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Abstract

This paper summarises public procurement policy changes undertaken since November 2008, based on data from the GTA project. A particular focus is on policy changes that alter the relative treatment of domestic firms vis-à-vis foreign rivals. The ultimate goal of this paper is to inform other, ongoing data collection efforts, public policy deliberations on crisis-era policy response in particular as they relate to state purchasing policy, and discussions on the relative merits of strengthening disciplines on public procurement matters in trade agreements.

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Gauging Procurement Policy Change During the Crisis-Era: Evidence from the Global Trade Alert¹

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Abstract:

This paper summarises the principal findings of the data collection efforts by the independent Global Trade Alert team on public procurement policy changes undertaken since November 2008. A particular focus is on policy changes that alter the relative treatment of domestic firms vis-à-vis foreign rivals. The ultimate goal of this paper is to inform other, ongoing data collection efforts, public policy deliberations on crisis-era policy response in particular as they relate to state purchasing policy, and discussions on the relative merits of strengthening disciplines on public procurement matters in trade agreements.

Key words: Government procurement, global economic crisis, protectionism.

JEL codes: F02, F13

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1. Introduction and Motivation.

The contribution of fiscal policy to restoring economic growth has waxed and waned since the onset of the global economic growth. After an initial burst of fiscal stimulus in 2008 and 2009, many governments retrenched, turning to austerity policies from 2010. While some detect a revival of fiscal activism during the past year (Davies 2016, Ip 2016), monetary policy has been the principal tool of macroeconomic policy in many G-20 nations.

If fiscal policy has been so muted—at least in terms of spending levels and contribution to national income growth—then is there little to say about the impact of public procurement policies during the crisis era? Not necessarily. By altering the relative treatment of domestic bidders for state contacts vis-à-vis their foreign rivals, changes in public procurement policy can shift expenditure across borders.

Given that many governments' expenditures on goods and services amount to large shares of national income, the potential redirection of demand could have significant implications for the fortunes of internationally-active firms, the employment prospects of their staff, the value for money in state contracting, international trade and investment flows and, should matters become contentious, for trade disputes.

Even in countries where fiscal policy has not been expansionary, changes in public procurement policies can have important implications for cross-border commerce and therefore become a legitimate area for commercial policy discussions. The criticism—and latter copy-catting—by foreign governments of early crisis-era policies to impose stringent "Buy America" provisions in the US fiscal stimulus package speaks to the potency of this matter.

From an economic point of view, public procurement policies can distort the allocation of resources and alter conditions of competition in bidding for state contracts. Arguably, there is also a legitimate societal concern that, in the desire to favour one group of bidders over another, the total cost of state purchases increases. In this manner, public procurement policies may act as a largely hidden form of redistribution from current and future taxpayers to narrow sectoral interests.

But what changes have governments made in public procurement policies during the crisis era? Apart from members of the Agreement on Government Procurement (GPA) of the World Trade Organization (WTO), whose public procurement policies are briefly summarised in that organisation's Trade Policy Reviews, there are few sources on changes in regulations and laws governing public purchasing. For sure, during the past two years a number of data collection efforts have begun and these are to be welcomed.

So as to ground deliberations to greatest extent possible in facts, the proximate purpose of this paper is to summarise the contents of the independent Global Trade Alert (GTA)'s initiative to collect data on government procurement policy changes since November 2008. This effort sought to identify policy changes that improved as well as worsened the treatment of foreign commercial interests in state purchasing policy. In total, 548 announced changes to public procurement policies have been identified by the GTA team.⁴

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⁴ Consistent with the goal of promoting evidence-based deliberations on public policymaking, the GTA provides this data free of charge to third parties. Please contact Simon Evenett at simon.evenett@unisg.ch for this data. As the description of the GTA's data collection efforts makes

The ultimate purpose of this paper is to inform other, ongoing data collection efforts, public policy deliberations on crisis-era policy response as they relate to fiscal policy and public procurement policy in particular, and discussions on the relative merits of strengthening disciplines on public procurement matters in trade agreements.

Although a plurilateral accord on government procurement matters was agreed in the 1970s, compared to other areas of international trade policy, negotiations and international obligations on public procurement matters remain relatively speaking a nascent area. Notwithstanding the adoption of government procurement obligations in many regional trade agreements during the past twenty years, some levels of government (in particular sub-national levels) and certain areas of expenditure tend not to be covered by such disciplines at all.

The implication is that there is plenty of room for expanding trade disciplines in this area of public policy. Whether governments are minded to do so is a separate matter. All of these matters, including assessments of the likely economic and commercial impact of potential disciplines, can surely be constructively informed by information on what steps governments have actually taken during an era of acute economic pain followed by growth underperformance.

No doubt some are eager to learn about the trade impact of crisis-era public procurement measures. Notwithstanding certain economic models showing that under specific circumstances that government procurement discrimination against foreign bidders has no effect on aggregate trade flows (see Evenett and Hoekman 2005 for an account of the relevant issues), it would seem from the reaction of business people and policymakers that foreign changes in state purchasing policy appear to have cross-border implications.

We too are keen to learn what those effects may have been, but note that to the best of our knowledge we know of no empirical paper that separately identifies the effects of government procurement policy changes since the onset of the global economic crisis. Analysts cannot run before they can walk. Data must be collected before econometric analysis is possible. Some may find the delays frustrating—but in our opinion this reflects the parlous state of data collection on non-tariff measures when the global economic crisis hit.

Worse, we fear that the near empirical vacuum on high quality data on non-tariff measures at the beginning of the global economic crisis may have been exploited by some analysts, interest groups, and public officials to dismiss outright the subsequent

clear, the number of procurement measures documented rises over time and the GTA is happy to share updates of this data as well.

⁵ Evenett and Fritz (2015a) did include public procurement policy changes into one of the categories of potential trade distortions that could affect the exports of the Least Developed Countries (LDCs). As of this writing, there are 19 entries in the GTA database whereby a harmful public procurement policy change has been implemented since November 2008 that affects products exported by the Least Developed Countries. It may be useful to note at this point that over the same time horizon, 925 government policies harmful to the commercial interests of the Least Developed Countries have been implemented. It is for this type of reason, and others, that Evenett and Fritz did not emphasise the role of foreign public procurement policy changes as a major factor holding back LDC exports during the crisis era.

importance of crisis-era non-tariff measures in general and, in this case, changes in public procurement law and regulations.

Instead of econometric estimates, here we report statistics on the amount of exports by the Group of Twenty leading economies (G20 nations) that are in product categories where adverse foreign public procurement policy changes have been implemented since November 2008. These statistics provide some sense of the scale of this public policy "problem" across countries and over time. Researchers may find these numbers of use in identifying the bilateral trade flows where public procurement policy changes might have had the largest effect. Inevitably, progress in this area on data, empirical analysis, and implications for policymaking is incremental. Still, in this paper we hope to contribute to a better understanding of crisis-era policy response in state purchasing.

The remainder of this paper is organised as follows. In section 2 the GTA data collection initiative is described and discussed in manner that facilitates a better understanding of the statistics reported in later sections. Those engaged in data collection efforts on procurement policy may find the observations in this section of interest. Section 3 summarises the evidence in the GTA database on the resort to government procurement discrimination and liberalisation since November 2008. Implications for policy deliberation, data collection efforts, and research are drawn in section 4.

2. Data collection on public procurement measures by the Global Trade Alert.6

When the extent of what was to become known as the global financial crisis became clearer in late 2008 and early 2009 concerns grew that governments might resort to beggar-thy-neighbour activities, just they had after the onset of the Great Depression in the 1930s. G20 Leaders, at their first crisis-era summit in November 2008 in Washington DC, vowed they had learnt the lessons of history and declared they would eschew protectionism.⁷ Several international organisations were tasked by G-20 Leaders with monitoring trade- and investment-related policy decisions and periodic reports were published. For our purposes, it is worth noting that none of these international monitoring reports gives public procurement measures much prominence.⁸

More generally, one concern that arose immediately was that no organisation was collecting data on the wide range of policy measures that governments could use in the 21st century to discriminate against foreign commercial interests, taken to be not just traders but also investors, foreign workers, and foreign owners of intellectual property rights. Given that protectionism has a bad name and that governments face substantial pressures to protect domestic commercial interests during sharp global downturns, the possibility that governments would "innovate" and deploy less well known tools of discrimination against foreign commercial interests could not be discounted.⁹

Concerns compounded when it became apparent that the WTO secretariat had adopted a particularly narrow, historically-motivated view of its monitoring mandate. That United Nations agencies had made so little progress in nearly 50 years in defining, classifying, and collecting data on non-tariff measures—initiatives that many involved contended were stymied by national governments—reinforced fears that when times are tough the public international organisations would not be able to effectively monitor their own members.

Such concerns led to the creation of the Global Trade Alert, which is based at the University of St. Gallen, Switzerland, and was launched under the aegis of the Centre for Economic Policy Research (CEPR), the Europe-wide network of researchers whose headquarters is in London, United Kingdom. A major objective of the Global Trade Alert is to document and make available information on changes in government policy that are likely to have altered the relative treatment of domestic vis-à-vis foreign

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⁶ If it is not apparent already—after all, the title page of this paper indicates Evenett's links to the Global Trade Alert—it is should be stated that one of the authors of this paper has been heavily involved in the design, execution, dissemination, and financing of this initiative.

⁷ In fact, the relevant summit communiqué was more specific, identifying certain trade policies governments would eschew. Since this communiqué statement was non-binding and given the possibility that governments might have meant something different from this statement than what could be inferred by third parties, there is little to be gained by declaring whether or not eschewing discrimination in public procurement fell within the spirit or the letter of this communiqué's remarks on protectionism.

⁸ Having said this, the latest report by the WTO Director-General on developments in the world trading systems refers specifically to six government procurement-related policy changes undertaken by G-20 governments from mid-October 2015 to mid-May 2016. See WTO (2016).

⁹ Indeed the experience of the 1980s—when a sharp global economic downturn was followed by substantial resort to voluntary export restraints rather than the import quotas and tariffs of the 1930s—was disquieting.

commercial interests since 1 November 2008, the month that the G20 Leaders first met in crisis mode.

That information has been made available on a searchable public website ¹⁰, which itself adds to the transparency of the world trading system. Such information has been used to evaluate government—in particular G20 government—policy stance. Increasingly, the data collected in this initiative is being used in analyses of trade policy development and international commercial flows. ¹¹ Given the focus of this paper on public procurement matters it is important to state that the range of policies reported in the GTA database is wider.

To better understand the GTA database it helps to differentiate between four matters: policy scope, unit of analysis, data collection, and classification of reported measures. Each is addressed in turn below.

Policy scope

An important point of differentiation between the GTA and the official reports on protectionism is that—at least as far as their "headline" numbers are concerned—the latter confine themselves to a specific set of policy instruments. This has, as implied above, the disadvantage that governments may deliberately choose policy instruments that fall outside the scope of official monitoring. To avoid this problem, the GTA has always focused on likely changes in the *relative treatment* and not on a specific set of policy instruments.¹²

Specifically, the GTA will include information on any policy change—no matter the instrument used—that alters the *relative treatment* of domestic firms vis-à-vis foreign rivals. The changes could in principle favour as well as harm foreign commercial interests—hence the GTA is not only looking for examples of "bad news" (that is, looking for harmful measures.) Moreover, the GTA considers policy changes at all levels of government, although the focus in reality has tended to be more on central and on first sub-national tiers of government.

Given that the GTA's monitoring relates to policy announcements made since 1 November 2008, the information in the GTA database can best be thought of as capturing the unanticipated changes in policy stance since 1 November 2008. Policy changes that were announced before 1 November 2008 but were implemented afterwards are not included in the GTA database because an informed private sector party could have anticipated the policy change.

In the language of economists, the GTA tries to capture the "flow" of policy change rather than the "stock" of policies in force on 31 October 2008. This is important for interpretational reasons—it may be that two governments implemented identical public procurement measures, but one did so after 1 November 2008 and one just before1 November 2008. Only the former measure would be recorded in the GTA database,

¹⁰ www.globaltradealert.org

¹¹ As of this writing, the term "Global Trade Alert" is mentioned in 1,010 distinct entries in the Google Scholar database.

¹² In a recent evaluation of different methods of tracking crisis-era protectionism, the Swedish National Board of Trade endorsed the relative treatment—or discrimination-based—approach to identifying relevant policy variables (Sweden 2016).

yet given the extraneous information mentioned directly above, in the policy context in question it might be unwise to condemn the former and praise the latter.

Despite the relative treatment standard, with the goal of monitoring as best as possible policy intervention motivated by liberalisation or strategic advantage, early on the GTA team decided not to report the

- negotiation or formal implementation of regional trade agreements¹³,
- implementation measures following the timetable established in a WTO accession,
- implementation of technical barriers to trade and sanitary and phytosanitary standards¹⁴,
- foreign policy-induced sanctions¹⁵,
- measures associated with free trade zones,
- measures involving international commerce below de minimus levels.

Some have contended that, as a result of its broader coverage of policy instruments, it is no wonder that the GTA finds more harmful measures than in official reports. Since the policy instruments covered by the latter are also covered by the GTA, it is possible to undertake apples-for-apples comparisons between different data sources. The last such comparison was undertaken in November 2015 and published in the 18th GTA report (Evenett and Fritz 2015b, chapter 12.) Depending on the metric used the GTA finds between 57% and 250% more instances of protectionism than the WTO secretariat over the same time frame.

Although in principle the GTA includes information on any government policy affecting the relative treatment of domestic firms, policy instruments are grouped together into over 20 categories in the database (which facilitates sorting the database, allows for targeted searches of the database, and computation of specific summary statistics.) Given the focus of this paper, it is worth noting that public procurement measures are separated into three categories in the GTA database: measures that require a certain level of local sourcing or hiring, measures conferring price preferences or other preferences on domestic bidders, and other (not otherwise specified, n.e.s.) public procurement measures.

Unit of analysis: an announcement of government intervention

Governments often include information on multiple policy interventions in a given policy announcement, such as a state budget speech before a legislature. This poses a problem for those monitoring changes in policy stance. If one chopped up each such announcement and made the unit of account in the database a single government policy intervention, then the database would be swamped by a small number of announcements of multiple interventions.

Alternatively, if the unit of analysis is an announcement then in some circumstances it will make sense to distinguish between the announcement itself and the different

¹³ Suspension of regional trade agreement provisions or attempts to manage trade between members of a regional trade agreement are included if it can be argued that the private sector was genuinely surprised by the announcement.

¹⁴ Cases where it can be demonstrated on the basis of the available public record that a government has misused these measures to favour domestic firms are included in the GTA database.

¹⁵ Counter-sanctions are included on the grounds that the sanctioned country chose to hit back with a commercial policy measure.

policy instruments associated with the announcement. This alternative approach was taken by the GTA team—a point worth bearing in mind as some public procurement measures have been announced at the same time as other government measures.

Given the products and sectors of the economy implicated by each government intervention may differ, then when using the GTA database it is important to remember that counts of the total number of announcements need not correspond to total number of government policy interventions, total number of products implicated, and total number of times a sector has been affected etc.¹⁶

It is for this reason that some users have not been keen on statistics based on the total number of announced measures—and why the GTA team reports different summary statistics extracted from their database and why ultimately the GTA team began computing the share of national exports likely to be facing foreign policy instruments of different types. Obviously the summary statistic used should reflect the research or policy question at hand. The view taken by the GTA team has to been to generate the richest dataset possible that enables analysts to extract the underlying data or summary statistic that best suits their current purpose.

Data collection

An important operational principle for the GTA team is to support, as far as is possible, each report on a government announcement with information from official sources, taken to include sources published by the government in question (which may be online) or information published by public international organisations. Other sources of information may be taken into account but as many facts as possible are to be taken from official sources.

For each potential entry in the GTA database, information is collected on:

- The identity of the government body making the announcement.
- The date of the announcement and any dates when announced measures come into effect or lapse.
- The policy instrument referred to in the announcement.
- The stated rationale for the policy change.

From this information, the following are obtained:

- Whether the measures in the announcement have an inception date (date when it was first implemented).
- Whether each measure's duration is finite.
- Whether each measure is still in force.
- When the measure involves trade in goods, which four-digit product categories in the UN COMTRADE database is implicated.
- Which sectors in the UN two digit CPC classification is implicated by the measure.
- With data on the relevant commercial flows (UN COMTRADE for trade in goods, for example) what trading partners are likely to be affected by the implementation of the measure.

All of this information is written up in a pre-specified format and submitted for evaluation. Each submission is reviewed twice by senior members of the GTA team.

¹⁶ The relevance of this observation will become apparent in the next section of the paper.

A submitted measure may be rejected outright, revisions may be asked for, or accepted. Only accepted measures are then published on the GTA website.

The GTA team regularly tracks dozens of government websites across the world—the goal to have the best possible worldwide coverage. In addition, the reports of leading public international organisations are monitored as well. Certain international law firms and national and international business organisations publish information on public policies of interest to them and these are consulted for promising leads. Lastly, key phrase searches are conducted on Twitter every week and libraries of commercial policy-related terms are used to identify other leads. Whenever a lead is investigated the primary goal is to find an official source that relates to the matter in question and then an independent assessment is made of any related policy announcement. In this way, private sector sources are employed without unduly influencing the research and evaluation process used by the GTA team.

Some measures—such as the implementation of an antidumping investigation—pass through several stages and the reported GTA measure is updated after every stage. Periodic checks of earlier reported measures are undertaken to ensure information is as up-to-date as possible.

These data collection methods have yielded information on literally thousands of government policy interventions since November 2008 and the GTA database has, at this writing, nearly 10,000 entries. Still, there is no guarantee that every relevant measure has been documented. Moreover, the extensive use of the internet to search for government announcements begs questions about coverage. Could some governments be less transparent than others, especially when they are undertaking controversial policies such as protectionism? Do the public sector governance norms in some countries give more weight to transparency than others?

Could countries whose official languages are less well known be under-reported? Do some countries make a small number of government announcements involving multiple policy interventions or do others make an announcement for almost every state intervention?

These are fair questions to ask and should certainly be borne in mind when interpreting summary statistics from the GTA database and for conducting empirical analysis for generally.¹⁷

Another important point to bear in mind is that it may take time to successfully complete a report on government policy intervention. Moreover, governments may take time to report or acknowledge previous state intervention. An important feature of the GTA's methods is to keep looking for announcements of government intervention made on or after 1 November 2008 even though such announcements may have taken place up to eight years ago. In contrast, the monitoring by international organisations focuses only on the most recent six-month interval and does not update its earlier published totals in light of evidence found at a later date. As the most recent report of the Global Trade Alert has shown, the protectionist record of the G20 countries during the crisis era is much worse once updating is undertaken (Evenett and Fritz 2016).

Another key implication is that very recent totals of instances of government protectionism and liberalisation tend to be sharply revised up over time---therefore,

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¹⁷ If an analyst suspects that the GTA's coverage of policy intervention varies across countries, then one might consider weighting observations by the total number of interventions (of all types) in the GTA database.

falling totals of recorded protectionism in the most recent quarters or years should not be read as indicating necessarily less resort to beggar-thy-neighbour activity. Anyone seeking to report on government procurement policy changes in "real time" ought to bear this observation in mind.

Classification of reported measures

As the relative treatment standard is used to determine whether an announcement should be included in the GTA database, given that treatment of foreign rivals can worsen or improve, it makes sense to classify government announcements depending on their likely effect on foreign commercial interests.

For the sake of the following argument, assume that a government announcement refers to a single state intervention. If the implementation of that measure would benefit foreign commercial interests then the measure is classified green (as in a traffic light system.) If a measure is implemented and almost certainly harms foreign rivals then it is classified red. If a measure is implemented and likely harms foreign commercial interests then it is classified amber. The introduction of the amber classification allows for some doubt about a measure's effects or about the sources supporting a reported measure.

Perhaps confusingly the GTA team also reports measures that have yet to be implemented and are likely to be harmful (or worse) as amber. ¹⁸ Therefore, users of the GTA database should distinguish between amber measures where the state intervention in question has been implemented (in which case there is an inception date in the published report on the measure) and where the intervention has not been implemented. This distinction is easy to make in the Excel spreadsheets that the GTA team sends to users requesting data.

When the GTA reports refer to protectionism they refer to implemented amber and red measures. When the GTA reports refer to liberalising measures this refers to implemented green measures.

When a government announcement involves more than one instance of state intervention then it is possible that some interventions are liberalising and others protectionist. How to colour code these measures? In cases where each intervention has the same effect on the relative treatment of foreign commercial interests, then the overall colour code reflects that. However, in cases where the relative treatment is mixed across interventions, the measure is classified amber.¹⁹

One implication is that users of the database should pay particular attention when using information on measures involving multiple state interventions that are coded amber and implemented. It may be that the state intervention that a researcher is particularly interested has a different impact on the relative treatment of foreign commercial interests than the overall colour coding of the measure suggests.

The purpose of this section has been to describe the construction and implementation of the GTA database. That database now includes 9,741 published reports on

¹⁸ These measures are included in the GTA database as some users want an "early warning" system, that is, information on policy intervention has been announced yet whose implementation is still to come. ¹⁹ The GTA will soon have a new website where each policy intervention is colour coded.

government announcements. As of this writing, 150 more measures are in the review process. During the past three years, approximately 2,000 new reports have been published each year. In contrast, the WTO's Trade Monitoring Database contains a total of 3,831 measures of government interventions taken during the global economic crisis.²⁰

Given the focus in this paper on public procurement-related measures, it is worth noting that at the time of this writing the GTA database contains 548 reports on government announcements that involve at least one measure relating to state purchasing laws or regulations. In contrast, the WTO's Trade Monitoring Database includes 51 entries which refer to "procurement." Twelve of those 51 entries refer to public procurement-related initiatives undertaken by the United States.

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²⁰ This WTO database can be accessed at http://tmdb.wto.org/searchmeasures.aspx?lang=en-US

3. Public procurement policy change during the crisis era: Evidence from the Global Trade Alert database.

The GTA database includes reports on 507 public procurement-related measures that were implemented from November 2008, though not all of these measures are currently in force.

Figure 1: Evolution of all reported, implemented public procurement-related measures, by year of implementation.

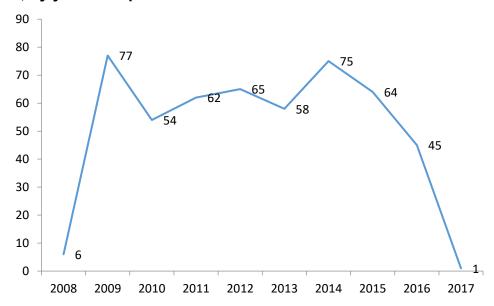


Figure 2: Evolution of all reported, implemented public procurement-related measures over time by GTA classification.

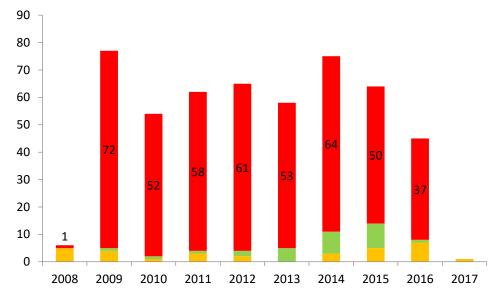


Figure 1 shows the imposition of public procurement-related measures over time and suggests a constant, though somewhat declining trend, with a peak in 2009. This said the GTA database reports these measures with a lag, so the fairly high numbers

reported in 2014 to 2016 are a worrying sign, especially given that the "red" discriminatory measures constitute the overwhelming majority of all reported measures in any given year since 2009 (see Figure 2).

The United States is responsible for 351 of the 507 measures (69.2% share of the total) that were imposed since November 2008. The distribution of the remaining 30.8% of all measures, shown in Figure 3, reveals that Brazil, Russia, Indonesia, India and Kazakhstan have also used these measures extensively. Eight countries' governments have implemented five or more public procurement measures since the global economic crisis. All but one of these eight countries are G-20 members.

Figure 3: Public-procurement related measures imposed in countries other than the United States.

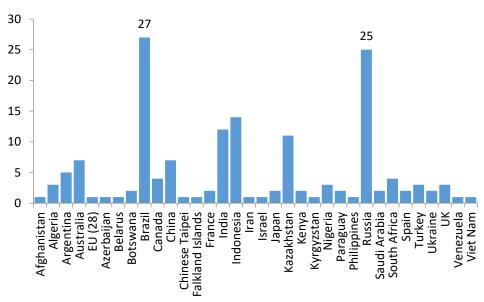
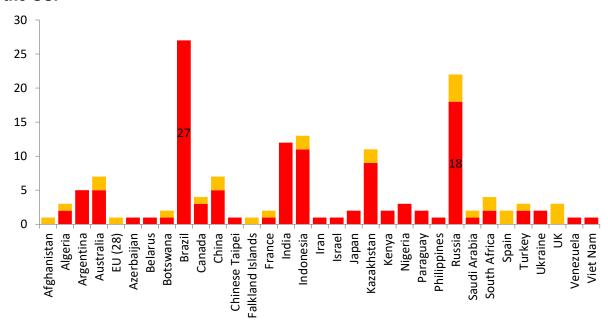


Figure 4: Discriminatory procurement measures imposed countries other than the US.



The distribution of the discriminatory (i.e. red and amber colour coded) procurement measures also reveals the dominance of the US - of all discriminatory procurement measures (n = 479), most (n = 328, of which "red" = 325) have been imposed in the US. The distribution of the remaining 151 measures imposed in the non-US countries, shown in Figure 4, mirrors that shown in Figure 3.

By measure type, public procurement localisation measures account for the majority of discriminatory procurement measures imposed both in the US (277 out of 328, of which "red" = 276) and in non-US countries (84 out of 151, of which "red" = 66). The distribution of the latter is reported in Table 1.

Table 1: Discriminatory procurement measures imposed by countries other than the USA, by type of measure.

Type of measure	Amber	Share (%)	Red	Share (%)
Bail out / state aid measure, Export incentive, Public procurement localization			1	0.8
Bail out / state aid measure, Public procurement localization	1	3.6	2	1.6
Bail out / state aid measure, Public procurement localization, State trading enterprise			1	0.8
Bail out / state aid measure, Public procurement preference, Trade defence measure (AD, CVD, safeguard)			1	0.8
Export incentive, Investment measure, Localization requirement, Migration measure, Public procurement localization		3.6		0.0
Import tariff, Investment measure, Non tariff barrier (not otherwise specified), Public procurement localization			1	0.8
Import tariff, Public procurement localization			1	0.8
Investment measure, Localization requirement, Public procurement localization			1	0.8
Investment measure, Public procurement, nes				0.0
Non tariff barrier (not otherwise specified), Other service sector measure, Public procurement localization			1	0.8
Non tariff barrier (not otherwise specified), Public procurement localization			1	0.8
Public procurement localization	18	64.3	66	53.7
Public procurement localization, Public procurement preference			2	1.6
Public procurement localization, State-controlled company			2	1.6
Public procurement localization, Sub-national government measure	1	3.6	1	0.8
Public procurement preference	4	14.3	35	28.5
Public procurement preference, State-controlled company			5	4.1
Public procurement, nes	3	10.7	2	1.6
Total	28	100.0	123	100.0

In terms of the implementation status, more than half (51.8%) of US discriminatory procurement measures (n = 328) that had been imposed are <u>not</u> in force. In contrast, 126/151 of non-US discriminatory procurement measures are currently in force. These distributions, by GTA classification, are shown in Figures 5 and 6, respectively. In both cases, there is plenty of crisis-era procurement discrimination to be unwound.

Figure 5: Distribution of US discriminatory procurement measures by current implementation status.

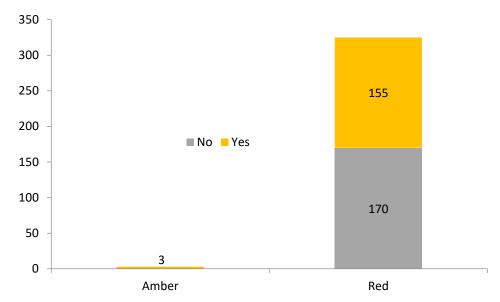
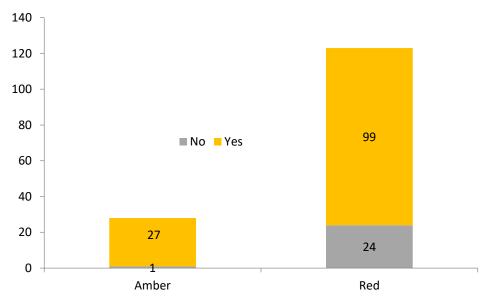
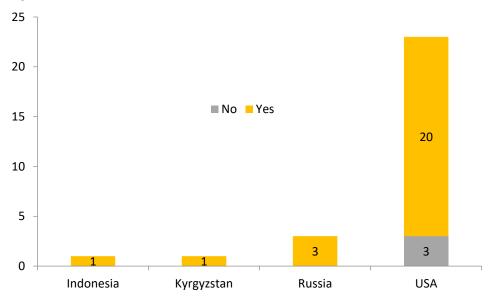


Figure 6: Distribution of non-US discriminatory procurement measures, by current implementation status.



Looking next at liberalising (or "green" colour-coded) measures (n = 28), the majority of these (82%) have also been implemented in the US and the overwhelming majority (89.3%) are still in force.

Figure 7: Distribution of liberalising procurement measures, by country and current implementation status.



The majority (64.3%) of "green" procurement measures are also public procurement localisation measures and most took effect in 2014-2015 (see Table 2).

Table 2: Distribution of "green" procurement measures by type of measure and evolution over time

Type of measure	2009	2010	2011	2012	2013	2014	2015	2016
Investment measure, Public procurement, nes	1					1		
NTB (nes), Public procurement localization, TBT							1	
Public procurement localization		1		1	4	7	4	1
Public procurement localization, Sub-national government measure				1			3	
Public procurement, nes			1		1		1	
Total	1	1	1	2	5	8	9	1

The UN CPC sectors affected most often by procurement measures in the GTA database are 41-42 (basic metals and fabricated metal products). These sectors have been affected by 123 implemented public procurement-related measures.

Of the measures affecting these sectors:

- Nearly all (122 measures) have been imposed by the US
- Nearly all (120 measures) are public procurement localisation measures
- All (123 measures) are classified as discriminatory by the GTA
- Less than half (56 measures) are currently in force
- Nearly a quarter (30 measures) have been imposed in 2016; 17 were imposed in 2009

- Nearly three-quarters (88 measures) were in stay for two years
- More than 90% (111 measures) affected Brazil, Canada, China, France, Germany, India, Italy, Japan, Mexico, South Korea, Russia, Sweden, and the United Kingdom.

The countries most frequently affected (n = 156) by procurement measures in the GTA database are Brazil, Canada, China, France, Germany, India, Italy, Japan, Mexico, South Korea, Russia, Sweden, and the United Kingdom.

Of all measures affecting these countries,

- All (156 measures) have been imposed by the US.
- All (156 measures) are public procurement localisation measures.
- All (156 measures) are classified as discriminatory by the GTA.
- Less than half (66 measures) are currently in force.
- Nearly a fifth (30 measures) have been imposed in 2016; whereas 23 measures were imposed in 2009.
- More than 80% (125 measures) were in force for two years.

Counts of measures give a sense of the frequency of resort to discrimination in public procurement, but not to the scale of the trade affected. To precisely identify the latter one needs information on state purchases from foreign suppliers at the detailed product level. Unfortunately, such data is not available. However, data on a nation's total purchases from all foreign sources at the product level is available and, carefully interpreted, this might be useful.

Some products are only bought by state bodies, especially in sectors where there are large government monopolies. For example, if the sole supplier of railway services in a country is the national rail company, then it is quite likely—if not almost certain—that the state is responsible for the total national imports of locomotives.

Moreover, if the state expands markedly the number of products covered by a restrictive procurement regulation then at a time when global trade is growing very slowly—if not stagnant as the global trade volume numbers since January 2015 suggest—then the expansion in the total amount of imports in product categories affected by procurement discrimination is more likely to be due to the policy change than to changes in private sector sourcing patterns.

It is for these reasons that we took advantage of calculations made during the preparation of the 20th Global Trade Alert report (Evenett and Fritz 2016) that reveal the exposure of each G20 country's exports to foreign public procurement discrimination. For that report, at the four-digit product level every bilateral trade relation where a discriminatory public procurement measure was in effect in a given year was identified. The trade associated with each of these bilateral product-level trade flows was identified and the date a measure came into effect used to weight each trade flow (such that, if a measure was only in effect in December 2012 then only a twelfth of the annual trade flow data for 2012 was used in the subsequent calculations.)

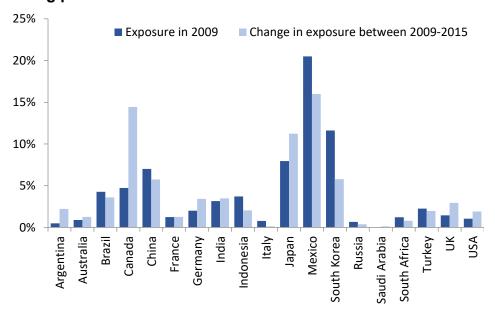
For each year between 2009 and 2015, taking into account when discriminatory public procurement measures came into effect and (where relevant) lapsed and that only some trading partners implement such discrimination, in the preparation for that report the percentage of each G20 nation's exports in products where procurement discrimination was calculated. These calculations were based only on discriminatory public procurement policy measures implemented since November 2008. Therefore, any legacy of pre-crisis procurement discrimination would add further to these numbers.

These numbers are reported in Figure 8, which shows the percentage share of G20 exports potentially at risk through discriminatory public procurement policies in 2009 (dark blue bars) and the change in these exposure shares between 2009 and 2015 (light blue bars).

Figure 8 suggests that Mexico, South Korea, Japan, and China had the highest shares of their total exports potentially affected by discriminatory procurement policies in 2009. In the case of Mexico and South Korea, the exposure shares were above 10%. In contrast, Saudi Arabia had almost none of its exports potentially at risk through discriminatory public procurement policies, which may not be terribly surprising given its export mix. Argentina, Russia, Italy and Australia also reported low exposure shares (less than 1%) in 2009.

Interestingly, Mexico, Canada, Japan, South Korea and China reported the largest increases in their respective exposure shares over from 2009 to 2015. Significantly, Argentina, Australia, UK and US, all of which had low exposure shares in 2009, had a lot more of their exports potentially affected by discriminatory procurement policies in 2015.

Figure 8: G20 exports (% share, 2009 and change over 2009-2015) potentially at risk through discriminatory public procurement policies implemented by foreign trading partners.



4. Concluding remarks.

This paper has shed light on the resort to public procurement policy change since the onset of the global economic crisis. Particular use was made of the Global Trade Alert database, which contains over 500 entries relating to changes in state purchasing. Having described how this database was constructed and indicated where analysts and users need to use the database with particular care, a summary of the principal procurement-related findings was presented.

Some may have been struck by the frequency with which the United States has resorted to public procurement discrimination. While it is certainly the case that the United States expanded such discrimination at the beginning of the crisis, it should be recalled that that country has by international standards a very transparent system of government and that it tends to report each publicly offering of state largesse. These two factors probably account for the large number of American entries in the GTA database.

Still, the GTA database contains plenty of information on procurement discrimination by other nations. Compared to the WTO's database on crisis-era policy response, the GTA database contains information on three times as many instances of non-US procurement discrimination. Eight nations other than the United States have implemented five or more discriminatory public procurement measures since the crisis began. "Buy America" cannot be blamed for all of the procurement discrimination of recent years. Addressing such discrimination is a global challenge, especially when one realises that seven of the eight of these nations are G20 members.

That conclusion is reinforced by the growing shares of national exports in product lines and to trading partners where public procurement discrimination has been imposed. For sure, such data has requires careful interpretation, not least because export exposure is not the same as export losses. Still, the fact that the percentages of exports exposed to such discrimination is rising quickly suggests that either the number of larger nations using such discriminatory tools is growing or that the products implicated by such expansion is rising too. Either way, export interests are potentially compromised and this may generate a vocal constituency in favour of further trade disciplines on state purchasing.

There is a long way to go, however, between identifying a potentially interest and the successful negotiation and implementation of trade disciplines. With better—but certainly not perfect—data available, analysis of the impact on trade and investment flows can begin. Should detailed price data ever become available, then the impact of crisis-era procurement discrimination on the value-for-money that states are getting from public purchases could be estimated as well. All in all, in the years ahead the prospects are brighter for more evidence-driven deliberation on public procurement matters and their implications for the world trading system.

References

Ip, Greg (2016). "Central Banks Are Losing Their Edge." Wall Street Journal. 21 September.

Davies, Gavyn (2016). "The Global Pivot Towards Fiscal Policy." Financial Times. 25 September.

Evenett, Simon, and Bernard Hoekman (2005). "Government procurement: market access, transparency, and multilateral trade rules," *European Journal of Political Economy*, Elsevier, vol. 21(1), pages 163-183, March.

Evenett, Simon, and Johannes Fritz (2015a). Throwing Sand In the Wheels: How Foreign Trade Distortions Slowed LDC Export-Led Growth. CEPR Press.

Evenett, Simon, and Johannes Fritz (2015b). *The Tide Turns? Trade, Protectionism, and Slowing Global Growth.* CEPR Press.

Evenett, Simon, and Johannes Fritz (2016). Global Trade Plateaus. CEPR Press.

Sweden (2016). National Board of Trade. *Protectionism in the 21st Century. Stockholm.*

WTO (2016). Report to the TPRB From The Director-General on Trade-related Developments (Mid-October 2015 to mid-May 2016). Geneva.