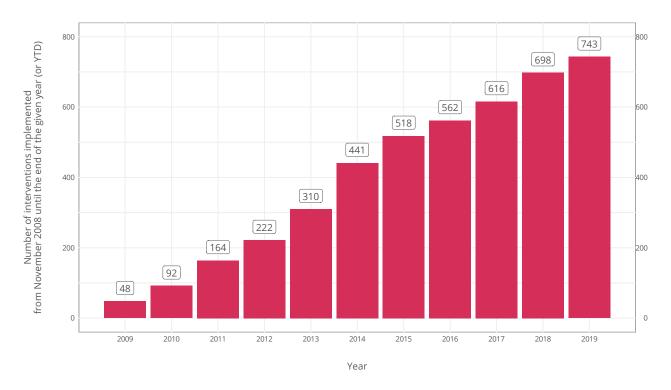




BRAZIL Track record of protectionism

BRAZIL

Number of discriminatory interventions imposed since November 2008

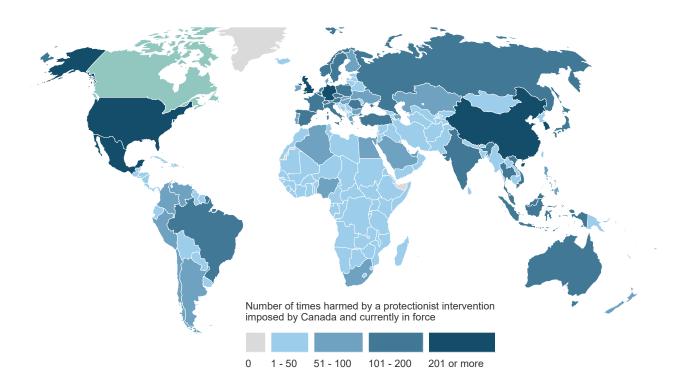


CANADA

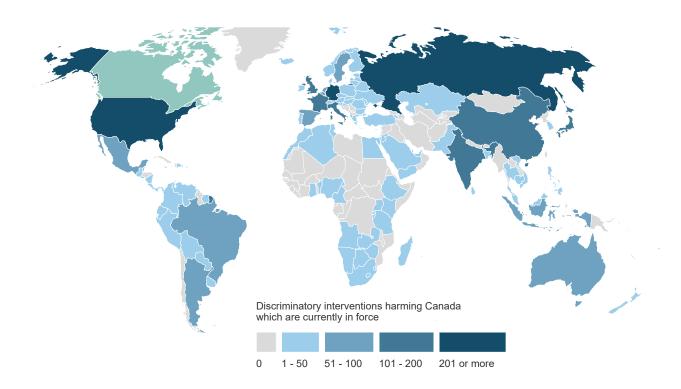
What is at stake for Canada's exporters?

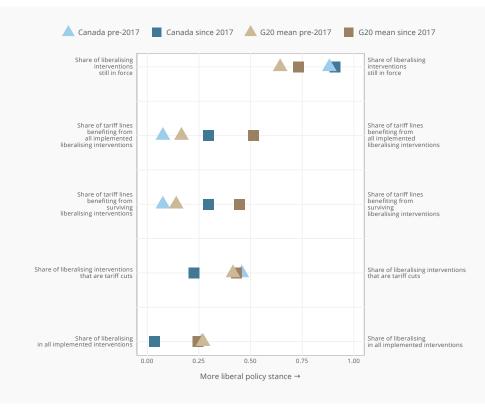
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s G20 m	nember':	s export	s at risk	due to	•••	
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	36.97	48.51	54.02	65.24	71.85	71.93	79.13	82.03	84.08	85.73	85.90
D	Contingent trade protection	0.11	0.12	0.13	0.13	0.13	0.14	0.43	2.07	2.57	4.42	4.54
E	Non-automatic licensing, quotas	0.18	0.32	0.64	0.70	0.88	0.91	1.02	1.12	1.49	2.23	2.22
F	Price control measures	0.31	0.31	0.33	0.34	0.34	0.42	0.56	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
I	Trade-related investment measures	0.14	0.41	0.21	0.23	0.24	1.65	3.00	3.41	3.96	3.92	3.86
L	Subsidies (excluding export subsidies)	12.75	17.57	22.06	31.63	39.94	40.75	39.55	41.83	43.56	48.85	48.47
М	Government procurement	2.19	2.62	2.89	3.16	3.21	3.60	4.22	4.25	4.76	5.37	6.55
Р	Export measures	23.48	31.32	42.03	54.76	56.29	45.99	52.38	53.64	57.00	57.67	56.61
	Import tariff increases	0.10	0.27	0.48	0.99	1.82	1.87	1.94	2.23	2.55	6.36	7.84
	Instrument unclassified	0.01	0.14	0.03	0.13	1.10	1.67	1.93	2.34	2.62	2.99	2.99

COUNTRIES HARMED BY CANADA'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING CANADA'S INTERESTS

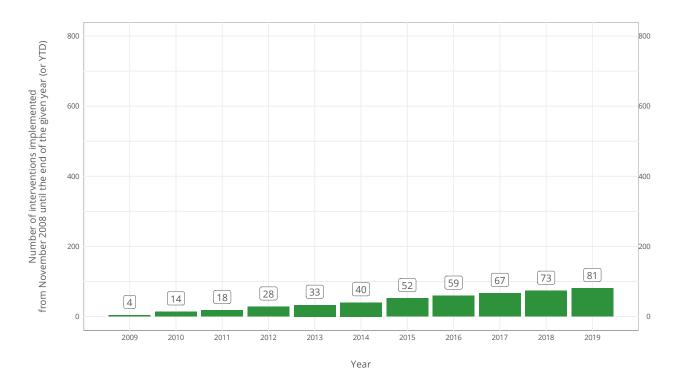


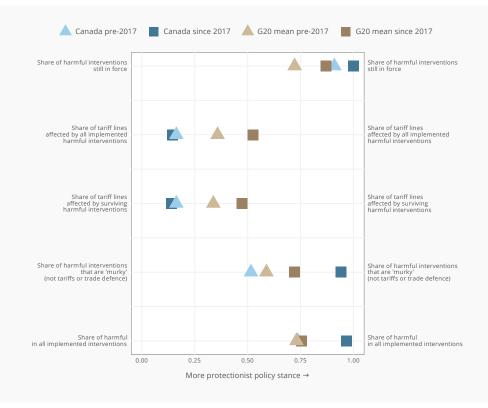


CANADA Track record of liberalisation

CANADA

Number of liberalising interventions imposed since November 2008

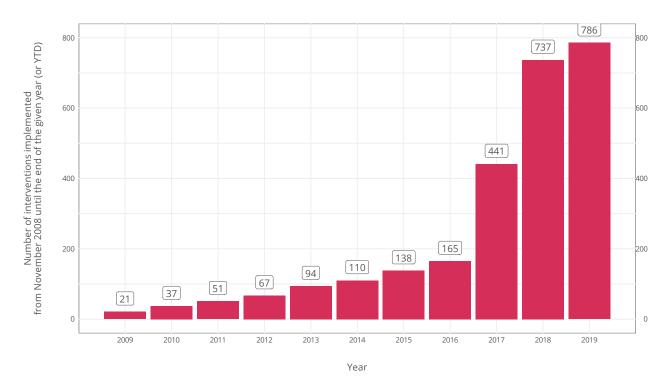




CANADA Track record of protectionism

CANADA

Number of discriminatory interventions imposed since November 2008

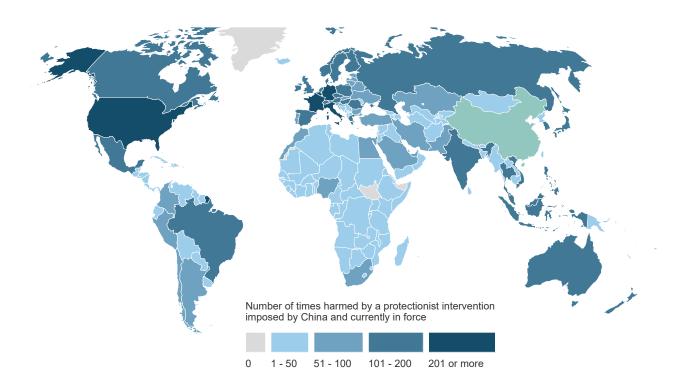


CHINA

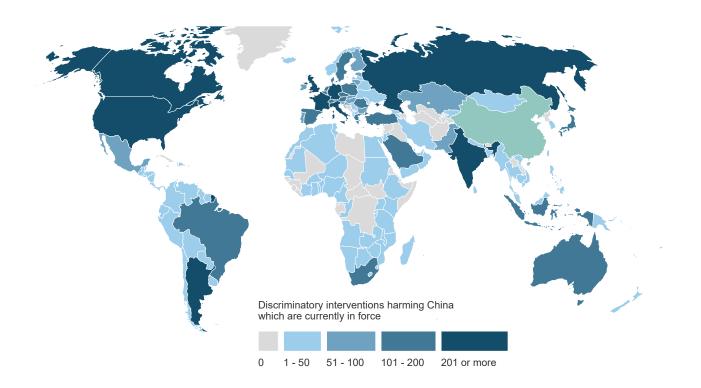
What is at stake for China's exporters?

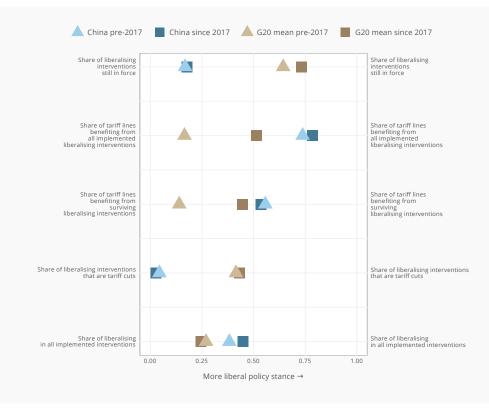
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember':	s export	s at risk	due to	•••	
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	14.63	26.28	42.90	51.97	66.91	71.05	66.43	69.47	71.44	72.98	73.96
D	Contingent trade protection	0.54	1.90	2.69	2.92	3.22	3.58	3.80	4.10	4.46	4.87	5.30
E	Non-automatic licensing, quotas	0.32	0.25	0.41	0.51	0.70	0.70	0.84	1.21	1.44	1.49	1.77
F	Price control measures	0.01	0.04	0.09	0.16	0.17	0.29	0.40	0.43	0.43	1.00	1.10
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
I	Trade-related investment measures	0.04	0.19	0.36	0.49	0.54	1.06	1.63	1.81	1.93	1.95	1.93
L	Subsidies (excluding export subsidies)	1.81	2.72	7.76	11.65	31.57	32.30	22.52	23.60	24.16	25.68	26.60
М	Government procurement	0.83	0.87	1.06	1.33	3.41	4.56	4.98	4.94	5.09	5.14	5.79
Р	Export measures	10.37	20.47	34.14	44.39	51.21	52.07	42.60	51.60	54.33	55.62	55.65
	Import tariff increases	0.74	1.35	2.02	2.90	3.92	24.21	22.13	22.94	25.25	30.49	36.78
	Instrument unclassified	0.15	0.34	0.39	0.41	0.55	0.94	1.02	1.09	1.08	2.15	2.27

COUNTRIES HARMED BY CHINA'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING CHINA'S INTERESTS

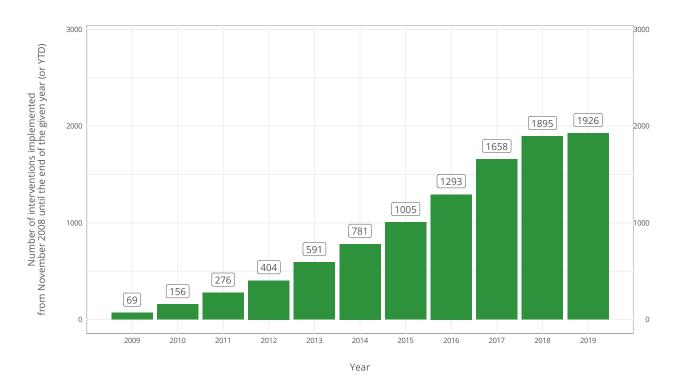


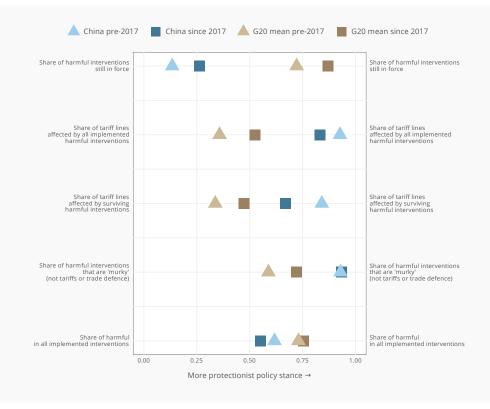


CHINA Track record of liberalisation

CHINA

Number of liberalising interventions imposed since November 2008

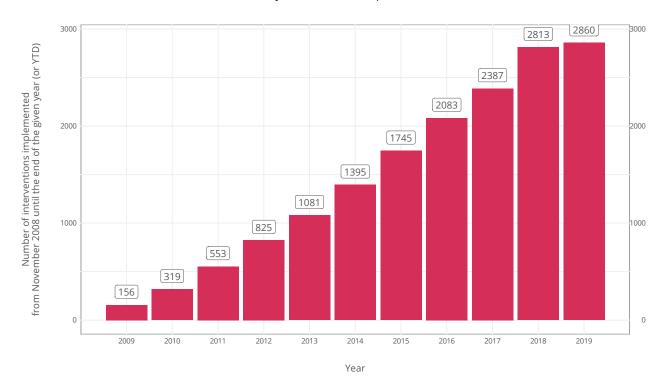




CHINA Track record of protectionism

CHINA

Number of discriminatory interventions imposed since November 2008

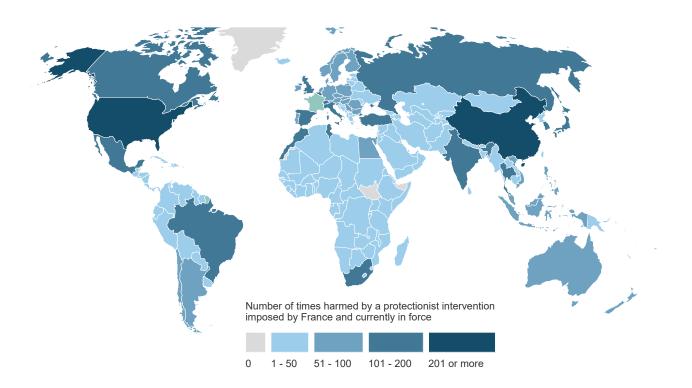


FRANCE

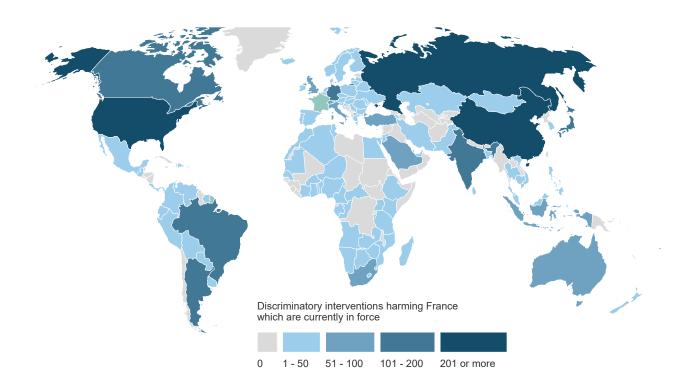
What is at stake for France's exporters?

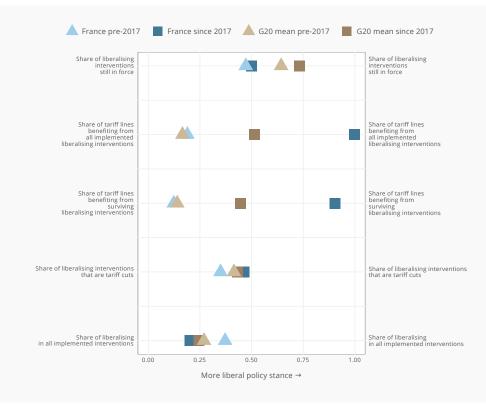
UN	Foreign		P	ercenta	ge of thi	s G20 m	nember'	s export	s at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	35.09	48.91	54.65	60.61	63.08	65.05	63.15	65.06	66.66	67.59	69.09
D	Contingent trade protection	0.01	0.03	0.03	0.05	0.08	0.17	0.17	0.27	0.28	0.33	0.40
E	Non-automatic licensing, quotas	0.13	0.17	1.10	1.22	1.31	1.40	1.48	1.51	1.81	2.41	2.40
F	Price control measures	0.00	0.01	0.05	0.08	0.29	0.82	0.98	1.05	1.09	1.25	1.27
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
I	Trade-related investment measures	0.11	0.17	0.21	0.23	0.25	0.46	0.68	0.97	1.52	1.46	1.46
L	Subsidies (excluding export subsidies)	6.51	10.66	8.44	10.99	10.93	13.72	12.94	14.02	15.69	19.68	21.46
М	Government procurement	0.34	0.43	0.31	0.48	0.63	0.82	1.10	1.23	1.30	1.39	1.61
Р	Export measures	29.75	41.73	49.85	56.97	59.33	59.31	57.74	59.73	61.18	61.76	63.60
	Import tariff increases	0.16	0.34	0.53	0.89	1.24	1.50	1.50	1.73	2.21	2.98	3.12
	Instrument unclassified	0.15	0.27	0.31	0.33	0.95	1.24	1.35	1.43	1.52	1.63	1.60

COUNTRIES HARMED BY FRANCE'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING FRANCE'S INTERESTS

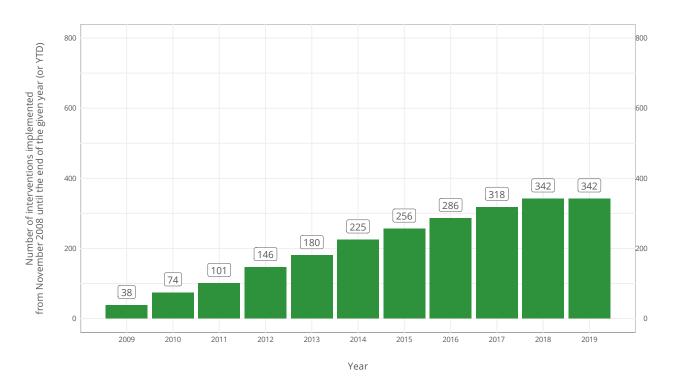


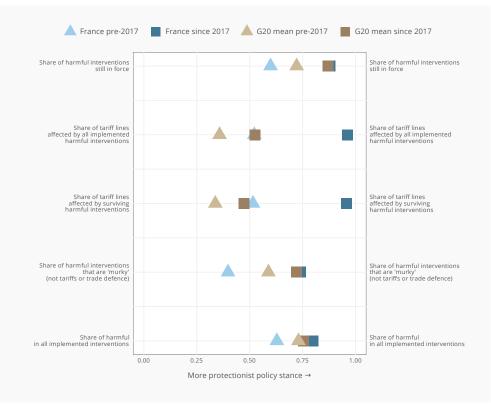


FRANCE Track record of liberalisation

FRANCE

Number of liberalising interventions imposed since November 2008

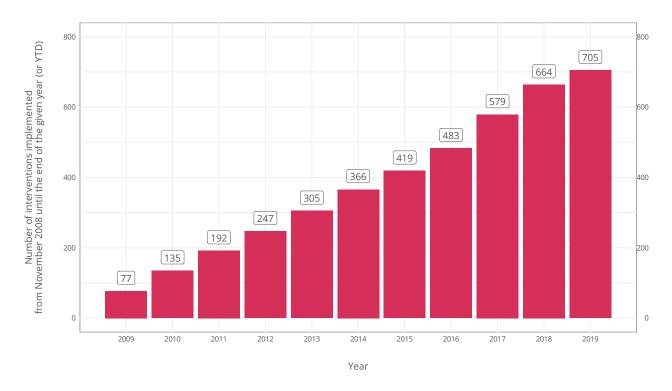




FRANCE Track record of protectionism

FRANCE

Number of discriminatory interventions imposed since November 2008

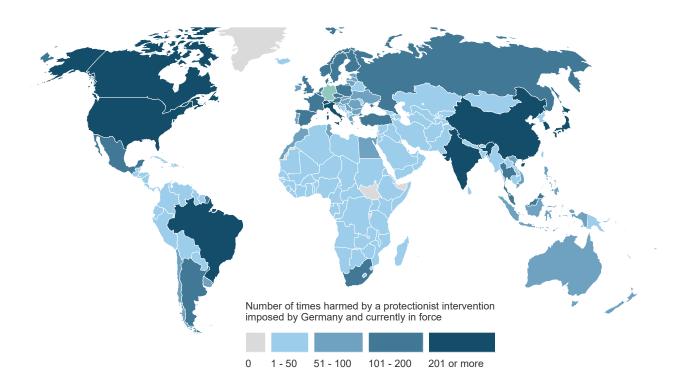


GERMANY

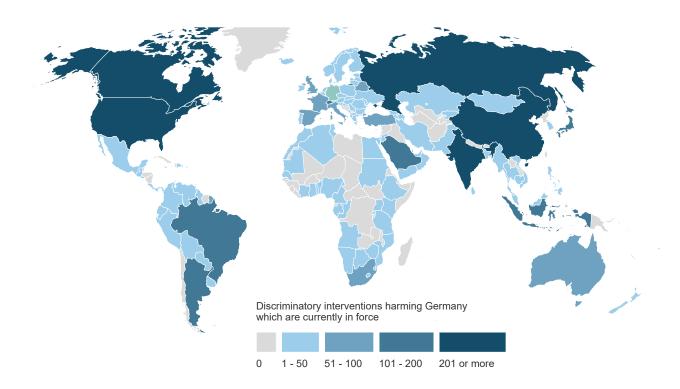
What is at stake for Germany's exporters?

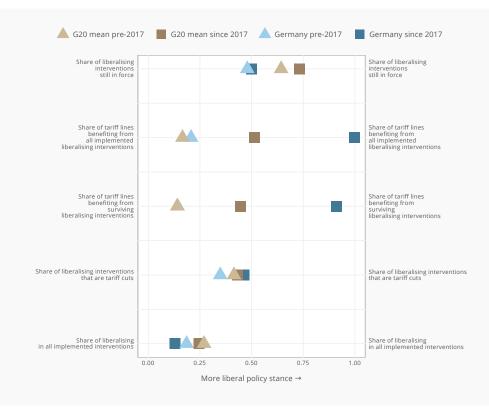
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s G20 m	nember':	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	41.85	53.45	55.47	58.92	60.99	61.93	60.22	62.45	64.72	65.84	67.25
D	Contingent trade protection	0.04	0.08	0.09	0.13	0.21	0.23	0.24	0.32	0.33	0.41	0.47
E	Non-automatic licensing, quotas	0.26	0.37	1.50	1.59	1.98	1.68	1.75	1.75	1.97	2.36	2.40
F	Price control measures	0.01	0.04	0.07	0.11	0.14	0.28	0.44	0.54	0.83	1.21	1.25
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
I	Trade-related investment measures	0.25	1.61	1.81	1.84	1.87	2.05	2.37	2.54	2.61	2.56	2.58
L	Subsidies (excluding export subsidies)	10.49	14.09	10.52	12.53	12.99	14.44	13.61	15.44	17.86	20.35	21.25
М	Government procurement	0.33	0.54	0.54	0.81	0.90	1.33	1.76	1.88	2.00	2.03	2.08
Р	Export measures	32.91	43.84	48.09	53.45	55.63	54.51	52.98	54.66	56.84	58.18	59.86
	Import tariff increases	0.43	0.67	0.76	0.97	1.69	1.91	2.11	2.22	2.49	3.11	3.25
	Instrument unclassified	0.05	0.24	0.32	0.34	0.48	0.57	0.78	0.80	0.94	1.03	1.00

COUNTRIES HARMED BY GERMANY'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING GERMANY'S INTERESTS

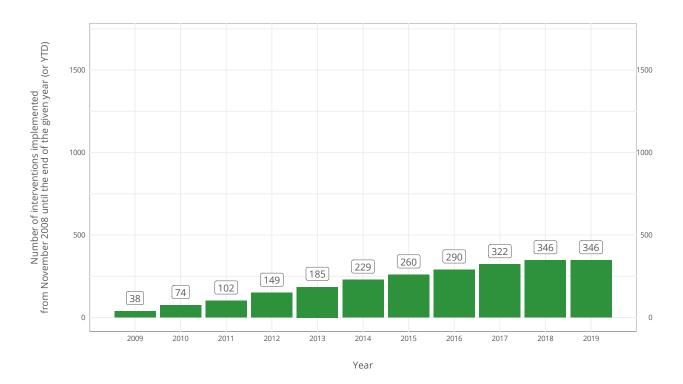


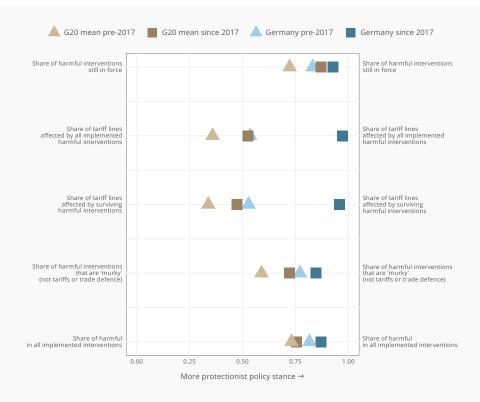


GERMANY Track record of liberalisation

GERMANY

Number of liberalising interventions imposed since November 2008

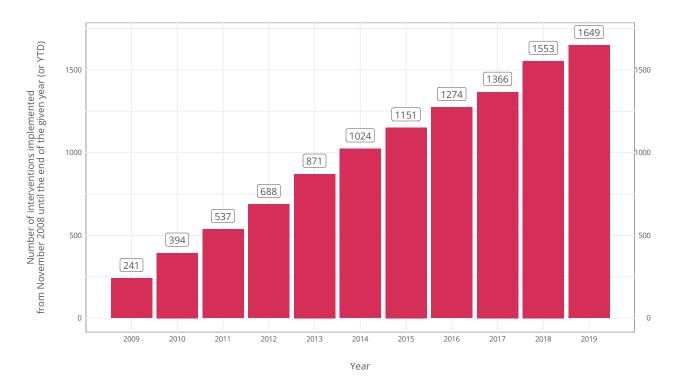




GERMANY Track record of protectionism

GERMANY

Number of discriminatory interventions imposed since November 2008

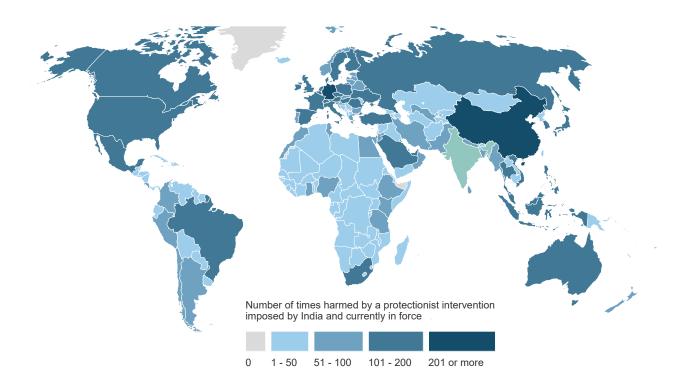


INDIA

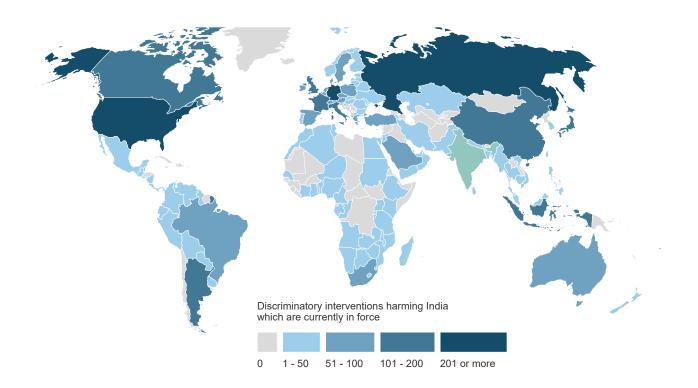
What is at stake for India's exporters?

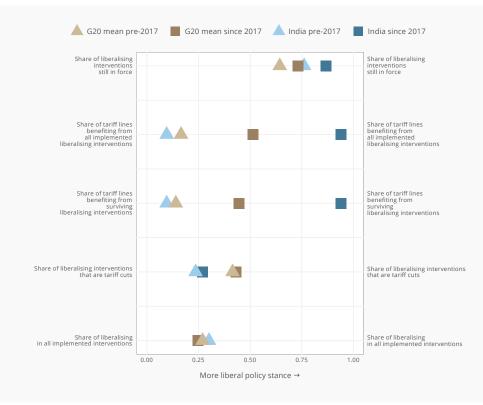
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember's	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	38.16	45.13	56.28	52.44	58.03	62.63	72.49	75.23	76.19	77.04	76.81
D	Contingent trade protection	0.15	0.23	0.58	0.76	0.86	1.04	1.08	1.62	1.78	2.52	3.18
E	Non-automatic licensing, quotas	0.19	4.16	5.97	7.54	7.01	7.25	7.52	8.58	9.24	9.55	9.38
F	Price control measures	5.35	5.37	5.37	5.37	5.37	5.53	5.59	5.62	5.62	5.63	5.67
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
I	Trade-related investment measures	0.04	0.18	0.22	0.28	0.33	1.23	2.36	1.95	1.76	1.67	1.66
L	Subsidies (excluding export subsidies)	2.30	3.96	9.71	11.77	29.71	30.79	21.21	17.07	25.26	28.20	22.02
М	Government procurement	1.10	1.22	1.26	1.54	1.62	1.78	2.15	2.36	2.29	2.32	2.48
Р	Export measures	29.43	34.89	45.64	40.26	40.41	46.33	58.36	63.39	68.59	69.43	69.18
	Import tariff increases	0.38	1.17	1.58	2.80	5.00	22.88	10.33	10.85	12.93	15.39	18.50
	Instrument unclassified	0.10	0.26	0.17	0.20	0.25	0.43	0.55	0.72	0.82	0.85	0.92

COUNTRIES HARMED BY INDIA'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING INDIA'S INTERESTS

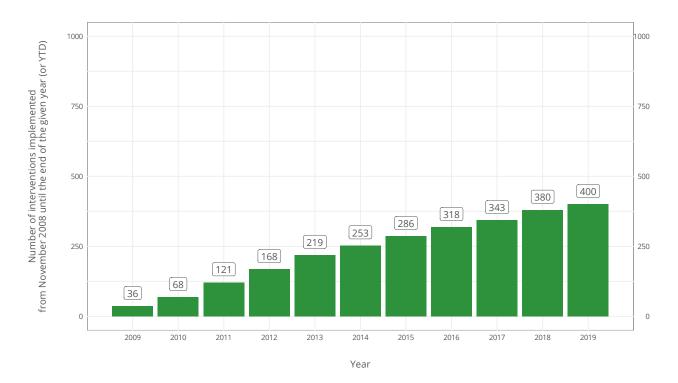


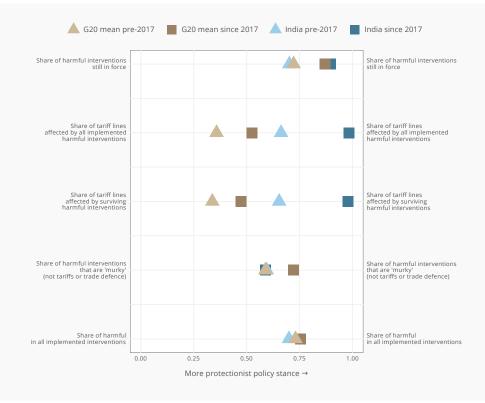


INDIA Track record of liberalisation

INDIA

Number of liberalising interventions imposed since November 2008

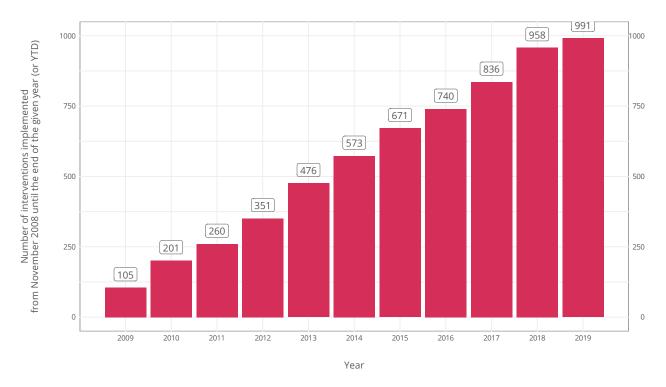




INDIA Track record of protectionism

INDIA

Number of discriminatory interventions imposed since November 2008

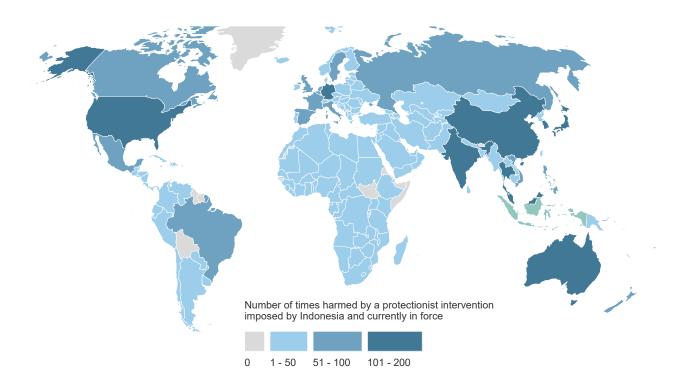


INDONESIA

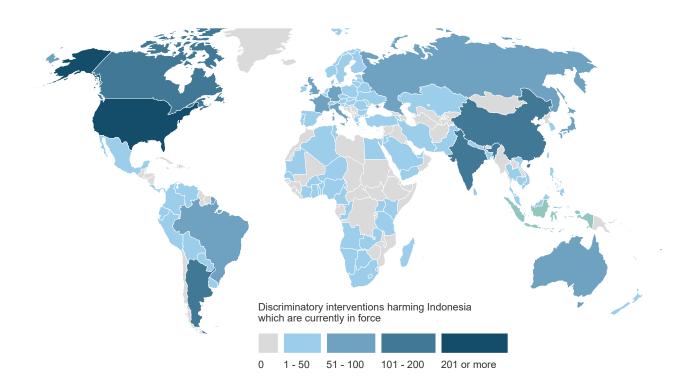
What is at stake for Indonesia's exporters?

UN MAST	Foreign discriminatory		Pe	ercenta	ge of thi	s G20 m	nember's	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	37.62	42.34	47.68	51.98	58.05	66.21	63.48	65.11	66.54	68.80	68.83
D	Contingent trade protection	0.20	0.30	0.34	0.40	0.47	0.50	0.51	0.58	0.63	1.32	1.39
E	Non-automatic licensing, quotas	1.21	0.99	3.00	3.41	3.15	3.19	3.51	4.64	4.77	4.79	4.76
F	Price control measures	1.18	1.18	1.24	1.30	1.30	2.02	2.53	2.54	2.54	5.05	5.32
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
I	Trade-related investment measures	0.00	0.03	0.14	0.29	0.41	0.52	0.58	0.63	0.66	0.66	0.66
L	Subsidies (excluding export subsidies)	3.82	3.76	7.07	7.82	17.18	17.63	14.03	14.57	15.46	20.33	17.48
М	Government procurement	0.32	1.70	1.56	1.59	1.62	1.69	1.90	1.91	1.96	2.00	2.28
Р	Export measures	32.25	37.29	40.04	43.14	47.90	55.64	53.56	54.92	56.86	57.05	56.66
	Import tariff increases	0.35	1.64	2.85	3.83	5.58	16.02	9.47	9.98	11.39	13.39	13.96
	Instrument unclassified	0.01	0.21	0.05	0.05	0.19	0.32	0.47	0.85	1.13	1.19	1.19

COUNTRIES HARMED BY INDONESIA'S DISCRIMINATORY INTERVENTIONS

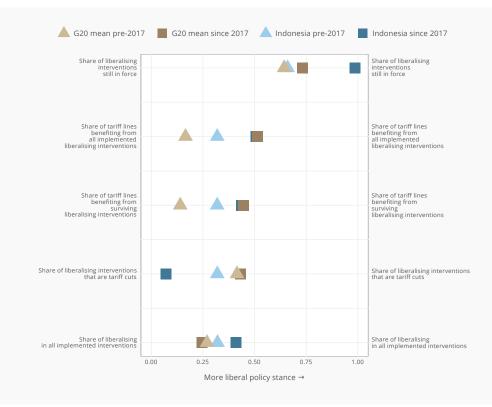


DISCRIMINATORY INTERVENTIONS HARMING INDONESIA'S INTERESTS



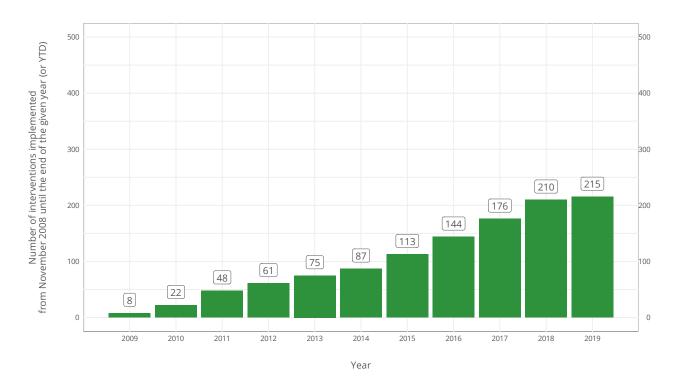
INDONESIA

Track record of liberalisation

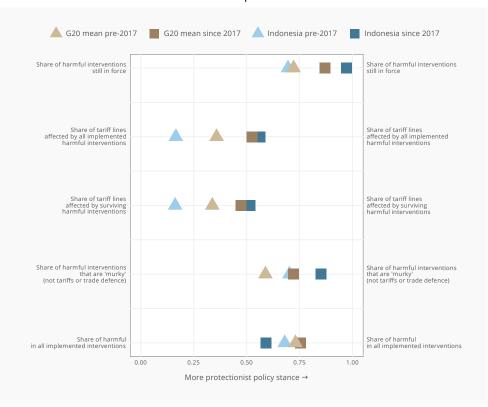


INDONESIA

Number of liberalising interventions imposed since November 2008

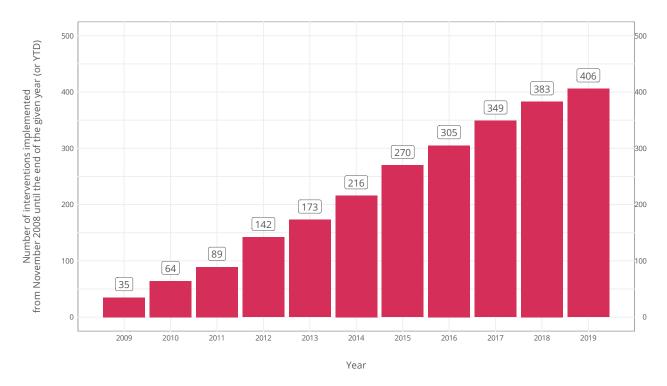


INDONESIA Track record of protectionism



INDONESIA

Number of discriminatory interventions imposed since November 2008

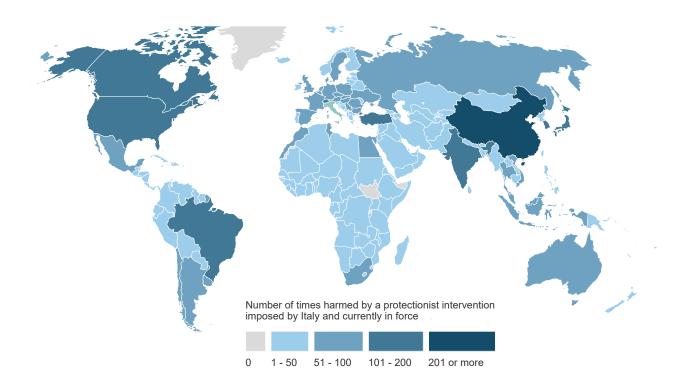




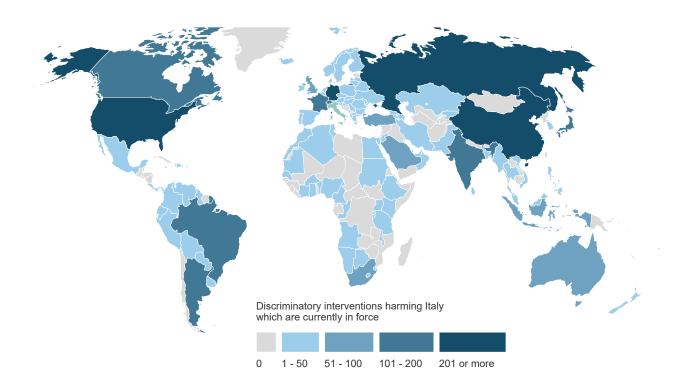
What is at stake for Italy's exporters?

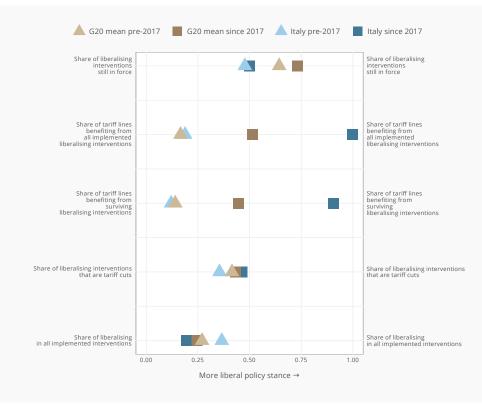
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s G20 m	nember':	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	47.44	58.83	61.81	65.16	67.19	68.15	66.79	68.91	70.91	71.91	73.16
D	Contingent trade protection	0.03	0.06	0.07	0.11	0.15	0.20	0.20	0.32	0.35	0.40	0.51
E	Non-automatic licensing, quotas	0.23	0.22	0.63	0.74	0.78	0.81	1.07	1.07	1.21	1.47	1.47
F	Price control measures	0.00	0.03	0.12	0.19	0.19	0.21	0.35	0.41	0.43	0.77	0.81
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
I	Trade-related investment measures	0.03	0.76	0.94	0.98	1.02	1.29	1.55	1.64	1.70	1.67	1.63
L	Subsidies (excluding export subsidies)	4.86	7.31	5.76	7.27	8.47	10.91	11.22	12.90	14.42	17.36	18.19
М	Government procurement	0.37	0.42	0.38	0.64	0.72	1.22	1.67	1.76	1.92	2.07	2.28
Р	Export measures	43.99	54.43	58.11	62.01	64.33	63.99	62.11	63.96	65.38	66.00	67.73
	Import tariff increases	0.16	0.50	0.65	0.98	1.46	1.74	1.91	2.05	2.63	3.17	3.40
	Instrument unclassified	0.07	0.14	0.16	0.17	0.26	0.30	0.47	0.61	0.70	0.80	0.81

COUNTRIES HARMED BY ITALY'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING ITALY'S INTERESTS

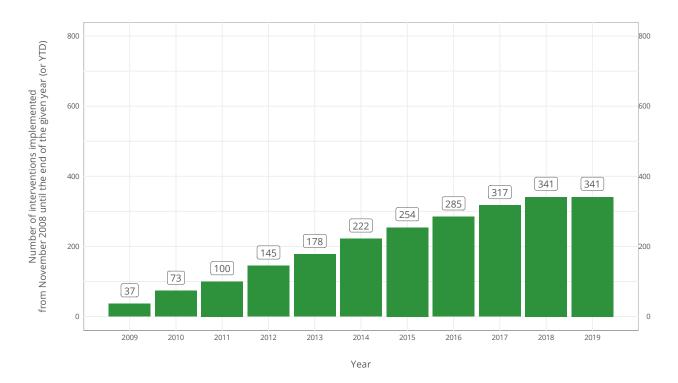


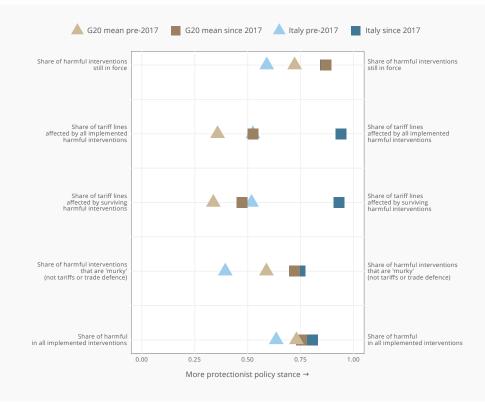


ITALY Track record of liberalisation

ITALY

Number of liberalising interventions imposed since November 2008

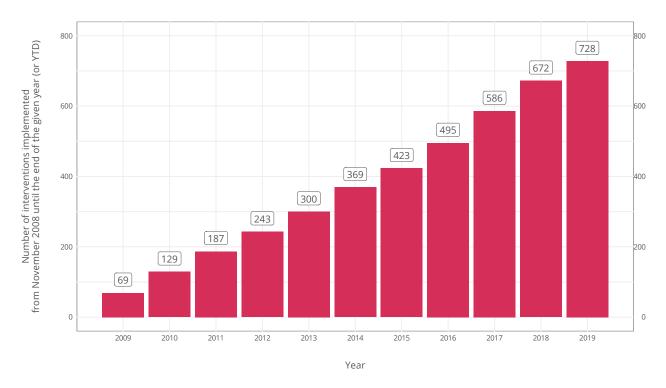




ITALY Track record of protectionism

ITALY

Number of discriminatory interventions imposed since November 2008

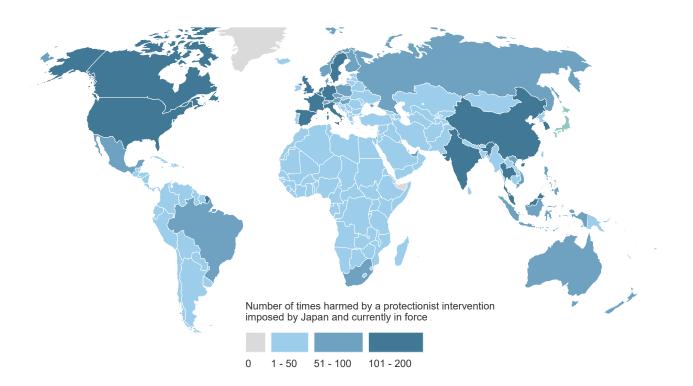




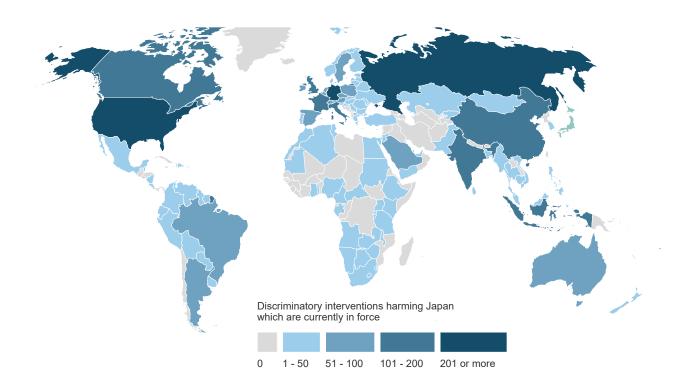
What is at stake for Japan's exporters?

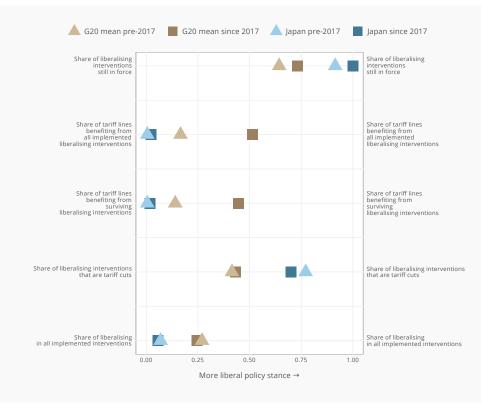
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember':	s export	s at risk	due to	•••	
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	57.17	69.81	72.29	77.43	82.21	82.98	81.38	82.14	83.69	84.54	83.15
D	Contingent trade protection	0.14	0.30	0.58	0.94	1.09	1.16	1.14	1.37	1.43	1.61	1.76
E	Non-automatic licensing, quotas	0.85	1.36	4.27	4.63	6.67	5.14	5.99	6.36	6.51	6.82	6.91
F	Price control measures	0.02	0.05	0.07	0.10	0.09	0.46	0.93	1.05	1.33	1.65	1.72
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
I	Trade-related investment measures	0.76	1.56	1.49	1.57	1.59	1.88	2.54	2.79	2.69	2.66	2.56
L	Subsidies (excluding export subsidies)	18.58	24.21	25.85	30.14	40.71	40.95	35.66	36.11	37.04	39.69	34.29
М	Government procurement	0.47	1.47	1.75	1.99	2.07	2.49	3.56	3.57	3.65	3.69	3.74
Р	Export measures	39.35	51.88	57.18	66.14	69.63	66.99	65.54	67.51	71.37	72.98	73.45
	Import tariff increases	1.78	2.56	3.49	4.94	8.68	8.69	10.29	10.61	11.07	14.35	14.57
	Instrument unclassified	0.27	0.95	1.37	1.41	1.48	1.94	1.92	1.80	1.93	2.31	2.38

COUNTRIES HARMED BY JAPAN'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING JAPAN'S INTERESTS

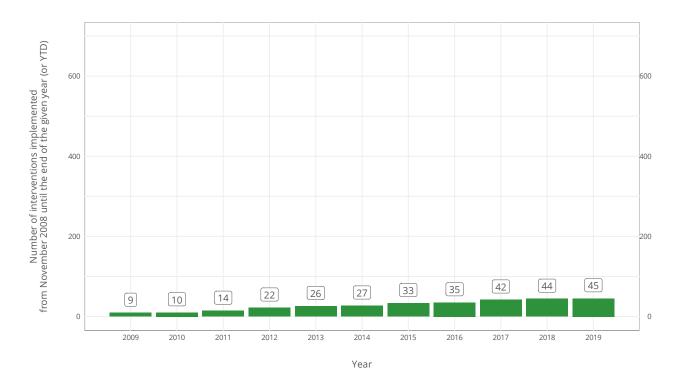


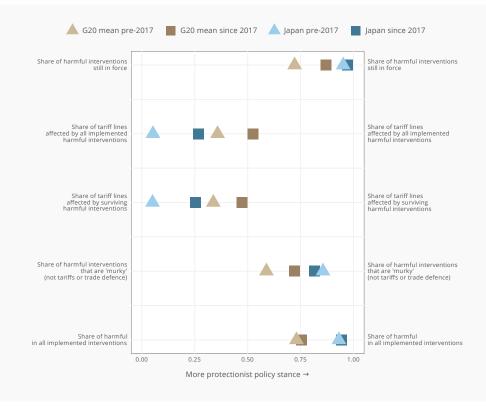


JAPAN Track record of liberalisation

JAPAN

Number of liberalising interventions imposed since November 2008

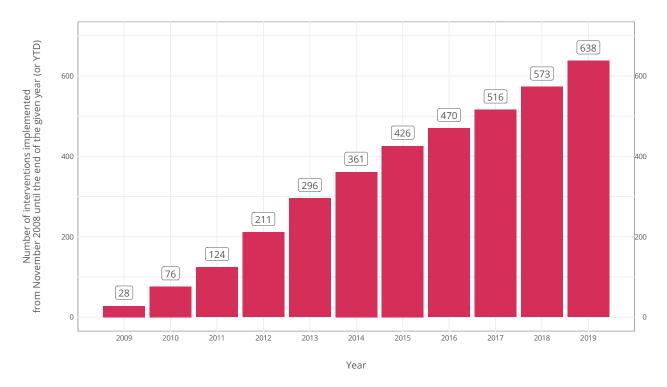




JAPAN Track record of protectionism

JAPAN

Number of discriminatory interventions imposed since November 2008

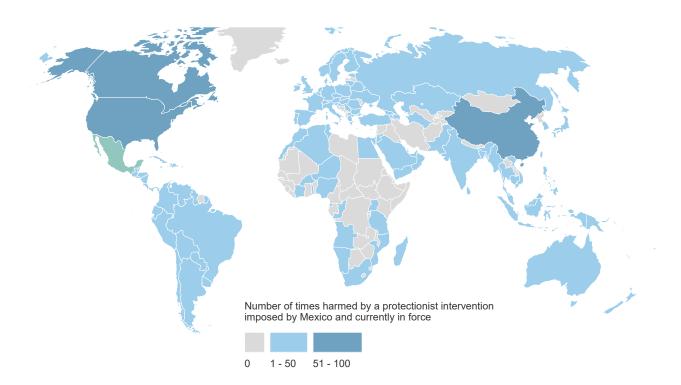


MEXICO

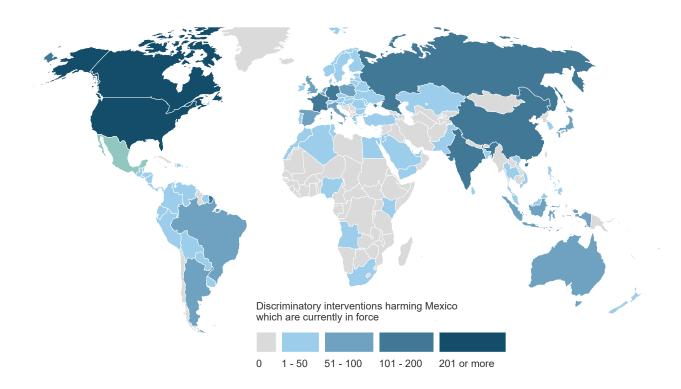
What is at stake for Mexico's exporters?

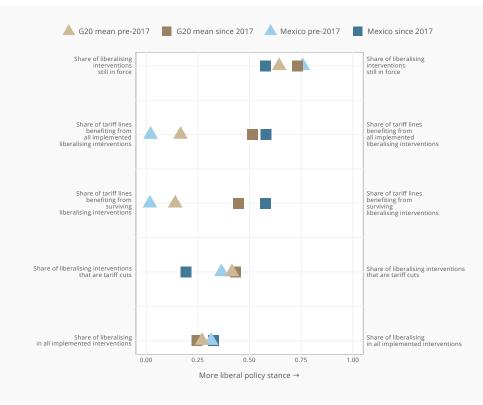
UN MAST	Foreign		P	ercenta	ge of thi	s G20 m	nember':	s export	s at risk	due to	•••	
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	59.38	68.86	71.79	74.21	77.34	78.08	88.67	88.94	91.42	93.13	93.30
D	Contingent trade protection	0.00	0.33	0.65	1.40	1.80	1.96	2.02	2.74	2.89	3.31	3.25
E	Non-automatic licensing, quotas	0.14	0.23	0.59	0.81	0.91	0.98	0.99	0.95	0.86	1.00	0.98
F	Price control measures	0.11	0.11	0.16	0.26	0.14	0.27	0.33	0.40	0.43	0.62	0.63
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
I	Trade-related investment measures	0.05	0.40	0.55	0.73	0.77	1.98	2.94	2.98	2.99	2.90	2.88
L	Subsidies (excluding export subsidies)	8.92	13.34	27.03	33.76	38.25	38.69	37.87	39.08	39.88	48.20	49.76
М	Government procurement	1.81	2.13	2.50	2.94	3.06	3.70	6.40	6.39	7.20	8.66	10.33
Р	Export measures	49.25	55.68	62.61	71.02	72.16	68.44	78.95	79.56	83.61	86.13	86.60
	Import tariff increases	0.09	0.17	0.25	0.34	1.06	1.17	1.59	1.74	2.34	5.86	6.74
	Instrument unclassified	0.00	0.13	0.08	0.09	0.31	0.66	0.67	0.77	0.88	0.93	1.11

COUNTRIES HARMED BY MEXICO'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING MEXICO'S INTERESTS

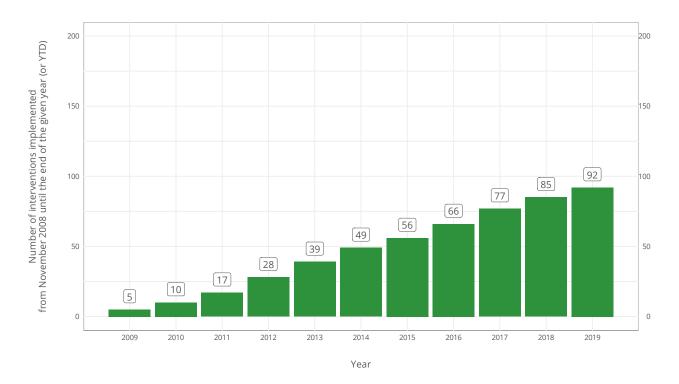


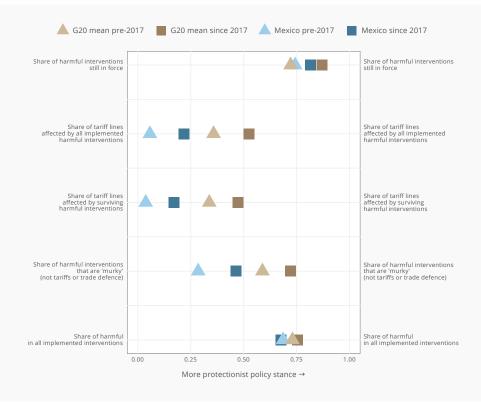


MEXICO Track record of liberalisation

MEXICO

Number of liberalising interventions imposed since November 2008

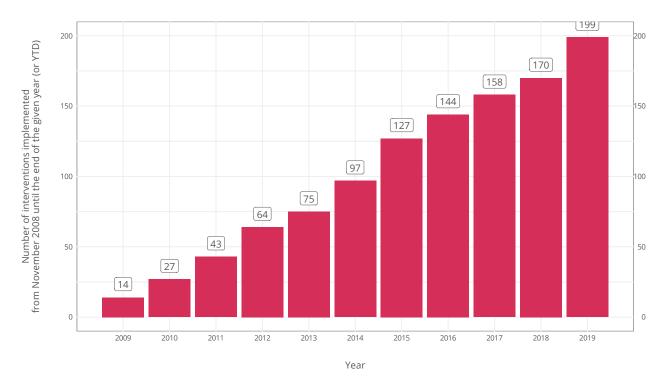




MEXICO Track record of protectionism

MEXICO

Number of discriminatory interventions imposed since November 2008

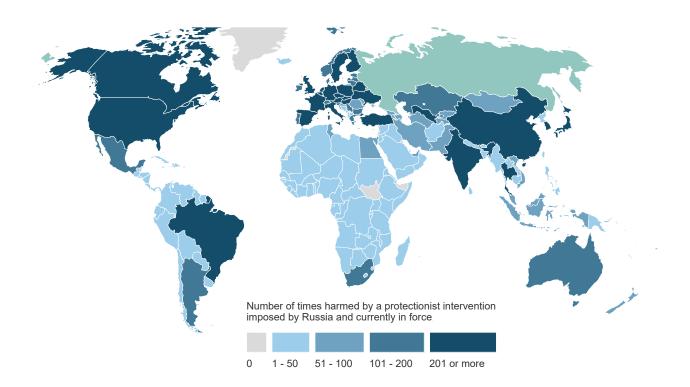


RUSSIA

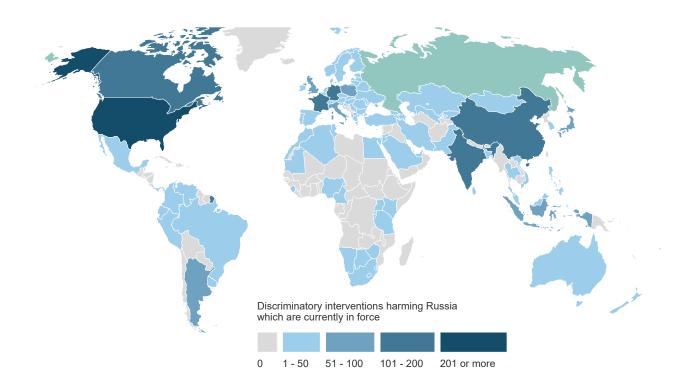
What is at stake for Russia's exporters?

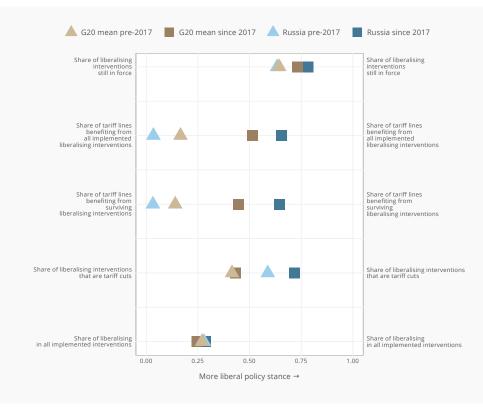
UN MAST	Foreign		P	ercenta	ge of thi	s G20 m	nember':	s export	s at risk	due to	••••	
chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	12.84	21.00	33.06	37.13	73.59	73.39	47.87	46.88	58.18	62.29	61.89
D	Contingent trade protection	0.03	0.15	0.18	0.51	0.69	0.79	0.87	1.11	1.26	2.36	3.38
E	Non-automatic licensing, quotas	0.43	0.13	3.76	4.02	4.29	4.18	4.17	4.69	5.00	5.09	5.07
F	Price control measures	0.22	0.22	0.23	0.24	0.25	1.02	1.21	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
I	Trade-related investment measures	0.02	1.03	1.01	1.01	1.11	1.49	1.72	1.70	1.70	1.70	1.74
L	Subsidies (excluding export subsidies)	4.46	7.08	12.01	10.62	57.95	57.92	28.36	29.42	29.67	31.06	27.50
М	Government procurement	0.51	0.72	0.83	0.84	0.87	0.88	0.93	1.00	1.14	1.18	1.23
Р	Export measures	4.56	10.33	20.42	24.34	25.67	23.88	25.34	26.40	41.29	47.72	45.85
	Import tariff increases	0.85	2.17	2.28	2.64	5.09	4.08	7.39	4.47	5.12	5.94	6.17
	Instrument unclassified	0.00	0.06	0.00	0.08	0.19	2.21	3.57	3.68	3.82	3.76	3.87

COUNTRIES HARMED BY RUSSIA'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING RUSSIA'S INTERESTS

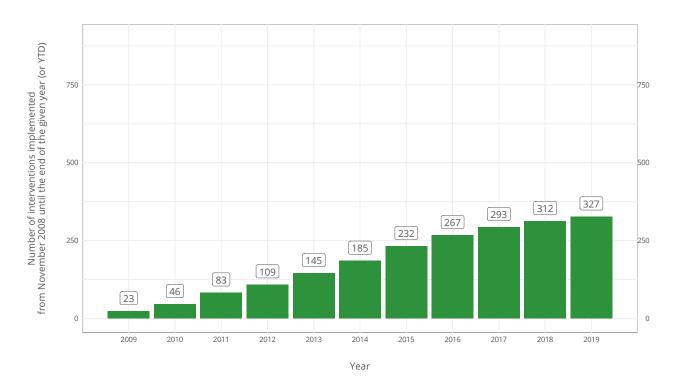


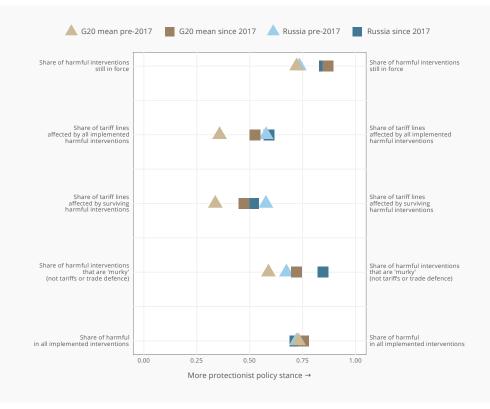


RUSSIA Track record of liberalisation

RUSSIA

Number of liberalising interventions imposed since November 2008

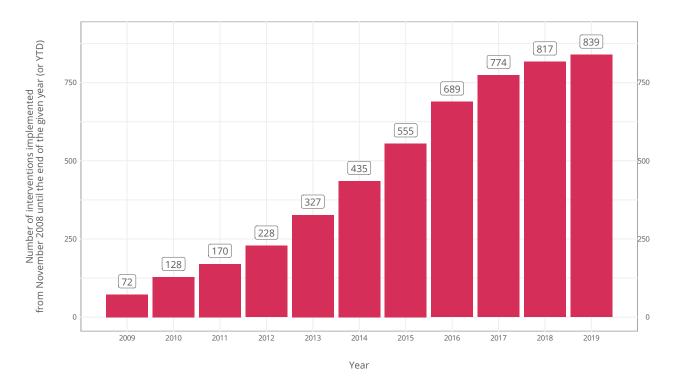




RUSSIA Track record of protectionism

RUSSIA

Number of discriminatory interventions imposed since November 2008

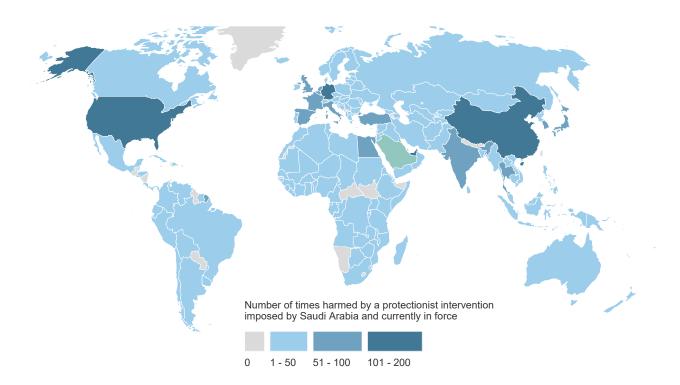


SAUDI ARABIA

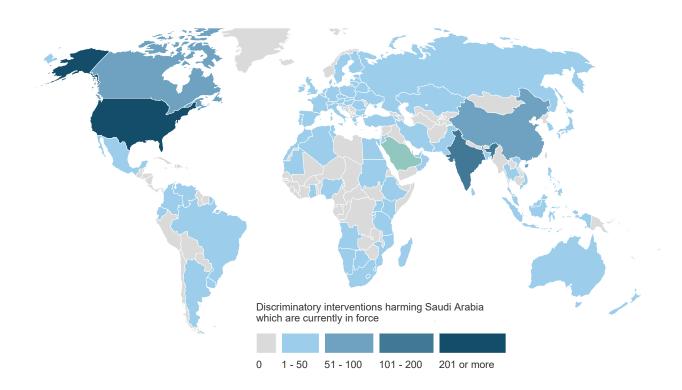
What is at stake for Saudi Arabia's exporters?

UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s G20 m	nember'	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	16.60	16.39	28.57	30.84	43.23	44.35	56.11	56.91	62.74	64.19	63.97
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	7.87	7.93	7.94	7.95
F	Price control measures	0.07	0.07	0.16	0.28	0.28	0.40	0.41	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	0.01	0.00	0.00	0.00
L	Subsidies (excluding export subsidies)	6.65	1.80	10.15	5.10	25.43	25.73	14.78	14.80	16.90	18.31	11.00
М	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	41.45	47.17	47.43	47.33
	Import tariff increases	7.45	9.03	9.32	9.90	10.77	11.11	13.42	13.41	14.09	14.74	16.52
	Instrument unclassified	0.00	0.00	0.00	0.00	0.04	0.87	0.89	0.89	0.89	1.48	6.18

COUNTRIES HARMED BY SAUDI ARABIA'S DISCRIMINATORY INTERVENTIONS

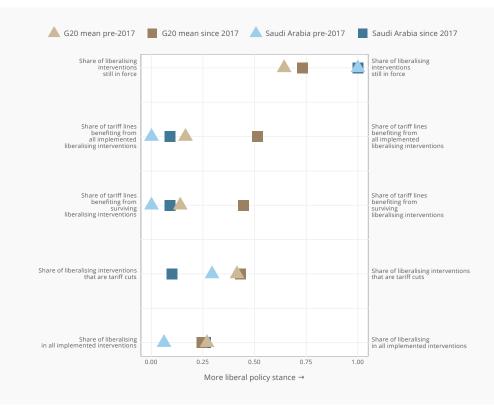


DISCRIMINATORY INTERVENTIONS HARMING SAUDI ARABIA'S INTERESTS



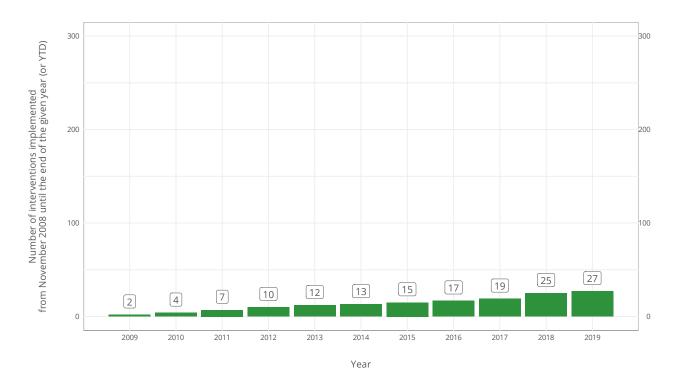
SAUDI ARABIA

Track record of liberalisation



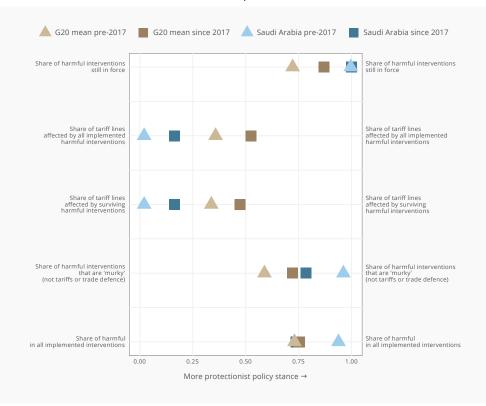
SAUDI ARABIA

Number of liberalising interventions imposed since November 2008



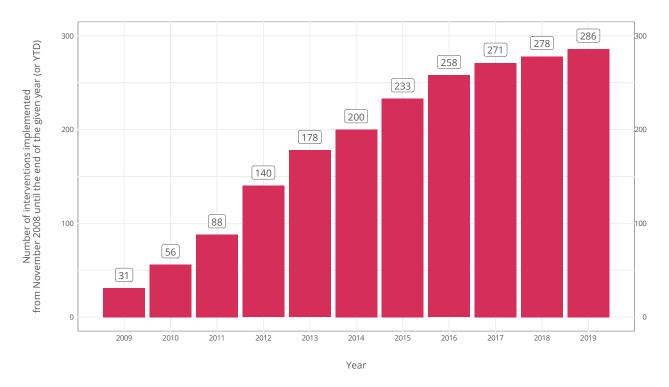
SAUDI ARABIA

Track record of protectionism



SAUDI ARABIA

Number of discriminatory interventions imposed since November 2008

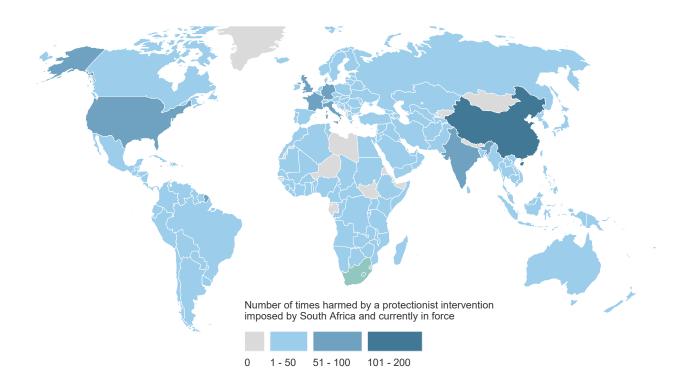


SOUTH AFRICA

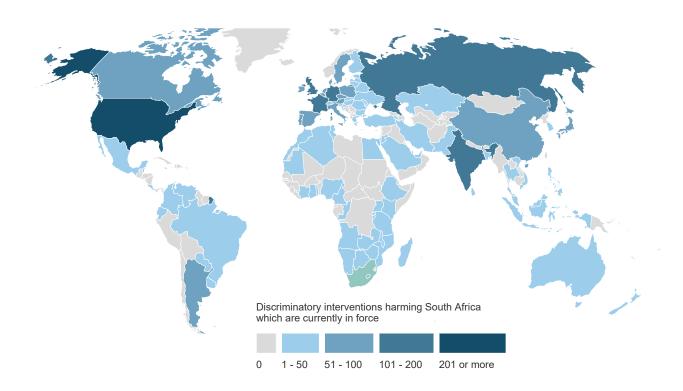
What is at stake for South Africa's exporters?

UN MAST	Foreign discriminatory		P	ercenta	ge of thi	s 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	27.18	34.10	42.10	46.64	61.07	58.33	51.29	52.87	53.88	55.17	54.63
D	Contingent trade protection	0.03	0.05	0.06	0.06	0.06	0.11	0.13	0.53	0.62	1.02	1.32
E	Non-automatic licensing, quotas	0.63	1.96	3.97	4.57	4.73	5.13	4.87	5.48	5.66	5.89	5.80
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
I	Trade-related investment measures	0.00	0.15	0.19	0.19	0.22	0.85	1.30	1.32	1.34	1.32	1.28
L	Subsidies (excluding export subsidies)	5.74	7.67	9.07	9.76	35.11	35.68	24.25	24.22	26.15	26.74	23.86
М	Government procurement	0.90	0.86	1.06	1.15	1.20	1.29	1.45	1.56	1.55	1.61	1.71
Р	Export measures	17.97	22.66	31.79	36.30	38.02	30.90	27.55	31.50	36.05	37.59	37.72
	Import tariff increases	0.30	2.13	2.91	4.64	7.85	8.55	9.14	10.00	10.48	11.76	11.87
	Instrument unclassified	0.05	0.70	0.69	0.70	1.78	2.66	0.32	0.44	1.09	2.39	2.42

COUNTRIES HARMED BY SOUTH AFRICA'S DISCRIMINATORY INTERVENTIONS

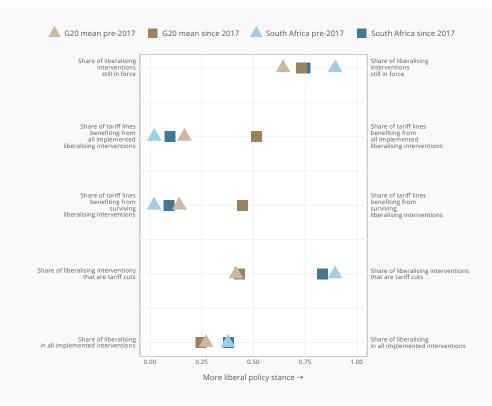


DISCRIMINATORY INTERVENTIONS HARMING SOUTH AFRICA'S INTERESTS



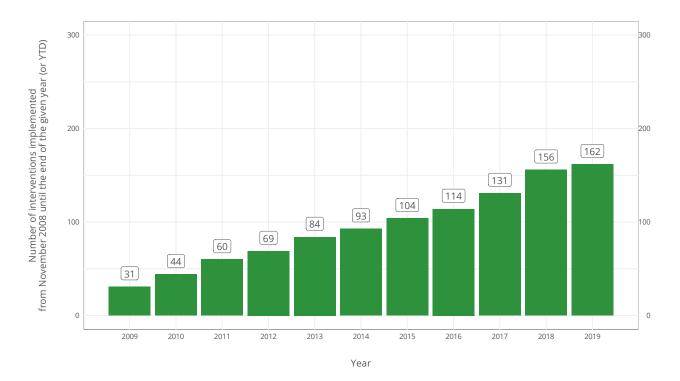
SOUTH AFRICA

Track record of liberalisation



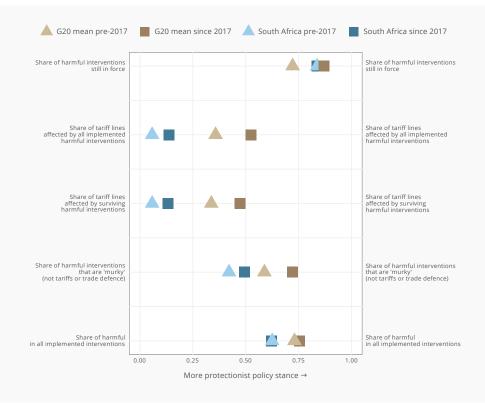
SOUTH AFRICA

Number of liberalising interventions imposed since November 2008



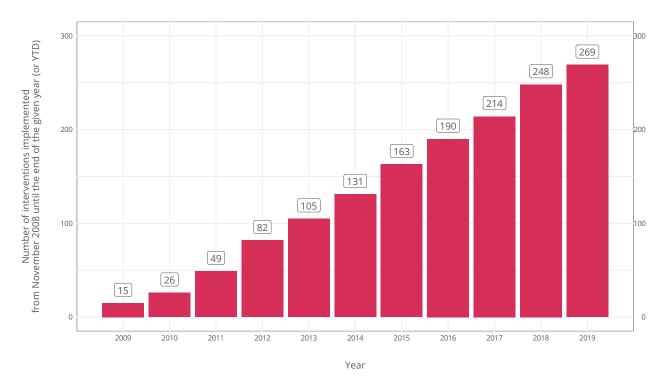
SOUTH AFRICA

Track record of protectionism



SOUTH AFRICA

Number of discriminatory interventions imposed since November 2008

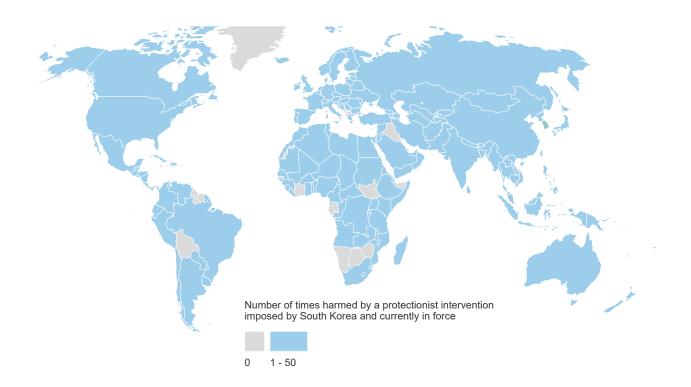


SOUTH KOREA

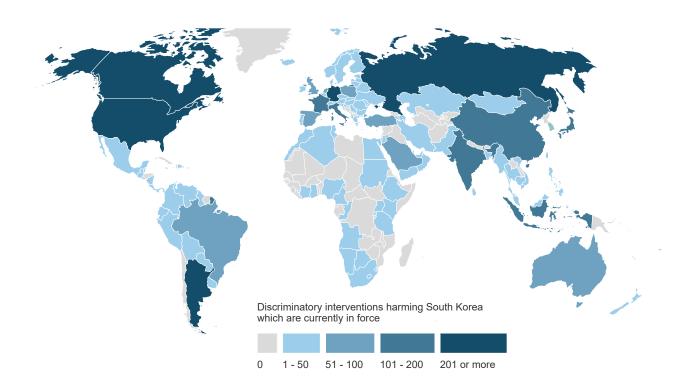
What is at stake for South Korea's exporters?

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	57.31	74.65	76.85	81.44	85.89	86.56	85.39	85.82	86.90	88.00	87.09
D	Contingent trade protection	0.24	1.18	1.32	1.73	1.95	2.01	1.99	2.38	2.59	3.25	3.74
E	Non-automatic licensing, quotas	0.56	0.90	4.97	5.19	5.45	5.65	6.60	7.48	7.47	7.82	8.07
F	Price control measures	0.04	0.11	0.11	0.12	0.08	1.53	1.97	2.04	2.24	3.05	3.29
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
I	Trade-related investment measures	0.38	0.78	0.94	1.04	1.05	1.51	2.24	2.45	2.51	2.57	2.53
L	Subsidies (excluding export subsidies)	19.21	27.75	32.28	36.06	47.59	47.97	44.98	44.64	45.49	49.72	43.33
М	Government procurement	0.85	2.19	2.33	2.48	2.79	3.23	3.70	3.71	3.93	4.01	4.02
Р	Export measures	41.26	55.73	60.52	68.88	72.96	72.75	70.54	72.18	74.29	75.47	76.97
	Import tariff increases	2.10	2.47	6.16	7.24	11.46	12.04	12.81	12.64	14.01	21.34	21.54
	Instrument unclassified	0.12	0.56	0.80	0.84	0.76	0.82	0.85	0.96	0.96	1.42	1.59

COUNTRIES HARMED BY SOUTH KOREA'S DISCRIMINATORY INTERVENTIONS

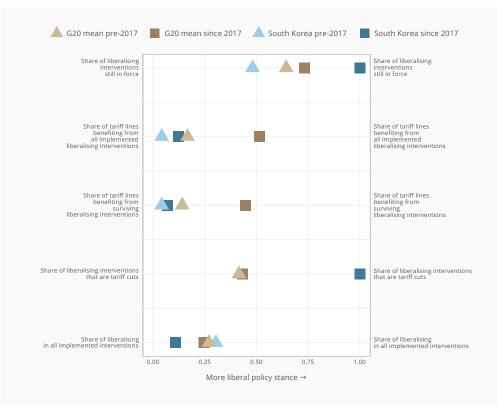


DISCRIMINATORY INTERVENTIONS HARMING SOUTH KOREA'S INTERESTS



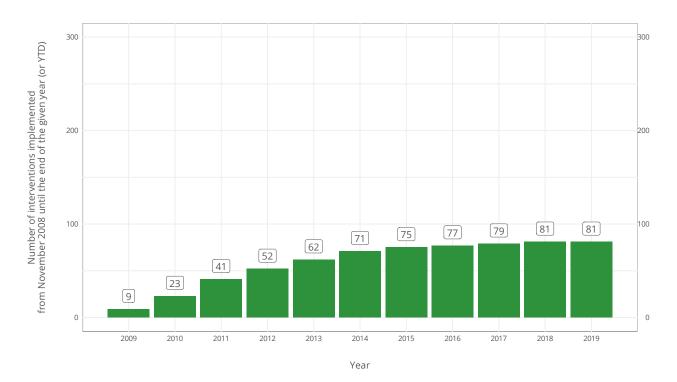
SOUTH KOREA

Track record of liberalisation



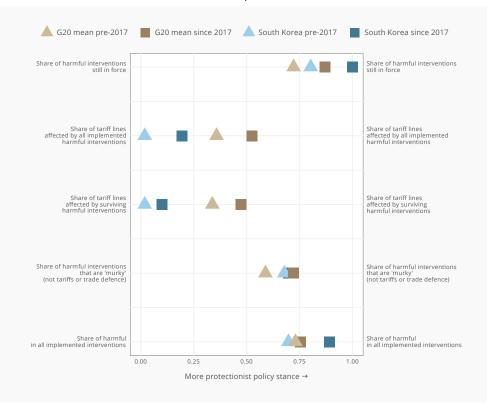
SOUTH KOREA

Number of liberalising interventions imposed since November 2008



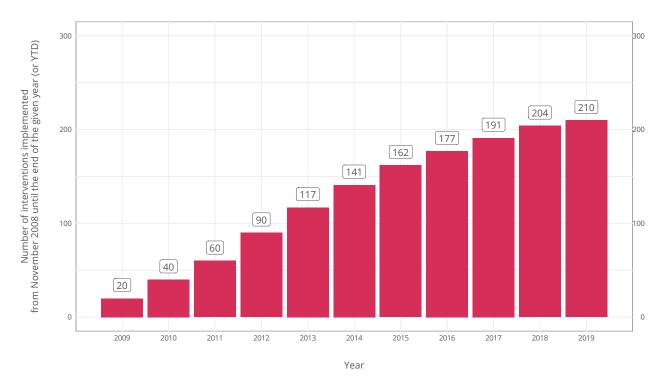
SOUTH KOREA

Track record of protectionism



SOUTH KOREA

Number of discriminatory interventions imposed since November 2008

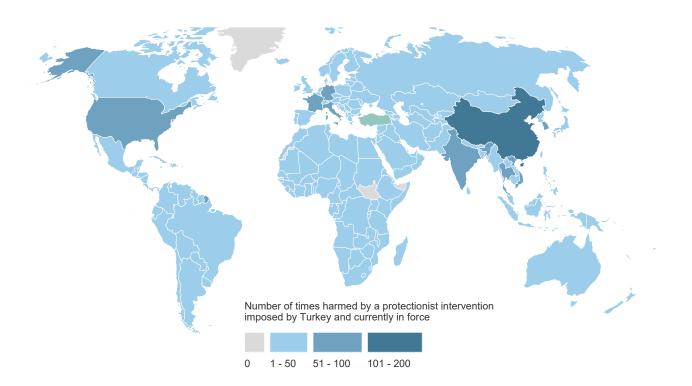


TURKEY

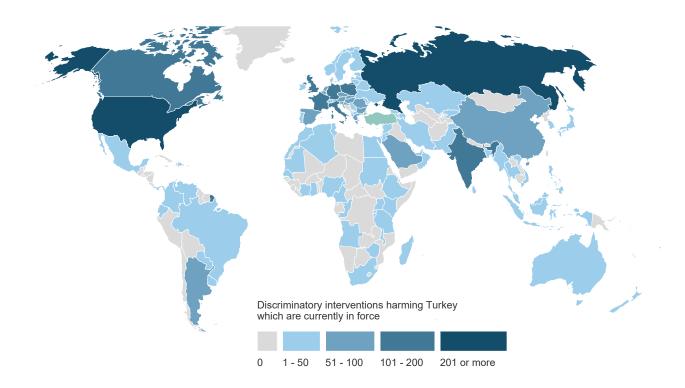
What is at stake for Turkey's exporters?

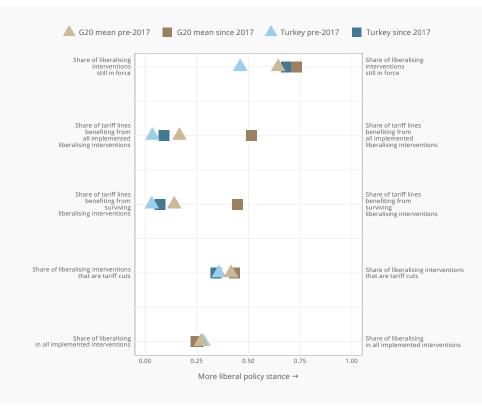
UN	Foreign		P	ercenta	ge of thi	s G20 m	nember's	s export	s at risk	due to		
MAST chapter	discriminatory policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	52.54	63.92	66.64	69.72	77.06	76.57	73.72	74.74	76.52	78.29	78.47
D	Contingent trade protection	0.09	0.04	0.12	0.13	0.26	0.68	0.87	1.00	1.07	3.37	6.01
E	Non-automatic licensing, quotas	0.08	0.17	0.72	0.92	0.94	0.94	1.15	2.78	3.44	3.61	3.60
F	Price control measures	0.43	0.46	0.47	0.47	0.47	0.57	0.60	0.61	0.61	1.00	1.04
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
I	Trade-related investment measures	0.48	2.14	2.39	2.42	2.46	2.99	3.47	3.48	3.49	3.46	3.46
L	Subsidies (excluding export subsidies)	7.32	10.18	7.66	9.23	48.66	49.57	23.20	23.84	24.86	27.97	28.80
М	Government procurement	0.94	1.38	1.36	1.41	1.46	1.95	2.47	2.71	2.82	2.85	2.85
Р	Export measures	46.86	57.44	60.44	63.10	65.21	64.30	62.85	64.69	65.85	66.23	66.56
	Import tariff increases	0.31	1.03	1.28	2.37	3.67	3.42	6.68	6.58	7.41	9.21	10.78
	Instrument unclassified	0.00	0.46	0.66	0.70	0.71	0.75	0.81	0.90	0.92	1.09	1.65

COUNTRIES HARMED BY TURKEY'S DISCRIMINATORY INTERVENTIONS



DISCRIMINATORY INTERVENTIONS HARMING TURKEY'S INTERESTS

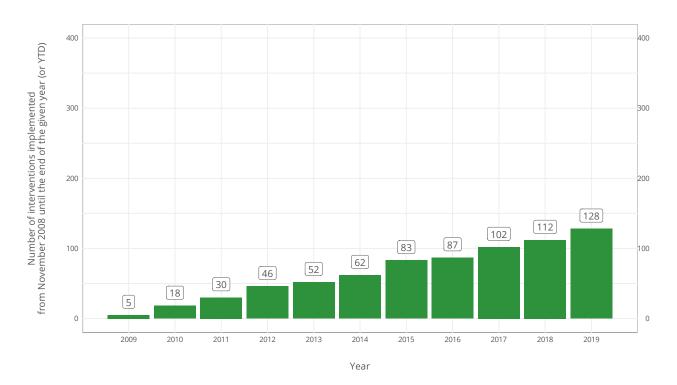


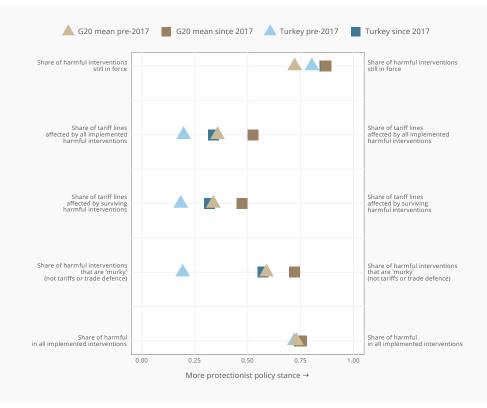


TURKEY Track record of liberalisation

TURKEY

Number of liberalising interventions imposed since November 2008

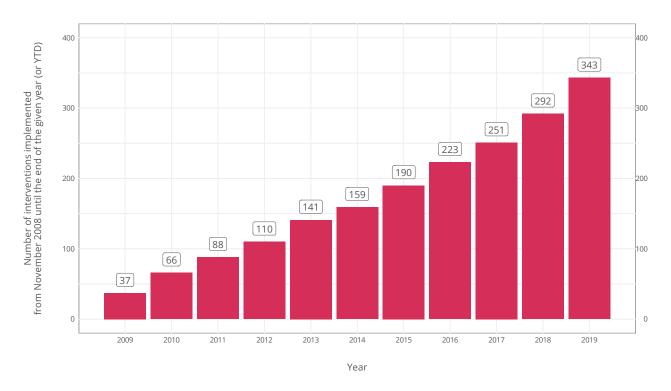




TURKEY Track record of protectionism

TURKEY

Number of discriminatory interventions imposed since November 2008

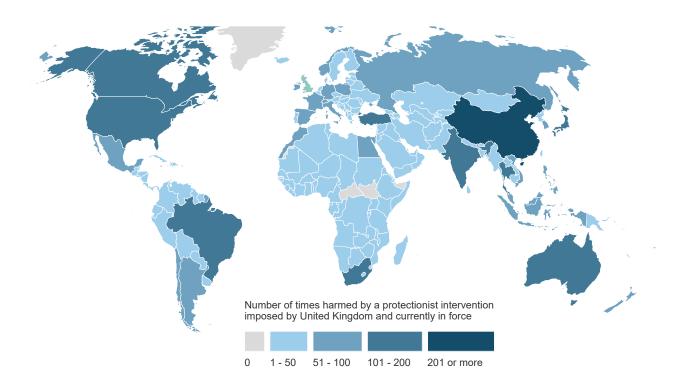


UNITED KINGDOM

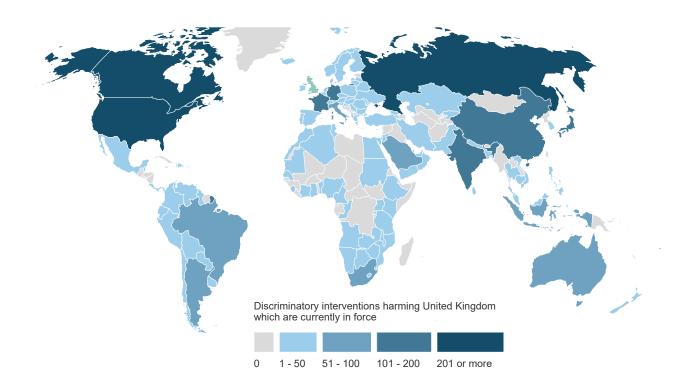
What is at stake for the United Kingdom's exporters?

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	34.97	45.04	50.78	57.31	60.35	61.21	61.94	64.17	67.92	69.47	70.26
D	Contingent trade protection	0.01	0.03	0.07	0.12	0.15	0.16	0.16	0.22	0.23	0.29	0.33
E	Non-automatic licensing, quotas	0.11	0.17	0.46	0.53	0.63	0.65	0.82	0.80	1.28	2.16	2.18
F	Price control measures	0.00	0.03	0.06	0.08	0.07	0.09	0.17	0.22	0.33	1.10	1.18
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
I	Trade-related investment measures	0.33	1.17	1.29	1.31	1.32	1.52	1.75	1.82	1.84	1.83	1.85
L	Subsidies (excluding export subsidies)	4.53	7.41	9.28	12.64	13.85	16.69	16.28	17.57	19.28	22.33	23.66
М	Government procurement	0.37	0.70	0.79	0.99	1.06	1.27	1.68	1.72	1.75	1.78	1.87
Р	Export measures	30.32	39.06	45.62	53.29	55.73	53.09	53.87	56.33	60.73	62.33	63.04
	Import tariff increases	0.55	0.71	0.72	0.91	1.91	2.24	2.30	2.49	2.70	3.35	3.51
	Instrument unclassified	0.02	0.29	0.41	0.42	0.50	1.79	2.06	2.14	2.25	2.39	2.39

COUNTRIES HARMED BY THE UK'S DISCRIMINATORY INTERVENTIONS

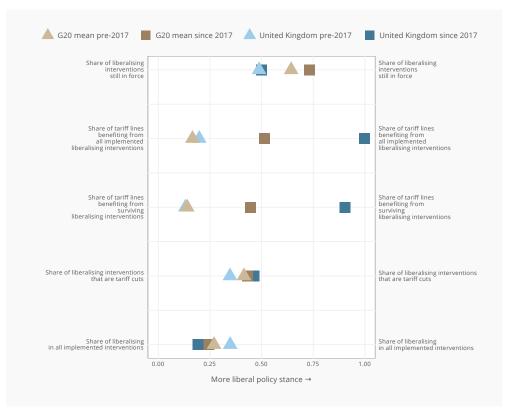


DISCRIMINATORY INTERVENTIONS HARMING THE UK'S INTERESTS



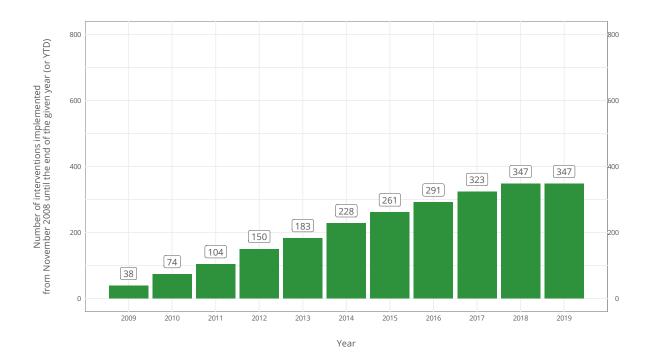
UNITED KINGDOM

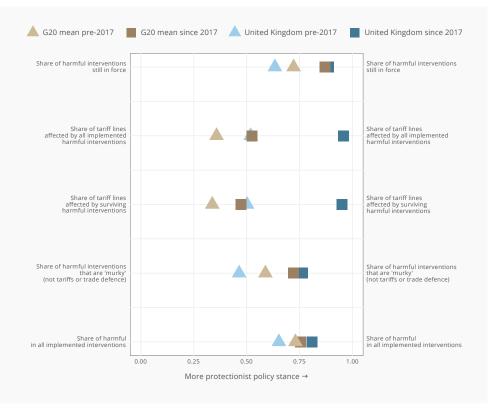
Track record of liberalisation



UNITED KINGDOM

Number of liberalising interventions imposed since November 2008

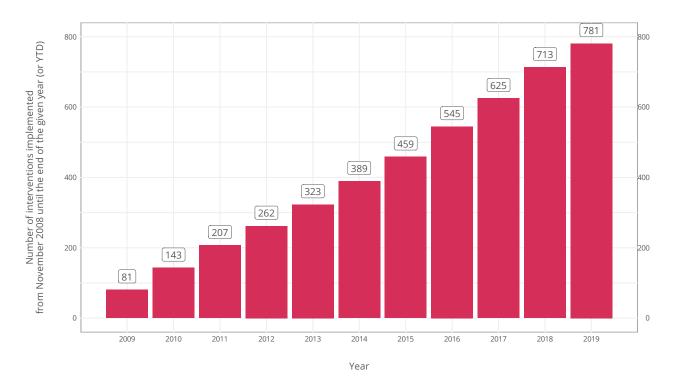




UNITED KINGDOM Track record of protectionism

UNITED KINGDOM

Number of discriminatory interventions imposed since November 2008

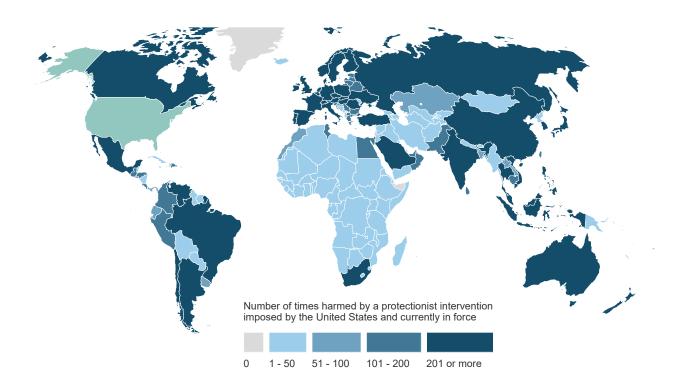


UNITED STATES

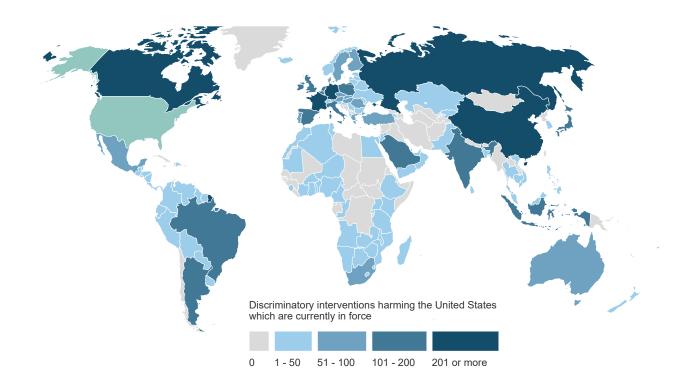
What is at stake for the United States' exporters?

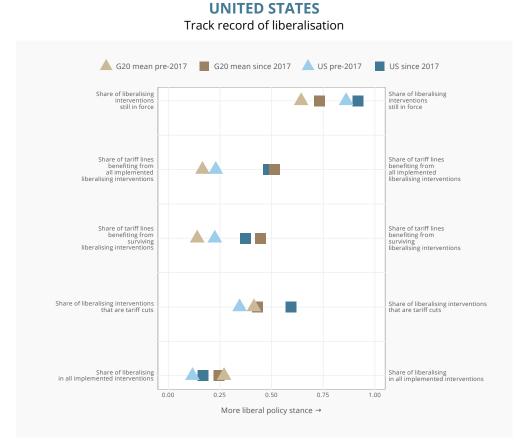
UN MAST	Foreign discriminatory		P	ercenta	ge of thi	is G20 m	nember':	s export	s at risk	due to		
chapter	policy instrument	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	All instruments	42.84	52.91	59.72	65.24	73.00	75.30	74.37	75.86	77.72	79.95	80.80
D	Contingent trade protection	0.29	0.43	0.48	0.60	0.66	0.63	0.64	0.69	0.79	1.36	1.58
E	Non-automatic licensing, quotas	0.47	0.81	1.83	2.44	3.52	3.33	4.89	5.09	5.21	5.35	5.36
F	Price control measures	0.08	0.10	0.14	0.20	0.33	0.66	0.89	1.03	1.11	1.52	1.59
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
I	Trade-related investment measures	0.36	0.77	0.45	0.49	0.50	0.57	1.25	1.58	1.14	1.06	1.06
L	Subsidies (excluding export subsidies)	6.07	8.47	7.53	9.10	27.00	28.75	21.89	23.19	26.21	29.93	30.26
М	Government procurement	0.08	0.36	0.36	0.57	0.85	1.37	1.94	1.83	1.84	1.96	1.96
Р	Export measures	36.50	44.93	52.37	58.34	61.21	62.70	62.17	64.16	66.41	67.27	67.93
	Import tariff increases	1.45	2.74	2.83	2.63	5.02	5.33	7.21	8.14	11.37	14.81	16.52
	Instrument unclassified	0.10	0.24	0.32	0.42	0.57	1.53	1.88	1.94	1.95	2.39	2.74

COUNTRIES HARMED BY THE US' DISCRIMINATORY INTERVENTIONS



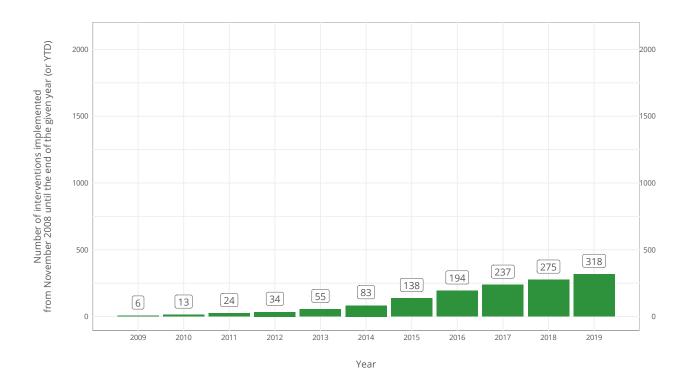
DISCRIMINATORY INTERVENTIONS HARMING THE US' INTERESTS

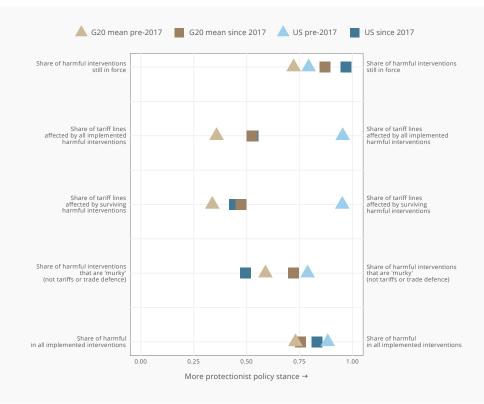




UNITED STATES

Number of liberalising interventions imposed since November 2008

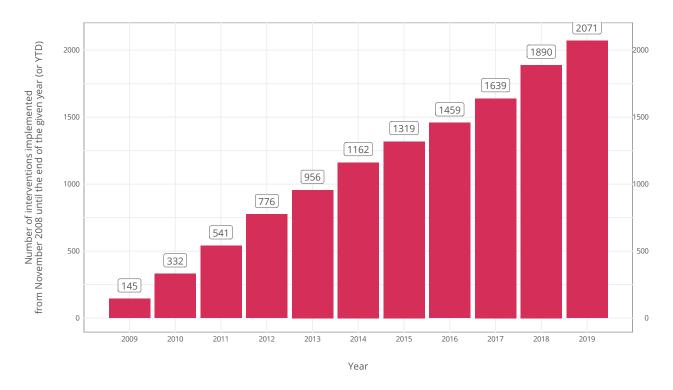




UNITED STATES Track record of protectionism

UNITED STATES

Number of discriminatory interventions imposed since November 2008



The populist and nationalist turn in many nations' politics has sharpened the rhetoric towards globalisation. But did this translate into changes on the ground in trade, investment, and migration policies? This report examines whether a worldwide shift away from the level commercial playing field is underway or whether turns inward are localised. Unlike many reports by international organisations, which tend to focus on six-month reporting cycles, the evaluation here covers the entire, recent Populist era.

An assessment of global commercial policy dynamics is supplemented by in-depth examination of the changing market access faced by exporters from the G20 nations including China and the United States, the European Union, and key groups of developing countries, such as the African Union and the Least Developed Countries. Evidence on the scale of protectionism and trade liberalisation affecting seven leading sectors of the world economy is presented as well, two of which important sources of export income for the Least Developed Countries.

The overall goal of this report is to provide analysts, corporate executives, the media, officials in national governments and international organisations, as well as policymakers with the most thorough assessment of trade policymaking three years after the resurgence of populism and nationalism. The recently announced "phase one" deal between China and the United States is interpreted in light of the worldwide developments in commercial policy reported here.

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