Chapter I

A snapshot of contemporary protectionism: how important are the murkier forms of trade discrimination?

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Introduction

Policymakers and academics around the globe have been concerned about the threat of rising protectionism during the recent Global Financial Crisis and its aftermath. The G20 Heads of States and Governments pledged to eschew protectionism in earlier summit meetings, at latter meetings they pledged to fight protectionism. In the Declaration of the summit in Toronto in June 2010, G20 leaders praised themselves for having chosen "to keep markets open to the opportunities that trade and investment offer." Also, they renewed the pledge "to refrain from raising barriers or imposing new barriers to investment or trade in goods and services" (G20, 2010). On the face of it, these statements are supported by the joint report of WTO, OECD and UNCTAD, dated 14 June 2010, which served as background information for the G20 talks in Toronto (WTO-OECD-UNCTAD, 2010). In particular, WTO estimated that new "import restricting measures" introduced since November 2009, covered only 0.4 percent of total world imports (WTO, 2010).

In contrast to this optimistic perspective, certain trade experts warned early in the crisis that this time around, in contrast to the Great Depression in the 1930s, protectionism is likely to be "murky" (Baldwin and Evenett, 2009). Murky protectionism needs not involve a direct violation of WTO obligation, but represents an abuse of the legitimate discretion given to the State to discriminate against foreign goods, companies, workers and investors. Examples include clauses in stimulus packages that confine spending to domestic producers ("buy local" provisions); "green" policies that subsidize the manufacturing of environmental friendly goods but again only for local producers (Evenett and Whalley, 2009; Aggarwal and Evenett, 2010); or the bailout packages for selected domestic firms in tradeable sectors, which effectively alter the conditions of competition and international commerce. Interestingly, the WTO-OECD-UNCTAD report also admits that such policy measures may be more significant in terms of their potential impact on trade, investment and competition, than the traditional trade and investment restrictions (WTO-OECD-UNCTAD, 2010). However, that report makes no attempt to compare the magnitude of trade affected by murkier forms of protection with the easier-to-measure tariffs and trade defense instruments.

The latest results from the Global Trade Alert (GTA), an independent monitoring initiative providing information of state measures (including "murky" measures) that are likely to affect foreign commerce, show little let up in the number of discriminatory measures being implemented since the G20 summit in September 2009 (Evenett, 2010). Worldwide, Governments have imposed 357 state measures that discriminate against foreign commercial interests since the Pittsburgh summit. Moreover Evenett and Fritz (2010) used a conservative methodology to identify 16 (out of the 554) state measures from the GTA database that are likely to adversely affect both a large number of trading partners and a sizeable amount of international trade. The total estimate of trade covered by these "jumbo" measures is at least 10 per cent of the total value of world imports in 2008.

One might ask why the conclusions of WTO and GTA are so different. Does the omission of the "murkier" forms of state discrimination against foreign commercial interests in the WTO calculations have a downward bias in their estimates of the trade affected by contemporary protectionism? Ultimately, is the issue what forms of state discrimination legitimately fall within the purview of any monitoring exercise? Section A provides a comparison of the methods used by WTO and GTA for their estimates of trade coverage of crisis-era protectionism. Section B gives a snapshot of the current level of protectionism and the protectionism that is in the pipeline. In particular, it identifies which forms of discrimination are the most prevalent forms of crisis-era protectionism.

The remainder of the paper focuses on the Asian and Pacific region and assesses whether contemporary protectionism in this region is similar to general tendencies (section C). In section D special focus is given to China, which is found by GTA to be the most frequently hurt jurisdiction by other nations' protectionist measures. Estimates are provided for the amount of Chinese exports affected by certain foreign crisis-era measures; the first time the impact on an Asian-Pacific nation's total exports has been calculated. Section E concludes and discusses the implications for policymaking.

This paper extensively uses the GTA database, which at the time of writing (July 2010) consisted of 1,052 investigations of state measures that had been announced or implemented since November 2008. The publicly available dataset goes beyond its competitors in terms of coverage of countries, policy instruments, and other information such as the identification of trading partners likely to be harmed by a specific measure. Details about the construction of this dataset can be found in Evenett (2009).

A. Comparison of WTO and GTA[2] estimates for trade coverage of crisis-era protectionism

It is a challenge to provide a precise estimate of the total value of world trade covered by protectionist measures implemented during the global economic downturn and thereafter. Still, recent reports by WTO and GTA have attempted to shed light on this matter. The WTO report takes into consideration only those import restricting measures implemented during the previous six months and estimates that 0.44 per cent of world trade is affected by protectionism.[3] The WTO report notes that strictly speaking, this estimate may be too high, because WTO uses HS 6-digit data to make its calculations, when in fact the measures are targeted at the 8-digit level (WTO, 2010, p. 16). In contrast, researchers associated with GTA have estimated that $US 1.6 trillion of world trade, equivalent to more than 10 per cent of world imports in 2010, provides a minimum level of the trade affected by crisis-era protectionism. The authors in question contend their estimate is "conservative," one reason being that it is based on 16 out of the 554 implemented and discriminatory measures in the GTA database.[4]

[2] In this section, the GTA estimate corresponds to the calculations of Evenett and Fritz (2010), who are both members of the GTA team.

[3] This is the estimate for import-restricting measures implemented since November 2009. If measures between October 2008 and October 2009 are added, the comparable estimate of world trade affected is 1.41 per cent.

[4] See Evenett and Fritz (2010) for more details.

Why are the reported coverage ratios so different? Firstly, the WTO estimate includes only standard trade policy instruments, principally trade defense measures. The most often used of these measures are designed so that they can target, not just specific nations that export a good, but certain exporting firms without those nations. While safeguard measures affect imports of a good from all foreign sources, unless the goods and importers in question are significant in size, the magnitude of trade affected will almost certainly pale in comparison with the totals from world trade. It is therefore not surprising that the total amount of trade affected by trade defense measures, in a given six month period, is small.[5] Similar findings are already well established in the literature on antidumping, for example[6]. Short of an explosion of trade defense measures being introduced, computing the total amount of trade affected by such interventions is tantamount to trawling for minnows. To continue the metaphor, the real question is whether there are any bigger fish in the (protectionist) sea?

The scope of regional trade negotiations, the Doha Round and the specifics of bilateral trade disputes since the 1980s shows that, for the better part of the last three decades, trade diplomats, trade ministers and trade analysts have recognized that states can discriminate against foreign commercial interests in many ways. The chapters of any recent regional trade agreement signed by the United States, or for that matter any industrialized country, indicates that discrimination is possible far beyond the application of tariffs and trade measures. So as to provide a complete picture of the contemporary realities of protectionism, GTA is prepared to include any state measure that alters the treatment of foreign commercial interests relative to domestic rivals.[7]

Rather than restricting the analysis to traditional instruments, GTA used objective criteria to identify so-called "jumbo discriminatory measures", which are likely to affect a large number of trading partners and a sizeable amount of trade (more than $US 10 billion). The 16 "jumbo" measures that were used for the estimate include bailouts, export subsidies and competitive devaluations among other less traditional beggar-thy-neighbor policies. Together, these measures concern half of the estimated $US 1.6 trillion of trade value covered. The other half is harmed by more traditional policies, in particular export restrictions and tariff measures.

GTA's use of a lower level of disaggregation to identify the affected tariff lines compared with WTO (HS 4-digits versus HS 6-digits) is a second aspect that may contribute to the different results. Surely it is more precise and therefore preferable to look at specific

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[5] This statement is almost certainly the case irrespective of any undercounting by the WTO secretariat. Potential undercounting cannot be ruled out in the measures listed in the WTO reports, not least because the WTO secretariat is in many cases reliant on its member Governments to honestly report in short order the measures taken against foreign commercial interests. Overcounting is unlikely in the WTO reports because the same member Governments would quickly point out any errors made. The bias is on reporting less protectionism than has actually occurred, a point readers should bear in mind when interpreting the press statements and speeches that accompany the publication of WTO reports.

[6] More interesting is that the use (rather than the amount) of such measures may has changed during the crisis. See Bown (2010) and Fritz and Wermelinger (2009) for details.

[7] The use of the word "alters" is deliberate in this last sentence. Therefore, the GTA database also records liberalizing measures that eliminate or narrow discrimination against foreign commercial interests.

products rather than using the broad HS 4-digit category,[8] which will overestimate the trade coverage since they will include some products not actually affected by a measure. It is important to remember that many of the non-tariff measures are implemented by levels of Government that do not identify the products affected using the standard HS classification. Any attempt at classification at the 8-digit level could (given the broad definitions of the product and the scope of many discriminatory policies) be arbitrary and undercount the amount of trade affected. For trade policy instruments where higher levels of disaggregation are publicly reported, going beyond the 4-digit level, may yield more precise estimates. But readers should be under no illusion that such information is available for all of the murkier, less transparent forms of protectionism.

Even though the right choice of disaggregation matters, along with other steps in the proper calculation of trade affected,[9] the biggest difference between the two sets of estimates almost surely rests on the choice of policy instruments included. It may be the case that the historical resort to import-reducing measures in the 1930s provides a rationale for considering the impact of those measures now. However, it is difficult to see how that argument justifies ignoring other relevant discriminatory policy instruments. In short, if the forms of protectionism have evolved over time, so should trade policy monitoring exercises and the associated trade coverage calculations. For sure, measurement may not be perfect but rough orders of magnitude are probably what is needed for policymaking. Still, reports should specify what steps were taken in making calculations,[10] so that others can replicate their methodologies.[11]

B. Snapshot of contemporary resort to protectionism

The purpose of this section is to provide an overview of protectionist measures that have been announced or implemented after the first crisis-related G20 summit in November 2008. The prevalence of "behind-the-border" non-tariff measures that potentially affect foreign commercial interests – not just imports – is highlighted.

1. Protectionism remains an issue of concern[12]

Given that the G20 leaders repeatedly pledged to eschew protectionism, the opportunity is taken here to assess what happened between the G20 summits in September 2009 and June 2010. Worldwide, Governments have implemented 357 state measures that discriminate against foreign commercial interests, almost trebling the amount of observed discrimination (to 554 measures). Measures that harm commercial interests of its trading partners outnumber beneficial measures four to one, although it should be remembered that each measure may differ in scope and impact. The G20 Governments are responsible for over 60 per cent of all the discriminatory measures implemented worldwide. It should also be

[8] Some sense of perspective is needed here. Even at the 4-digit level there are over 1200 different types of product. Readers are encouraged to look over the 4-digit HS classification to see how fine grained it actually is.

[9] The computational steps in Evenett and Fritz (2010) almost certainly result in underestimates of the total amount of trade affected, for reasons given therein.

[10] To its credit, the most recent WTO report was transparent in this respect.

[11] To that end, Evenett and Fritz (2010) have made the relevant data and spreadsheets associated with their trade coverage calculations available to those who have asked for them.

[12] Some of the results presented in this sub-section are also published in Evenett (2010).

noted that 80 per cent of the trade liberalizing measures implemented during the last eight months were introduced by G20 Governments.

These discriminatory measures hurt others. In fact, as shown in table 1, many of the G20 members have suffered a substantial number of hits on their commercial interests. For example, China has suffered 282 hits to its commercial interests abroad (an increase of nearly 100 since the G20 in September 2009). The question arises, why do Governments (in particular large and powerful ones) continue to accept this damage to their commercial interests, especially when there is a lot of variation across countries in the harm that is inflicted.

Another puzzling factor in the limited dissension among large nations is the recognition that some countries inflict harm far more often than others. Four indicators of the harm done by a nation's discriminatory policies are reported and the top 10 worst offenders on each metric are listed in table 2. From the Asian and Pacific region, China, India, Indonesia, Kazakhstan and the Russian Federation recur on the list (see section C of this paper for a closer look at this region). The EU27 refers to the combined impact of all the actions taken by the European Commission and the 27 member States. Together, the EU27 appear as the top five worst offenders on all four metrics, a dubious distinction. However, most of the harm done by the EU27 grouping results from measures taken by the EU member States and not by the European Commission.

Table 1. Since the Pittsburgh G-20 summit many countries have seen their commercial interests under attack

Top 10 targets	Number of discriminatory measures imposed on target		Number of pending mesures, which if implemented, would harm target	
	Toronto G20 summit	Increase from previous G-meeting	Toronto G20 summit	Increase from previous G20 meeting
China	282	183	125	48
EU27	266	na	80	na
United States	213	127	46	27
Germany	204	20	56	26
France	188	110	46	22
United Kingdom	181	109	44	24
Italy	175	105	50	27
Belgium	70	92	42	21
Japan	168	90	47	24
Netherlands	163	92	42	24

Notes: This table is also published in Evenett (2010).

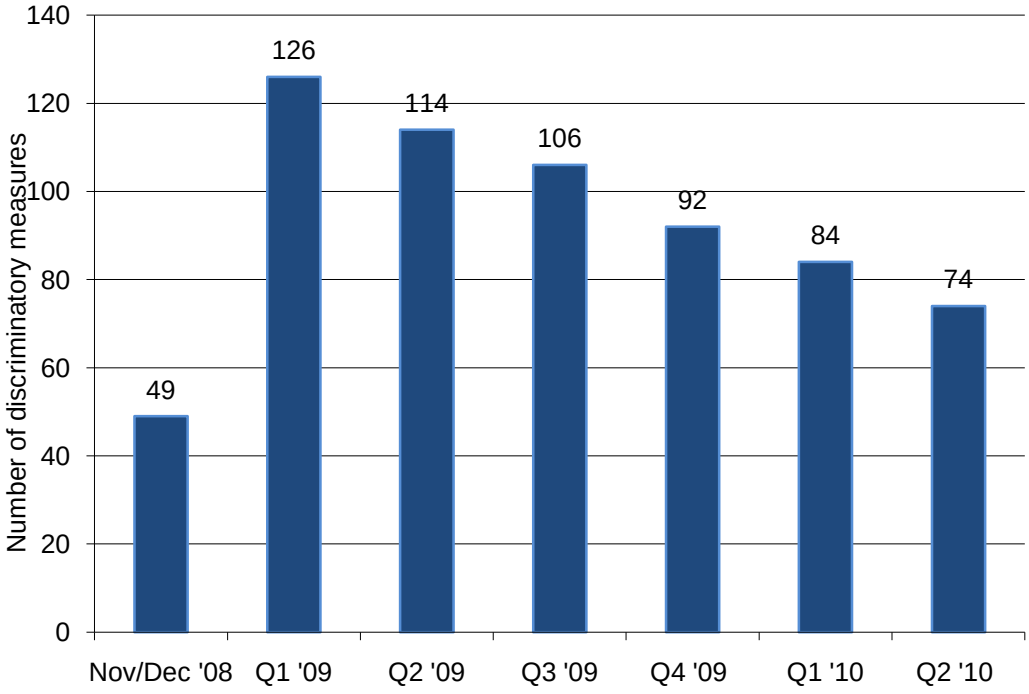
Table 2. Some jurisdictions inflict more harm than others

Rank	Metric, country is specified rank, number			
	Ranked by number of (almost certainly) discriminatory measures imposed	Ranked by the number of tariff lines (product categories) affected by (almost certainly) discriminatory measures	Ranked by the number of sectors affected by (almost certainly) discriminatory measures	Ranked by the number of trading partners affected by (almost certainly) discriminatroy measures
1	EU27 (146)	Venezuela (784)	EU27 (55)	EU27 (168)
2	Russian Fed. (73)	Kazakhstan (719)	Algeria (54)	Argentina (161)
3	Argentina (41)	Nigeria (5999	Nigeria (45)	China (161)
4	India (31)	EU27 (437)	Venezuela (38)	Indonesia (152)
5	Germany (29)	Russian Fed. (421)	Kazakhstan (36)	Russian Fed. (142)
6	United Kingdom (24)	India, Indonesia (347)	Russian Fed. (34)	Finland, Germany, South Africa (132)
7	Indonesia (22)		Ethiopia (32)	
8	China, Italy (19)	Ethiopia (345)	Indonesia (32)	
9		Argentina (336)	India (31)	Belgium, Brazil (131)
10	Austria (17)	China (335)	Germany (27)	

Notes: This table is also published in Evenett (2010). The EU27 refers to the combined impact of all the actions taken by the European Commission and the 27 member States.

It is also important to check whether the protectionist momentum has abated as the world economy appears to recover. Figure 1 plots the number of harmful measures implemented per quarter since November 2008. At first cut this plot shows a slowdown in use of discriminatory state actions. However, as Evenett (2010) argues, many interventions become apparent several (sometimes up to 12) months after the actual implementation. Therefore, the decline over time reflects reporting challenges rather than improved government behaviour. Comparisons across the GTA reports over time has shown that in most quarters the totals quickly converge to a range of 100-125 protectionist measures implemented per quarter. No departure from this pattern has been observed, suggesting that the recovery has yet to resort to protectionism. Moreover, much of the discrimination put in place has yet to be removed, while more than 200 measures have been announced and may be implemented in the months ahead. Therefore, as far as open markets are concerned, the current situation does not afford much room for complacency.

Figure 1. Less harmful state actions are recorded in each quarter, but this is an artifact of reporting lags



Source: Global Trade Alert database, accessed in July 2010.

2. Non-tariff measures (behind-the-border) are the most prevalent

The introduction of this paper alluded to the importance of less transparent protectionist measures – the so-called murky protectionism – during the recent global economic crisis. In introducing this subject, it is necessary to set to one side certain unpersuasive arguments for not reporting certain discriminatory measures against foreign commercial interests. For instance, it is well known that the deep financial crisis induced caused many Governments to bail-out troubled banks and other financial intermediaries. Far too many policymakers and trade diplomats have appeared to argue that the systemic nature of the threat to the financial system trumps all other considerations.

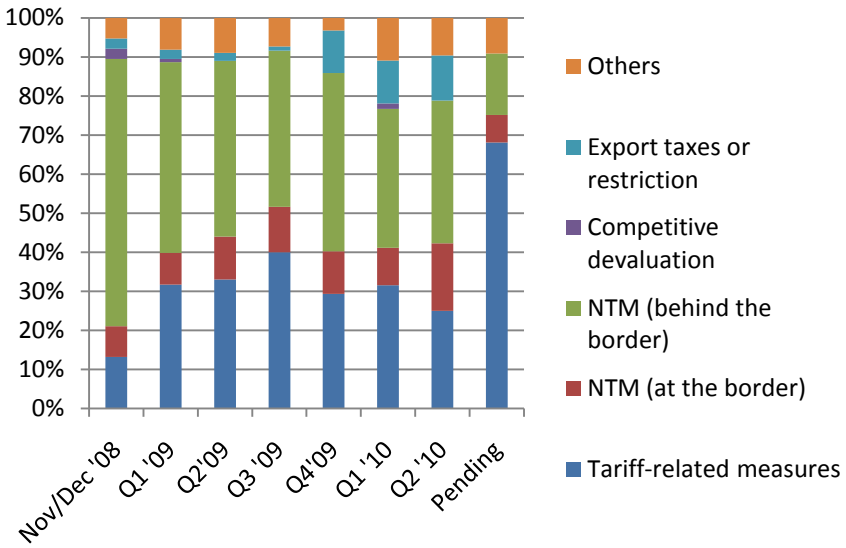
Here it is important to distinguish between two features of such bail-outs: their apparent systemic importance and any discriminatory nature. This distinction is important because it begs the question of whether it was necessary to introduce discriminatory bail-outs to preserve the financial system. It may be possible – indeed arguably it is preferable –to introduce bailouts that helped preserve the stability of the financial system which do not discriminate against foreign commercial interests. If so, a country can be faithful to its commitments to trading partners and still be able to tackle financial crises. Furthermore, to the best of our knowledge, there is no accepted proposition that discrimination is a pre-requisite for effectiveness (assessed at the national or global level.) It is quite probable that, had a greater set of alternatives been contemplated, less discriminatory or non-discriminatory financial support packages that were equally effective could have been identified.

When one examines the evidence, however, what is astonishing is that a lot of the reported crisis-era state aids were not provided to the financial sector, but to other industries in trouble where the "systemic threat" argument hardly applied. For example, 60 per cent of

all bailout/state aid measures, implemented between November 2008 and June 2009, which were recorded in the Global Trade Alert database, were provided to non-financial sectors. Moreover, one would expect the "bailout season" to be over, given the apparent recovery from the crisis. However, no signs of such a slowdown can be found in the data; these measures remain the most often used discriminatory policy tool, followed by trade defense actions.

Figure 2 draws the quarter-by-quarter picture for different groups of measure types. The share of behind-the-border measures,[13] which tend to be less tightly regulated by the WTO accords, remains around 40 per cent – a proportion that is fairly constant since the beginning of 2009. By contrast, the share of traditional tariff-related measures, in particular trade defense measures, actually falls from a 40 per cent peak in the third quarter of 2009 to 25 per cent in the second quarter of 2010. Including other forms of discrimination, such as migration and investment measures or export restrictions, the prevalence of non-tariff interventions becomes all the more apparent in the set of implemented stated measures. Having said this, tariff and trade defense measures still dominate the measures that have been announced but not yet implemented.[14]

Figure 2. How has contemporary protectionism changed quarter-by-quarter?



Source: Global Trade Alert database, accessed in July 2010.
Notes: Tariff-related measures include tariff and trade defense measures. *NTM at the border* include quotas, import bans, TBT, non tariff barriers (not otherwise specified). *NTM behind-the-border* include consumption subsidies, local content requirements, public procurement, bailout/state aid measures, export subsidies, trade finance support, support to state trading enterprises and state-controlled companies. *Others* include investment, migration, intellectual property protection and other service sector measures.

[13] Including consumption subsidies, local content requirements, public procurement measures, bailout/state aid measures, export subsidies and trade finance support.
[14] To save space, the sectoral analysis of government intervention is not presented here. Aggarwal and Evenett (2010) provide some evidence and hypotheses as to how the sectoral incidence and form of state action have changed during the global economic crisis.

C. Is protectionism in Asia and the Pacific region at par with global tendencies?

This section explores whether discrimination against and harm inflicted by emerging or developing countries in Asia and the Pacific are similar to the protectionist tendencies at the global level.[15]

1. Harm done to the Asia-Pacific commercial interests

China is the only jurisdiction in Asia and the Pacific region on the list of jurisdictions whose foreign commercial interests are harmed the most (see table 1 above). The second most affected in this region, the Republic of Korea, has been hit almost half the amount of times as China has. Table 3 lists the top 10 harmed Asia-Pacific countries.

Table 3. The Asia-Pacific countries are not among the most targeted, except China

Top 10 targets	Number of discriminatory measures imposed on target	Trading partners imposing largest number of discriminatory measures on target			Type of measure imposed most frequently on target		
		No 1	No 2	No 3	No 1	No 2	No 3
China	282	Russian Fed. (47)	Argentina (33)	India (22)	Trade defence measure (94)	Tariff measure (69)	Bail out / state aid (61)
Republic of Korea	149	Russian Fed. (36)	India, Argentina (11)		Bail out / state aid (51)	Tariff measure (39)	Export tax or restriction, Trade defence measure (18)
Thailand	141	Russian Fed. (27)	Indonesia (15)	Argentina (12)	Bail out / state aid (42)	Tariff measure (38)	Export subsidy, Export tax or restriction, NTB, Trade defense measure (15)
Turkey	137	Russian Fed. (36)	Argentina (9)	France (8)	Bail out / state aid (47)	Tariff measure (40)	Export tax or restriction (19)
India	131	Russian Fed. (20)	Argentina (14)	Indonesia (10)	Bail out / state aid (38)	Tariff measure (38)	NTB (19)
Singapore	109	Russian Fed. (18)	Indonesia (15)	Argentina (11)	Bail out / state aid (28)	Tariff measure (34)	Export tax or restriction (20)
Australia	107	Russian Fed. (15)	Indonesia (14)	Argentina, France, Japan, United Kingdom (7)	Bail out / state aid (38)	Tariff measure (26)	Export subsidy (14)
Malaysia	101	Indonesia (14)	Russian Fed., Argentina (10)	France, India (6)	Bail out / state aid (29)	Tariff measure (27)	Export tax or restriction (14)
Indonesia	94	Russian Fed. (12)	Argentina (10)	India (9)	Bail out / state aid (24)	Tariff measure (27)	Trade defence measure (14)
Russian Federation	93	Argentina (10)	China (8)	Kazakhstan (7)	Bail out / state aid (21)	Tariff measure (25)	Export tax or restriction (14)

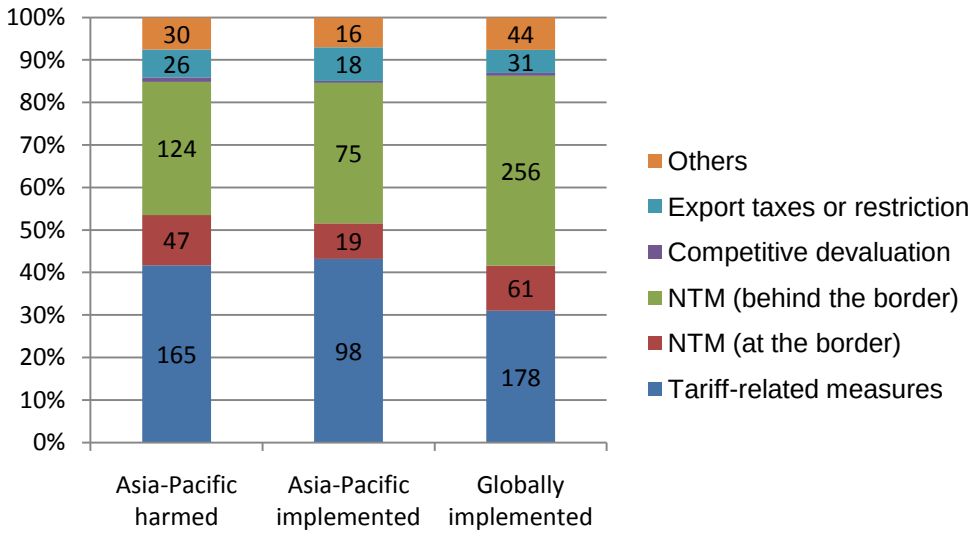
Source: Global Trade Alert database, accessed in July 2010.

[15] A more in depth analysis of the protectionist landscape in Asia and the Pacific region is provided in Mikic (2009).

2. Some of the worst offenders can be found in the Asia-Pacific region

Study of table 3 reveals that many of the countries responsible for many of the measures harming Asia and the Pacific region are from within the region. The Russian Federation and Indonesia, in particular, are featured prominently. At the global scale, the Russian Federation and Indonesia along with India, China and Kazakhstan, also belong to the world's leading protectionist players (see table 2 above). Taken together these countries are also responsible for 15 of the 22 "jumbo discriminatory measures".[16] It is also interesting that there is symmetry between the measures inflicting harm on the Asia-Pacific region and the ones imposed by the region (see figure 3). The comparison with the global distribution shows that tariff increases and trade defense measures are more prevalent in the Asia-Pacific region. By contrast, behind-the-border measures make up a smaller (but still considerable) share in the Asia-Pacific region.

Figure 3. Compared with the world average, the Asia-Pacific region resorts to Tariff-related measures more often



Source: Global Trade Alert database, accessed in July 2010.
Notes: Tariff-relates measures include tariff and trade defense measures. *NTM at the border* include quotas, import bans, TBT, non tariff barriers (not otherwise specified). *NTM behind-the-border* include consumption subsidies, local content requirements, public procurement, bailout/state aid measures, export subsidies, trade finance support, support to state trading enterprises and state-controlled companies. *Others* include investment, migration, intellectual property protection and other service sector measures.

3. Harm to the least developed countries

Is the treatment of the least developed countries (LDCs) different? As mentioned by Mikic (2009), the international community has declared repeatedly that LDCs in the world should be assisted in their efforts to integrate into the global economy. Traditionally, they

[16] Identified by Evenett and Fritz (2010). It has to be noted that 22 jumbo measures were identified, but only 16 of them were used for the estimate of total trade coverage (see section A).

have access to special and differential treatment through the multilateral trading rules. In addition, they have been given special focus in the Millennium Development Goals through the adoption of Goal 8, which is focused on developing global partnerships. The Asia-Pacific region is host of 14 out of 49 LDCs. Despite the considerations above, these countries have been the target of discriminatory interventions during the crisis-era; while none of them so far has implemented any measure (see table 4). Trading partners that have imposed most of these measures are India, whose interventions have harmed seven LDCs at least twice. Likewise, Indonesia's measures have harmed eight LDCs. Most of the measures that are thought likely to have harmed poor countries are export restrictions and bailouts. Given their vulnerabilities, more detailed analysis of the amount of harm done to LDCs is warranted.

Table 4. Least developed countries are not spared from protectionist dynamics

Asia-Pacific least developed countries	Number of discriminatory measures imposed on target	Trading partners imposing largest number of discriminatory measures on target			Type of measure imposed most frequently on target		
		No 1	No 2	No 3	No 1	No 2	No 3
Bangladesh	37	India (8)	Argentina (5)	Indonesia (3)	Bail out / state aid measure (12)	Export tax or restriction (10)	Migriation (6)
Afghanistan	18	India (4)	Argentina, Russian Fed. (2)		Export tax or restriction (6)	Bail out / state aid measure, Export subsidy (5)	
Cambodia	15	India (4)	Argentina, Indonesia (2)		Export tax or restriction (5)	Bail out / state aid measure, Export subsidy (4)	
Myanmar	15	Indonesia (4)	India (3)	China, Rep. of Korea (2)	Export tax or restriction (6)	Tariff measure (5)	Export subsidy, NTB (3)
Nepal	15	India (4)	China, Germany, Indonesia, Malaysia, Thailand, United States (1)		Export taxes or restriction (4)	Bail out / state aid measure, Export subsidy, Local content requirement, Migration measure, NTB, Public procurement, Trade finance (1)	
Lao People's Democratic Republic	7	Argentina, Belgium, China, Germany, Indonesia, Malaysia, South Africa, Thailand, United States (1)			Export tax or restriction (4)	Bail out / state aid measure (3)	Tariff measure (2)
Samoa	5	Indonesia (2)	Belarus, Nigeria, Rep. of Korea, Russian Fed. (1)		Bail out / state aid measure (2)	Export tax or restriction (2)	Import subsidy (1)
Maldives	4	India (2)	Indonesia, Japan (1)		Export subsidy, Trade finance (2)	Export tax or restriction, NTB (1)	
Solomon Islands	3	Indonesia, Japan, South Africa (1)			Bail out / state aid measure, NTB, Tariff measure (1)		
Vanuatu	3	Belgium, China, Japan (1)			Bail out / state aid measure, Export tax or restriction, Import subsidy (1)		
Timor-Leste	3	Indonesia (3)			Export tax or restriction (2)	Tariff measure (1)	
Bhutan	2	India (2)			NTB, Tariff measure (1)		
Kiribati	1	Japan (1)			NTB (1)		
Tuvalu	0						

Source: Global Trade Alert database, accessed in July 2010.

D. How is China's trade affected by contemporary protectionism?

Mention has already been made that China's commercial interests have been hit the most often by foreign discriminatory measures.[17] Out of the 1,052 measures investigated by GTA, 533 measures affect Chinese exports. More than half of these, namely 282, are "almost certainly" discriminatory against China's commercial interests; another 126 measures are announced or under consideration and would (if implemented) involve discrimination. Only 75 (out of 533) measures against China are benign or beneficial to its commercial interests. This section investigates how much of China's exports and imports are affected by foreign discriminatory measures and whether it is also the less-transparent forms of intervention that affect more of China's trade.[18]

1. A conservative method to identify measures that affect China's trade

The first step is to identify the foreign measures that harm Chinese trade. What follows is a conservative methodology that almost surely underestimates the set of relevant measures. The first step amounts to identifying those foreign measures in the GTA database meeting the following conditions:[19]

a) The measure is classified "red" in the Global Trade Alert dataset; that is, the measure "almost certainly" discriminates against foreign commercial interests and has been implemented.
b) The measure is still implemented in June 2010 (when the computations for this paper were undertaken).
c) In 2008 the measure would have covered more than a *de minimus* amount of goods trade with China (taken to be $US 1 million).
d) The measure is not a subsidy or bailout to the financial sector, and not an investment, migration or service sector measure.
e) If the measure is a subsidy or bailout to a non-financial sector (including trade finance support), then the total value of the outlay by the implementing Government was at least $US 1 billion; or (in case the value of the total outlay is not available) in 2008 the measure would have covered at least $US 10 billion in international trade.
f) If the measure is a subsidy or bailout to a non-financial sector (including trade finance support), then in 2008 the implementing jurisdiction's average share of world exports in the product lines affected exceeded 5 per cent.

The above criteria make sure that measures included in the subsequent calculations have almost certainly affected Chinese trade above *de minimus* levels. Specifically, the

[17] Applying different metrics (such as number of discriminatory measures affecting specific trading partner, number of pending measures likely to affect trading partner, or number of jurisdictions imposing discriminatory measures against trading partner) China is always the top offended nation.

[18] A similar investigation is done for the case of Switzerland in Wermelinger (2010). Notice that the focus here on exports and imports reveals nothing about the harm done by foreign protectionism to Chinese migrants and foreign investments. For this reason, and others, the value of Chinese commercial interests affected by foreign protectionism will be larger than the numbers reported in this section.

[19] For stated reasons in section A, the methodology applied here is motivated by Evenett and Fritz (2010).

requirements (e) and (f), which concern measures that affect China's exporting interests through their influence of world prices of the products in question, restricts attention to measures likely to have affected world prices.

The above procedure identified 164 (out of the 282) state measures. Next, account is taken of the fact that different types of measure are likely to affect different types of Chinese imports and exports. Specifically, it is assumed (consistent with the GTA's methodology in identifying affected trading partners and tariff lines) that:

a) China's ***exports*** of a particular product are ***directly*** affected (i.e. China's exports to the implementing jurisdiction in the tariff lines concerned) by foreign tariff increases, trade defense measures, quotas, import bans, technical barriers to trade, non-tariff barriers (not otherwise specified), consumption subsidies, local content requirements, public procurement and competitive devaluations affecting the same product.

b) China's ***exports*** of a particular product are ***indirectly*** affected (i.e. China's exports to the world in the tariff lines concerned) by foreign bailout/state aid measures (to non-financial sectors) and export subsidies affecting the same product.

c) China's ***imports*** of a product are affected (i.e. China's imports from the implementing jurisdiction in the tariff lines concerned) by foreign export taxes or restriction and competitive devaluations affecting the same product.

2. A significant amount of Chinese trade is affected by foreign measures; behind-the-border measures account for most of trade covered

Not surprisingly, the amount of trade harmed by the large number of measures that discriminate against China's commercial interests is substantial. Table 5 shows that almost 10 per cent of total Chinese exports are covered, and that most of the harm is done by interventions that affect China's exports directly. Two points of interpretation should be made: first, the bigger estimate (for directly affected exports) is also more precise, as the measures involved indeed directly hinder the concerned exports. Second, the smaller estimate (for indirectly affected exports) is calculated with the conservative methodology described above. Table 6 shows that the three biggest measures[20] in terms of potentially affected Chinese exports (that meet all but one of the above criteria) are excluded in the estimate. The implementing jurisdiction's share of world exports in the product lines affected by these measures is below 5 per cent and is less likely to distort world prices of these products. This approach is rather restrictive and a marginally more liberal method would increase the share of export coverage dramatically. The situation is less of a concern for imports. China's trading partners harm $US 45 billion or 4 per cent of total Chinese imports with export restrictions and competitive devaluation measures.

The analysis confirms that the most often harmed jurisdiction in the GTA database is also considerably affected in terms of trade covered by the measures. It would be interesting to study how the number of measures that harm a jurisdiction (or the total trade of this jurisdiction) correlates with the share of total trade affected by these measures. If the

[20] Incidentally, all classified as "jumbo" by Evenett and Fritz (2010).

correlations are different from zero, it would show that traders are not symmetrically harmed in terms of trade coverage.[21]

It is also interesting to know which foreign jurisdictions' measures adversely affect the China's trade the most. Four different indicators of harm inflicted by China's partners are calculated; three of which take account of trade coverage. Table 7 reports the 10 worst offenders against China's bilateral (direct) exports on each metric. Indonesia, the Russian Federation, and the United States appear in the top 3 worst offenders for two of the indicators, respectively. All of them are also identified as big global offenders with respect to "jumbo" measures implemented.[22]

Additional analysis of the China evidence also confirms previous findings. Although tariff increases and trade defense measures are most frequently measures to harm China's commercial interests (namely, 90 measures, amounting to more than half of all those measures used to calculate the conservative estimate), it is the less-transparent "behind-the-border" measures that affect greater total amounts of Chinese trade. Table 8 presents a detailed list for the number of measures and share of trade values affected by each measure type; only 12 per cent of the trade covered by foreign protectionist measures are associated with tariff increases and the application of trade defense measures. Figure 4 illustrates the same information at a less disaggregated level.

Table 5. How much of China's trade is affected by discriminatory measures?

Trade value (in 2008, US$ bn) of potentially affected Chinese exports			Share of potentially affected exports in total Chinese exports			Trade value (in 2008 US$ bn) of potentially affected Chinese imports	Share of potentially affected imports in total Chinese imports
directly	indirectly	total	directly	indirectly	total	total	total
124.39	18.12	142.51	8.69%	1.27%	9.96%	45.00	3.98%

Source: Authors' calculations based on Global Trade Alert and UN Comtrade.

[21] This exercise goes beyond the purpose of this paper, but some anecdotal evidence for the existence of symmetric export coverage is available; the export coverage for Switzerland is around 10 per cent; similar to the China case. It has however to be noted that the 10 per cent are mainly driven by the broad export tax rebate the Chinese Government granted in 2009 (Wermelinger, 2010). This measure alone (indirectly) affects 9 percent of total Swiss exports.

[22] It should be noted that China itself has implemented the "jumbo" measure covering most trade worldwide.

Table 6. List of discriminatory measures that indirectly affected Chinese exports

Implementing juristiction	Title of the measure	Measure type	Number of product lines affected	Percentage of total number of product lines exported by China	Implementing juristiction's share of world exports in the product lines affected	Chinese share of world exports in the product lines affected	Trade value (in 2008, US$ bn) of potentially affected Chinese exports	Share of potentially affected exports in total Chinese exports	Jumbo measure?	Included in conservative estimate of trade coverage?
Argentina	Extension of tax exemptions for locally produced capital goods	Bail out / state aid measure	192	16.96%	0.18%	12.92%	690.17	48.24%	yes	no
Brazil	New credit line for exports of consumer goods	Trade finance	196	17.31%	1.21%	16.65%	636.68	44.50%	yes	no
United Kingdom	UK: Temporary aid for the production of green products	Bail out / state aid measure	119	10.51%	3.66%	8.09%	211.57	14.79%	yes	no
France	Financial support to customers of Airbus.	Consumption subsidy, Export subsidy	50	4.42%	11.97%	2.03%	8.65	0.60%	no	yes
	France: Immediate EUR 1.65 billion rescue package for French farmers	Bail out / state aid measure								
United States	Support for General Motors and Chrysler.	Bail out / state aid measure	3	0.27%	8.41%	1.02%	7.79	0.54%	no	yes
Germany	Organic Farming - R&D&I scheme	Bail out / state aid measure	1	0.09%	22.15%	1.87%	1.06	0.07%	no	yes
European Union	Measures to "stabilise" markets for certain dairy products	Export subsidy	9	0.80%	64.69%	0.86%	0.62	0.04%	no	yes
	Reintroduction of export refunds for milk and milk products, butter and butteroil									

Source: Authors' calculations based on Global Trade Alert and UN Comtrade.

Table 7. Ranking of trading partners in terms of direct harm to their bilateral exports to China, 4 different metrics

Ranking	Share of affected exports as % of China's exports to the world in the targeted 4-digit product lines	Share of affected exports as % of China' s total exports to that implementing juristiction	Trade value (in 2008, billion USD) of affected exports	Number of product lines affected
1	19.63%	100.00%	82.41	212
	Japan	Ethiopia	United States	Indonesia
2	17.16%	100.00%	11.76	166
	Rep. of Korea	Kazakhstan	Indonesia	Russian Federation
3	16.13%	100.00%	7.04	139
	USA	Nigeria	Russian Federation	Nigeria
4	12.24%	100.00%	5.64	106
	European Union	Venezuela	Japan	Ethiopia
5	4.02%	68.40%	3.55	107
	Mongolia	Indonesia	European Union	United States
6	3.35%	32.59%	3.18	93
	Viet Nam	USA	India	Kazakhstan
7	2.71%	29.20%	1.48	83
	Canada	Argentina	Argentina	Argentina
8	2.37%	21.27%	1.29	71
	Customs Union (RBK)	Russian Federation	Iran	Japan
9	1.90%	10.05%	1.12	66
	Russian Federation	India	Ethiopia	Venezuela
10	1.81%	8.41%	1.11	38
	Thailand	Paraguay	Viet Nam	Islamic Rep. of Iran

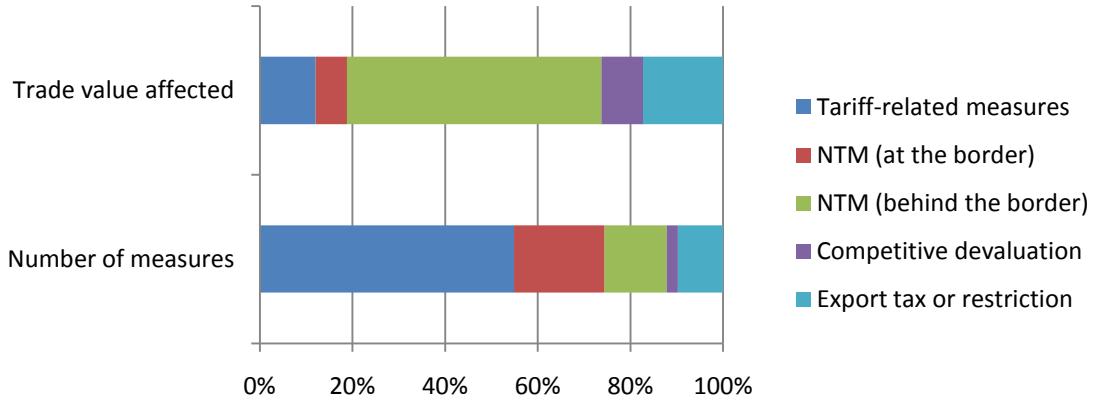
Source: Authors' calculations based on Global Trade Alert and UN Comtrade.

Table 8. Chinese trade covered, by discriminatory measure

Measure category	Tariff-related measures		Non-tariff measures										
			at the border				behind the border						
Measure type	Tariff measures	Trade defence measure (AD, CVD, safeguard)	Quota (including tariff rate quotas)	Import ban	Technical Barrier to Trade	Non tariff barrier (not otherwise specified)	Consumption subsidy	Local content requirement	Public procurement	Bail out / state aid measure	Export subsidy	Competitive devaluation	Export taxes or restriction
Number of measures	39	51	3	13	3	13	4	5	6	4	3	4	16
Trade flow affected	Exports												Imports
Share of trade value affected	6.35%	5.64%	0.28%	1.02%	0.12%	5.37%	0.25%	42.27%	1.80%	5.95%	4.66%	2.46%	6.55%	17.27%

Source: Authors' calculations based on Global Trade Alert and UN Comtrade.
Notes: The figures concern only the measures used for the calculations below; in particular only 164 of the 282 discriminatory measures are used.

Figure 4. Share of different types of measures that affect China's trade, weighted by trade covered



Source: Authors' calculations based on Global Trade Alert and UNComtrade.
Notes: Tariff-relates measures include tariff and trade defense measures. *NTM at the border* include quotas, import bans, TBT, non tariff barriers (not otherwise specified). *NTM behind-the-border* include consumption subsidies, local content requirements, public procurement, bailout/state aid measures, export subsidies, trade finance support, support to state trading enterprises and state-controlled companies. *Others* include investment, migration, intellectual property protection and other service sector measures.

E. Conclusions and implications for policymaking

Making extensive use of the GTA database, the purpose of this paper was to provide a snapshot of current protectionist dynamics. Two methods of estimating the trade covered by crisis-era protectionism were also examined. Although the method used in the recent WTO report may use a more appropriate level of tariff line disaggregation for some discriminatory measures, overall, it was argued that GTA's estimates provide a better estimate of the amount of global commerce affected by global era protectionism.

This paper also confirmed the contemporary importance of "murky" protectionism. The overview of the crisis-era protectionist landscape showed that in each quarter of the past 18 months more than half of discriminatory measures are not tariffs or trade defense measures and tend to fall under weaker or no WTO rules. The harm inflicted by and the discrimination against the Asia-Pacific region is rather similar to global tendencies; although tariff-related measures are slightly more prevalent in this region. For the jurisdiction harmed by the greatest number of foreign discriminatory measures, China, it is shown that at least 10 per cent of its exports are harmed and more than 50 per cent of which are affected by "murky" forms of protectionism, notably, local content requirements and bailouts.

In interpreting the performance of WTO rules, the evidence presented raises further questions. Some heart might be taken from the fact that Governments have not chosen to raise tariffs above bound rates. However, the widespread resort to subsidies and bail outs raises concerns that WTO rules were circumvented (or at least, loopholes and weaknesses exploited) rather than strictly adhered to. This matter will require further attention, with the proper specification of counterfactuals in frameworks that allow for the substitution between discriminatory policy instruments.

At a minimum, two implications for policymaking are presented. Given the cumulative damage done to the world economy from crisis-era protectionism, if the world economy continues to recover, the national policymakers should not only resist any temptations for future protectionism but also start to unwind those discriminatory measures in place. Both national ministries and international organizations, such as WTO, could identify the most harmful crisis-era interventions and start talks on how such measures can be withdrawn. The list of "jumbo" measures identified by Evenett and Fritz (2010) and those affecting Chinese commerce, identified here, could be a starting point for such discussions. In addition, WTO and other international organizations should assist small and poor countries to obtain, where possible, exemptions from discrimination of their trading partners.

In the middle to longer run, Government leaders should rethink the role of WTO in the light of contemporary experience. If a consensus emerges that current multilateral trade rules were not strong enough to resist protectionist temptations during the global economic crisis, then policymakers may wish to initiate negotiations on new rules on subsidies, public procurement, export taxes and incentives, and the other measures used frequently in recent years. Such negotiations would go well beyond the Doha Round mandate and it is an open question as to whether that mandate – if unmodified – best serves the interests of the world trading system.

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