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# Trade Policy Flexibilities and Turkey

Tariffs, Antidumping, Safeguards, and WTO Dispute Settlement

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### **Abstract**

Trade policy commitments to lower import tariffs and to maintain tariffs at low levels entail short and long-run political-economic costs and benefits. Empirical work examining the relationship between such commitments and the exercise of trade policy flexibilities is still relatively nascent, especially for emerging economies. This paper provides a rich, empirically-based assessment of ways that Turkey exercised trade policy flexibilities during the global economic crisis of 2008–11. First, and despite multilateral and customs union commitments that might limit changes to applied tariffs, Turkey made changes to both its applied Most Favored Nation and preferential tariffs that cumulatively affect nearly 9 percent of manufacturing imports and 10 percent

of import product lines. Second, Turkey's cumulative application of temporary trade barrier (TTB) policies—antidumping, safeguards and countervailing duties—are estimated to impact by 2011 an additional 4 percent of imports and 6 percent of product lines. Other surprising results on Turkey's use of flexibilities include: extending the duration of previously imposed antidumping and safeguards beyond expected removal dates, removing one TTB policy over a set of products and immediately reapplying a different TTB policy, covering lengthy upstream and downstream segments of important industries, and deepening discriminatory preference margins already inherent in existing preferential trade agreements.

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# **Trade Policy Flexibilities and Turkey:**

### Tariffs, Antidumping, Safeguards, and WTO Dispute Settlement

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#### 1 Introduction

What value can emerging and developing economies extract from international trade agreements? Trade policy commitments to lower import tariffs and to *maintain* tariffs at low levels entail short and long run political-economic costs and benefits. Benefits include improved resource allocation and productivity gains throughout the economy. Commitments may also reduce the uncertainty facing foreign exporters thus allowing them to make relationship-specific investments to create domestic value in the importing economy. On the other hand, costly constraints may include restraint on unilaterally optimal behavior (e.g., imposition of Nash tariffs), the ability to extract rents from politically organized lobby groups, or reduced policy sovereignty in the face of other unexpected shocks.

In the modern trading system, a more complete understanding of the cost-benefit tradeoffs associated with international agreements also requires coming to terms with the *flexibilities* that many countries utilize to get around their commitments. Flexibilities in this context refer to the many formal and informal means by which countries knowingly raise trade barriers above their commitments, even if such policy changes are intended to be implemented on a temporary basis. Many countries, especially a number of major emerging economies, are exercising flexibility through temporary trade barrier (TTB) policies such as antidumping, safeguards, and countervailing duties on a large scale and with high frequency (Bown, 2011, 2013). Furthermore, the evidence presented below for the case of Turkey indicates that there are a number of *different* policies being used to access "flexibility"; thus a singular focus on any one policy may miss important complexities to the story.

The core lines of economic theory point to trade agreement commitments creating value by either addressing international externalities (Bagwell and Staiger, 1990, 1999) or foreclosing interest group access to governments (Maggi and Rodriguez-Clare, 1998, 2007). Nevertheless, economic research examining the relationship between commitments and flexibilities is still relatively nascent. While there have been a number of theoretical advances building from these core models that highlight tradeoffs and interaction between commitment and flexibility, there is a much more limited empirical understanding of the relationships. The lack of *empirical* progress, especially with regard to understanding emerging economies, is partly driven by the reality that how trade policy flexibilities are used in practice requires informed analysis of highly detailed data that until recently was often not available.

Our contribution is to provide a rich, empirically-based description of the various ways that Turkey exercised trade policy flexibilities during the global economic crisis of 2008-11 to confront the

commitments embodied in its trade agreements. We identify and present a number of trends, patterns, and puzzles arising from these data. We raise a number of questions for political-economic theory and additional research to address through more rigorous modeling and econometric analysis. Finally, our results highlight some potentially pressing, short-run policy concerns that arise in light of the observed patterns of the data.

Examination of Turkey during the period 2008-11 is a useful starting point for a number of reasons. First, the global economic crisis imposed on Turkey a relatively exogenous economic shock — the worldwide recession was brought on by the U.S.-initiated financial crisis in 2008. Second, major implications for Turkey's trade continued well beyond the initial shock due to its legacy of dependence on the EU market: e.g., in each of the 10 years prior to the onset of the crisis, Turkey sent nearly 60 percent of its goods exports to the EU, by 2010 this had fallen to 48 percent. Thus, ongoing weak EU import demand associated with the lengthy European debt crisis acts as a persistent negative shock for some of Turkey's exporters. Third, Turkey is not only a relatively large and important emerging market to examine, but the complexity and richness of its trade policy provide a particularly interesting case study. Prior to the onset of the crisis, Turkey began the period already with substantial variation — some explicit and some more subtle — in its tariff commitments. Turkey's tariff commitments have been taken on through its preferential trading relationships — most important of which is a customs union with the European Union — and its membership in the World Trade Organization.

Turkey made vigorous and important changes to its trade policy during 2008-11 that impact an economically consequential amount of imports. First, and *despite* preferential and multilateral commitments that might limit changes to its applied tariffs, Turkey's policymakers have exercised flexibilities during 2008-11 by making changes to *both* its applied MFN and preferential trade agreement (PTA) tariffs. For example, increases to applied import tariffs in the textiles and steel industry alone during this period could affect nearly 9 percent of Turkey's manufacturing imports. Second, during this same period, Turkey continued intensive use of the relatively formalized TTB policies of antidumping, safeguards and countervailing duties – policies that provide another major class of flexibilities in the multilateral trading system. Applying data from the World Bank's *Temporary Trade Barriers Database* (Bown, 2012) reveals that Turkey's use of antidumping and safeguards have affected an increasing share of its trade over the first decade of the 2000s; i.e., by 2011 an estimated 4.4 percent of the value of Turkey's manufacturing imports and 6.4 percent of import product lines were impacted by these trade barriers. Thus, while Turkey's policymakers largely withstood protectionist pressure to make

comprehensive change during 2008-11 to its relatively liberal import regime, many *new* trade barriers were implemented under the various flexibilities at their disposal.

Without a better understanding of potential benefits to how Turkey has used these trade policy flexibilities in light of its commitments, the focus turns exclusively to a standard set of policy concerns that arise through an examination of the details of the newly applied import protection. A first concern is simply the scale and frequency of trade policy flexibility being exercised across import products. The scale of new import restrictions has the potential to severely distort trade flows and resource allocation and hamper productivity and industrial competitiveness. The frequency of trade policy changes through exercised flexibilities also generates substantial additional uncertainty regarding market access which may impede any benefits arising from relationship-specific investment by trading partners' exporters (Handley and Limão, 2012). Second, these same concerns are exacerbated by frequent extensions to the duration of previously imposed antidumping and safeguards well beyond the point at which they were expected to be removed under WTO rules, as well as conversion of product coverage from under one TTB policy to another. Third, Turkey has used its flexibilities extensively to cover upstream and downstream segments of important industries like textiles and apparel - i.e., from industrial petrochemical inputs, to man-made fibers and yarns, to textiles and made-up products. This pattern also complicates incentives for the policy removal process; as such policymakers may require creative and unprecedented solutions regarding coordination and through which the WTO Agreements and negotiations offer no guidance. Finally, Turkey's trade policy continues to reflect both concern with increased competition from export-oriented economies such as China, and the applied new trade barriers reflect the possibility of additional implicit discrimination toward countries that are already receiving sizeable tariff preferences through existing PTAs that could exacerbate economic problems such as trade diversion.

The empirical contributions of this paper are relevant for a growing theoretical and empirical literature on the role of economic incentives in trade policy formation under international agreements, including the interplay between commitments and flexibilities. Many of these advances build from the core economic theories of trade agreements described above. For example, Bagwell and Staiger (2005) examine self-enforcing trade agreements among governments that acquire private information over

<sup>&</sup>lt;sup>1</sup> Francois and Martin (2004) provide an earlier treatment of the role of tariff commitments in reducing variability and uncertainty.

time.<sup>2</sup> Their model can be used to shed light on basic empirical regularities associated with the GATT/WTO system; i.e., negotiations take place over tariff bindings and applied flexibilities arise through use of TTB-like policies. Beshkar, Bond and Rho (2012) develop a theoretical model and empirically examine the tradeoff between agreements that constrain terms-of-trade motives for import protection and flexibility. They find the level of tariff bindings and the size of tariff binding overhang are both inversely related to measures of terms-of-trade motive for protection. The variety of trade policy instruments at work in Turkey also lend it as an important potential case study in the related literature on trade policy substitution. Limão and Tovar (2011), for example, develop a theoretical model and examine Turkey's tariff commitments as of the mid-1990s and find that such commitments increase the likelihood and restrictiveness of subsequent Turkish non-tariff barriers.

The rest of this paper proceeds as follows. Section 2 describes the macroeconomic and trade policy context facing Turkey at the eve of the Great Recession as well as the macroeconomic shocks that it experienced during 2008-11. Section 3 presents the heart of our empirical characterization of the various trade policy flexibilities that Turkey has exercised during 2008-11. Section 4 examines the potential channels through which trading partner relationships might influence Turkey's exercise of trade policy flexibilities. Section 5 concludes by discussing policy implications and questions that some of these puzzles raise for future research.

## 2 Turkey's Trade Policy Regime Prior to the Crisis, Changes to Macroeconomic Conditions, and Pressure for New Import Restrictions

#### 2.1 Turkey's import tariffs and commitments before the crisis

Turkey's trade policy is at the same time relatively simple and extraordinarily complex. By the eve of the Great Recession, Turkey had developed a quite open import regime, according to a number of standard

<sup>&</sup>lt;sup>2</sup> Bagwell and Staiger (2005) implement a repeated game approach to model self-enforcing trade agreements in the spirit of the influential model introduced by Bagwell and Staiger (1990). Bown and Crowley (2013a) provide evidence that United States use of TTBs such as antidumping and safeguards over 1997-2006 is consistent with the cooperative tariff increases associated with the shocks arising under the Bagwell and Staiger (1990) theory. The evidence on the relevance of the terms-of-trade motive for TTB use presented in Bown and Crowley (2013a) is consistent with other recent research documenting the importance of similar economic incentives for trade policy formation, including the case of optimal (Nash) tariff *levels* (Broda, Limão and Weinstein, 2008) and tariff *reductions* associated with WTO accession negotiation (Bagwell and Staiger, 2011).

indicators documented in Table 1.3 As of 2007, Turkey's trade-weighted applied tariff on manufacturing products was only 1.0 percent, and its simple average applied MFN tariff was only 4.8 percent. More comprehensive and economically meaningful indicators such as the trade tariff restrictiveness index (TTRI) or the overall trade restrictiveness index (OTRI) were also quite low for Turkey during this period.<sup>4</sup>

Nevertheless, there are two key indicators for Turkey from Table 1 that point to a slightly more nuanced story. The first is that Turkey's simple average tariff binding - or the rate beyond which Turkey is legally committed not to raise its MFN tariff at the WTO - for its manufacturing products was 16.9 percent; this was much higher than its MFN applied rate of 4.8 percent. The implication is that, for the products over which Turkey had made WTO binding commitments, there remained substantial "overhang" or "water" in the tariff bindings – i.e., Turkey could legally raise its average applied MFN tariff rate by more than 12 percentage points. The second is that Turkey had legally bound at the WTO only a very small share - i.e., 42.8 percent - of even its manufacturing products' tariff lines. The implication is that Turkey could legally raise its applied MFN tariffs by any amount without WTO legal obligation for more than half of its import product lines.

On the other hand, what the relatively poor indicators for Turkey's tariff binding overhang and low tariff binding product coverage do not capture is that Turkey has made substantial trade policy commitments outside of the WTO system through its customs union with the European Union.<sup>5</sup> First, two-way trade between Turkey and the European Union is effectively duty free. Second, Turkey has sequentially adopted many of the other free trade agreements that the EU has negotiated with third countries, thus also extending preferential tariff access to these trading partners. Combined, nearly 60 percent of Turkey's overall exports are sent to countries with which it either has an FTA or customs union, here referred to jointly as PTAs. This implies that the trade policy indicators that take into account Turkey's tariff preferences and that trade weight these tariffs will reveal Turkey as being even more open than the indicators of its MFN policies in isolation, given that so much of its trade is with PTA partners.

<sup>&</sup>lt;sup>3</sup> The World Bank (2010) leads with "Turkey has one of the most liberal trade regimes, based on its 1.5 percent MFN Tariff Trade Restrictiveness Index (TTRI). It ranks as the 5<sup>th</sup> least restrictive tariff regime out of a 125 country sample." Togan (2010) provides an assessment of the WTO's 2007 Trade Policy Review of Turkey.

<sup>&</sup>lt;sup>4</sup> These measures not only take into account elasticities, but the OTRI also considers some non-tariff measures in addition to tariffs. For a methodological presentation of the construction of these measures, see Kee, Nicita and Olarreaga (2009).

<sup>&</sup>lt;sup>5</sup> Turkey has been in accession negotiations with the European Union since 2005.

Furthermore, as the lower half of Table 1 indicates, the European Union has legally bound 100 percent of its tariff lines under the WTO, and the EU's applied tariffs are so close to its bindings that it doesn't frequently change its applied MFN tariffs. The main exception to the EU-Turkey customs union is that it does not cover trade in agricultural goods (except processed agricultural goods) and European Coal and Steel Community (ECSC) products. For all of the covered products, the relative intractability of the EU's MFN applied tariff has the potential to serve as an anchor tying down the applied MFN tariff of its customs union members like Turkey; i.e., even though Turkey has bound less than 50 percent of manufacturing import product lines at the WTO and has substantial tariff binding overhang for the products it has committed to bind.<sup>6</sup> In that sense, it is possible that WTO commitments like tariff binding coverage and elimination of binding overhang could be redundant in that these would be non-binding constraints anyway because the EU customs union served as the *de facto* commitment.

However, as we discover below, even the customs union with the EU did not provide an ironclad commitment for Turkey not to raise its MFN tariffs during the 2008-11 period. And it is important to point out that there is no explicit evidence to indicate that Turkey's trade policy toward PTA non-members changed because of obvious *external* institutional forces outside of direct Turkish government influence - e.g., EU policymakers did not substantially change their own MFN tariffs and thus put pressure on customs union partners to do the same. Furthermore, Vandenbussche and Viegelahn (2011) indicate that even implicit forces – i.e., such as through EU application of new TTBs on third countries – were unlikely to have been more than a small influence as the EU increased its import restrictions very little during the recent global economic crisis.<sup>7</sup>

#### 2.2 Turkey's macroeconomic conditions during 2008-11 and pressures for new import restrictions

Turkey suffered a major economic contraction in 2008-9 that was synchronized with almost all major economies around the world. As the top panel of Figure 1 illustrates, Turkey's real GDP shrank by nearly 6 percent (on an annualized basis) in both 2008:Q4 and 2009:Q1. The unemployment rate rose sharply

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<sup>&</sup>lt;sup>6</sup> For an analysis of a number of the trade-related adjustments associated with Turkey's customs union formation with the EU, see Hoekman and Togan (2005).

<sup>&</sup>lt;sup>7</sup> In an assessment of why the EU's TTB import protection policies were left relatively unaffected by the crisis, Bown and Crowley (forthcoming) point to two central macroeconomic forces – the sharp and persistent real depreciation of the euro after 2009:Q4 and the "switch" in behavior by EU policymakers from applying new import restrictions on trading partners that were contracting (as had been the historical norm) toward only the relatively few with strong economic growth.

and reached nearly 15 percent by the middle of 2009. Nevertheless, Turkey recovered relatively quickly in the aftermath of the Great Recession – achieving consistent growth and reducing unemployment while managing to maintain relatively low inflation through 2011.

The lower panel of Figure 1 shows Turkey's current account position (as a share of GDP) and its trade-weighted real exchange rate, illustrated so that increases reflect an appreciation of the Turkish lira. Since 2002, Turkey suffered a persistent and rising current account deficit, with import growth outpacing the expansion of its exports. The trend was briefly interrupted at the height of the economic crisis in 2009:Q1 as the collapse in trade flows (significantly reducing both Turkey's imports and exports, and thus the nominal current account deficit) outpaced the decline in Turkey's GDP. Turkey's economic recovery that began shortly thereafter has led to resumption in growth of the current account deficit, which had stabilized in 2011 at roughly 10 percent of GDP. The size of the current account deficit signals a significant trade imbalance concern.

Turkey's trade-weighted real exchange rate has undergone brief periods of both appreciations and depreciations since 2006. The lira appreciated considerably until 2008:Q3 and the early stages of the global financial crisis, at which point it depreciated briefly but substantially through 2009:Q1. It then began another sustained period of appreciation through 2010:Q3; at that point it began a period of depreciation that continued through 2011.

There is a substantial research literature examining the relationship between macroeconomic shocks and changes to national trade policy, though most of it is focused on high-income countries. In a recent contribution, Bown and Crowley (2013b) present evidence over the period 1989-2010 that examines the relationship for Turkey and a set of twelve other emerging economies. On average, across these emerging economies, new import protection through flexibilities embodied in its temporary trade barrier policies (discussed in more detail in section 3.2 below) are associated with recent appreciations in the real exchange rate. I.e., for the case of Turkey, this is consistent with a strengthening Turkish lira — that makes imports suddenly more price-competitive with domestic production — subsequently resulting in additional demands for new import restrictions. There is also evidence from emerging economies that new trade barriers are associated with negative shocks to domestic real GDP growth and rising unemployment. The timing of the shocks that Turkey has faced in the Great Recession period, especially

<sup>&</sup>lt;sup>8</sup> Knetter and Prusa (2003) and Bown and Crowley (forthcoming) provide evidence on the macroeconomic determinants of these relatively formal instruments of import protection for high-income economies; the latter paper uses quarterly data for the period 1988-2010 and thus covers the inception of the Great Recession.

with respect to movements in its real exchange rate immediately preceding the crisis, may be an important part of the pressure placed on policymakers to exercise trade policy flexibility and raise trade barriers.

#### 3 Turkey's Trade Policy Flexibilities

While simple on its face, much of the complexity of Turkey's trade policy arises because of the myriad of *flexibilities* – both formal and relatively informal – that its policymakers administer. Application of these flexibilities has led to deviations from Turkey having a truly common external tariff (toward PTA nonmembers) otherwise specified by the customs union with the EU. During 2008-11 in particular, Turkey has even exercised flexibility by changing some of its applied trade policies toward PTA partners.

While there are a number of potential ways to characterize the data so as to examine questions associated with Turkey's use of trade policy flexibilities, we frame our analysis around policy instruments. As an organizing principle, we begin by viewing these flexibilities through the lens of the multilateral rules of the WTO.

We begin by characterizing Turkey's exercised policy flexibilities based on whether they were implemented through *informal* channels, such as through changes to applied tariffs, or through relatively *formal* channels of the particular WTO Agreements on Antidumping, Safeguards, or Subsidies and Countervailing Measures. First, Turkey does have relatively informal provisions that allow it to raise its applied MFN tariff rates above the common EU customs union level provided that certain evidentiary conditions are met. The second important class of more formal flexibilities includes Turkey's increasing use of TTB policies such as antidumping, countervailing duties and safeguards. While this second class of flexibilities can potentially be imposed on a WTO-consistent basis, they are also frequently subject to WTO legal scrutiny through formal multilateral dispute settlement proceedings under the WTO's Dispute Settlement Understanding (DSU).

#### 3.1 Changes to Turkey's applied import tariffs

The terms of Turkey's customs union agreement with the European Union allow it to raise its MFN tariffs in certain instances. First, as described above, certain coal and steel products and non-processed agricultural goods are not covered by the customs union. Second, in exceptional circumstances, Turkey can raise its applied MFN tariffs above its customs union commitments for other products provided it

can prove injury to a domestic industry. The top portion of Table 2 lists a number of notable changes that Turkey made between 2009 and 2011 by exercising these flexibilities to its trade policy. Table 2 also illustrates estimates of the imports (pre-policy change) that were impacted. Two increases in Turkey's applied MFN tariffs that took place stand out as being particularly economically important; combined they are estimated to impact up to an additional 9 percent of Turkey's manufacturing imports. In

The first instance concerns changes that Turkey made to its applied MFN tariff on flat rolled steel products. In 2009, Turkey increased its applied MFN tariff by 8 percentage points (from a range of 5-6 percent to 13-14 percent) and eventually rolled back that tariff change by 4 percentage points (to a final range of 9-10 percent) in 2010. Estimates are that up to \$3.1 billion of imports were covered by the product lines and trading partners that ultimately faced the tariff increase. Furthermore, in each instance the applied tariff toward PTA members was apparently *unchanged*; the result has been to increase the size of tariff preference and implicit discrimination toward PTA members.

This particular MFN applied tariff increase is interesting given that the covered product lines are part of the list of European Coal and Steel Community products excluded from the EU-Turkey customs union. However, a separate and puzzling question is why Turkey chose this *particular* trade policy instrument to exercise flexibility – i.e., to raise the MFN tariff in this instance – as opposed to one of its alternative and more frequently used policy flexibilities described below, such as a global safeguard or a

<sup>&</sup>lt;sup>9</sup> See Degree on Safeguard Measures for Imports No. 2004/7305, Article 63 of Decision No 1/95 of the EC-Turkey Association Council, and Article 60 of the Additional Protocol to the Association Agreement. In addition, the WTO's latest Trade Policy Review indicates that "Law No. 474 on Customs Tariff Schedule allows the Government to increase the applied MFN rates when these are deemed insufficient to provide "adequate" protection to domestic industries. Law No. 474, published in the *Official Gazette* of 25 May 1964 and amended by Law No. 4217, published in the *Official Gazette* of 8 December 1996" (WTO, 2012a, p. 29).

<sup>&</sup>lt;sup>10</sup> Kee, Neagu and Nicita (forthcoming) estimate that Turkey's OTRI in manufacturing products increased only marginally between 2008 and 2009 during the early stages of the global economic crisis, and the major component behind this increase was due to new antidumping. Turkey did, however, also raise trade barriers significantly on certain agricultural products in this early period of the crisis.

<sup>&</sup>lt;sup>11</sup> Table 2 also identifies \$52 million in agricultural product imports over which Turkey increased tariffs during 2009-11, and \$485 million of agricultural products over which Turkey made tariff *reductions*.

<sup>&</sup>lt;sup>12</sup> These estimates are computed at the 6-digit HS level, the level of disaggregation available for the time period under investigation. Given that the tariff increases were carried out at the tariff line level and may not have affected all tariff lines within a 6-digit HS product category, this is an upper bound for the true estimate.

set of antidumping import restrictions. Historically, Turkey has also applied TTBs on imports of steel products.

A second and more prominent example involves Turkey raising *both* its applied MFN and PTA tariffs in 2011 on an estimated \$4.8 billion of textile imports, almost 30 percent of which were from China. The tariff increases cover over 460 different 6-digit Harmonized System product lines, i.e., nearly 10 percent of Turkey's import lines. The changes to the tariff rates across PTA versus non-PTA member status also were not identical — Turkey increased its applied MFN tariff from an initial range of 4-12 percent to a final range of 12-30 percent, whereas it increased its applied PTA tariff over the same products from an initial range of 0-9.6 percent to a final range of 3-27 percent.

The discussion in section 3.2.3 below reveals a potentially important contributing explanation for Turkey's textile industry demands for a tariff increase and new import restrictions – i.e., increases to the costs of some of its key inputs (e.g., cotton and synthetic yarns and fibers) due to Turkey's prior imposition of TTBs on these upstream products which made domestic textile producers less competitive in comparison to foreign firms that did not faced increases to those input costs. A loss in competitiveness and injury to firms is a frequent trigger for their demands to policymakers for new import restrictions.

#### 3.2 Antidumping, safeguards, and other temporary trade barriers

One of the most transparent and relatively formal ways through which government policymakers in the WTO system exercise trade policy flexibility is through the TTB policies of antidumping, countervailing (anti-subsidy) duties, global safeguards, or the China-specific transitional safeguard. The policies are relatively substitutable in the sense that each is designed to provide policymakers with a *potentially* WTO-consistent means through which to impose temporary import restrictions on trade partners in response to demands from a domestic industry that produces a competing product that claims to be injured by imports.<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> Previous to this in 2010, according to WTO's latest Trade Policy Review of Turkey, it was also the case that "textiles and clothing products became subject to registration to monitor their importation" (WTO, 2012a, p. viii).

<sup>&</sup>lt;sup>14</sup> There are important institutional and legal differences between each of the four policies, despite their relative substitutability, that will not be the subject of analysis here. For a discussion, see Mavroidis, Messerlin and Wauters (2008).

Turkey has formal domestic legislation in place to administer all four of these import-restricting policies, and it has been an active user of all four policies during the first decade of the 2000s, including 2008-11. So as to provide context regarding the size of import coverage relative to the two examples of applied tariff increases described in section 3.1, the lower three rows of Table 2 present estimates for the amount of imports adversely impacted by the cumulative stock of previously-imposed TTBs that Turkey had in effect as of 2011. Overall, the TTBs cumulatively affected roughly \$3.9 billion of Turkey's imports as of 2011, or roughly 4.4 percent of its manufacturing imports.

#### 3.2.1 Turkey's TTBs: Overall trends

Figure 2 illustrates the time trend in Turkey's overall use of these temporary trade barrier policies following the methodology introduced in Bown (2011), with data updated through 2011. This figure documents the share of Turkey's imports each year that are subjected to such policies. The solid black line refers to the cumulated "stock" of imports *subject to* all Turkey's TTB policies each year – i.e., those TTBs imposed in that year as well as those imposed in previous years that have yet to be removed. The dashed black line refers to the cumulated stock of imports subject to Turkey's antidumping policy *only*; the majority of imports that Turkey subjects to TTBs occur under the antidumping policy. The grey lines refer to the "flow" of new products subject to Turkey's new import-restricting TTB policies for that year only. The data presented in Figure 2 is split into two panels. The top panel reports imports as the share of 6-digit Harmonized System import product lines in manufacturing (non-oil) that are subject to TTBs. The lower panel trade-weights the TTB policies so as to provide an alternative way to assess the economic importance of the trading partners and import products subject to these trade barriers.<sup>16</sup> There are a number of messages to take away from Figure 2.

First, substantial spikes to Turkey's "flow" of new TTB import restrictions coincide with major policy events and previous shocks. The first coincided with an economic crisis in 1994 and thereafter when Turkey liberalized its trade regime by forming the customs union with the EU, joining the WTO, and thus reducing its applied PTA and MFN tariffs. The second episode was a spike in 2000 during

<sup>&</sup>lt;sup>15</sup> Karacaovali (2011) provides an introduction to Turkey's application of TTBs with a description of its use through 2009.

<sup>&</sup>lt;sup>16</sup> These indicators present measures of the share of imports affected by one of these TTB policies. They should not be confused with an analysis estimating by how much imports contract when such barriers are imposed. Bown (2011) provides a more complete explanation of the methodology used to construct these measures, as well as a discussion of their limitations.

another macroeconomic crisis. Despite these earlier negative macroeconomic shocks, however, the "stock" of imports covered by TTBs remained relatively limited each year until 2004 on the basis of the count of products (1.9 percent) and also on a trade-weighted basis (2.2 percent).

Second, Figure 2 also illustrates a number of important changes that have taken place with Turkey's application of TTBs since 2004. The overall trend in Figure 2 is toward Turkey covering a much greater share of its imports with TTBs since 2004. By 2011, the share of Turkey's import products covered by TTBs had reached 4.4 percent on a trade-weighted basis or 6.4 percent when measured as a share of import product lines. Immediately prior to the crisis in 2007, only 3.6 percent of Turkey's HS-06 import product lines were impacted by TTBs. However, while Turkey's use of antidumping, as indicated by the dashed black lines, is measured as either being stable (trade-weighted basis) or growing slightly (count of products), the divergence between the solid black line and dashed black line reveals a sharp increase in much of Turkey's imports becoming subject to flexibilities provided by other temporary trade barrier policies. The divergence documented in Figure 2 is primarily due to Turkey's increased application of its global safeguards policy; Turkey's first major application of the global safeguard during this period resulted in new trade barriers on imports of footwear beginning in 2006. Over the longer period of examination, Turkey is certainly not alone in its use of safeguards; e.g., Argentina, Brazil, China, European Union, India, and United States have each also had episodes in which they applied safeguards over a nontrivial share of their imports since the WTO's inception in 1995 (Bown, 2011). Nevertheless, Turkey is somewhat different in its substantial recent application of safeguards. Since 2003, most of these other economies have shied away from safeguards application; one explanation is that a number of adverse WTO dispute settlement rulings made the rules for WTO-consistent safeguard use unclear (Sykes, 2003). As a result, many other countries may have simply substituted toward use of relatively similar TTB policies such as antidumping where DSU rulings have been much less aggressive in chilling overall use.

Third, while there were sharp increases in the "flow" of new Turkish TTBs during 2006-8 (see the grey lines in Figure 2); this mostly took place *before* the major global macroeconomic shocks of the Great Recession, instead it coincided with a period of substantial appreciation of the Turkish lira. Compare Turkey against the cumulative use of TTBs by G20 economies illustrated in Figure 3a, broken out by high-income versus emerging economy application of import protection. In contrast to other emerging economies illustrated in Figure 3a, Turkey has had relatively less *new* TTB activity during 2009-11. And yet, the "stock" of Turkey's import products becoming impacted by Turkey's TTBs in Figure 2 has

continued to climb between 2009 and 2011 despite the reduced "flow" of industry requests for new TTBs. This continued growth in Turkey's share of imports impacted by TTBs is due to the failure to remove many of the previously imposed trade barriers under the basic guidelines provided by the WTO Agreements.

Finally, in terms of a direct comparison with individual G20 emerging economies that are cumulatively captured in Figure 3a, by 2009 only India had as large a share of its imports subject to TTBs as Turkey. However, the upward overall trend in Turkey's TTB use is common to a number of other major emerging economies – including Argentina, Brazil, India and to a lesser extent China – as each has undergone a period during the Great Recession in which there has been an increased share of the imports becoming subject to imposed TTBs (Bown, 2013).

#### 3.2.2 Trading partners affected by Turkey's TTBs: Additional implicit discrimination?

Consider next Figure 3b which presents a breakdown of the relative frequency with which trading partners are affected by the G20 emerging economies' collective use of TTBs. In 2011, while 3.3 percent of emerging economy imports from all sources were subject to a TTB, 10.8 percent of their imports from China were subject to such import restrictions. This compares to 3.2 percent of imports from high-income economies being subject to TTBs and only 1.6 percent of imports from other emerging economies.

Figure 4a illustrates that Turkey's application of TTBs across export sources has some similarity to the major emerging economy users of TTBs that has been documented collectively in Figure 3b. Over the period 2006-11, roughly 15-20 percent of Turkey's imports from China each year were subject to some imposed TTB. <sup>17</sup> On the other hand, 4-7 percent of Turkey's imports from all *other* emerging economies were subject to TTBs; the significant decline in 2008 was due to the removal of antidumping measures imposed since 1995 on steel billet imports from Russia, Ukraine and Moldova. Finally, only 1-2 percent of imports from high-income trading partners were subject to TTBs.

to TTBs (Bown, 2013, Table 1).

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<sup>&</sup>lt;sup>17</sup> Turkey is similar to India, Argentina, Brazil and most other emerging and high-income economy users of TTBs – similar to the evidence presented in Figure 3b – they are disproportionately used to impact imports from China. Nevertheless, Turkey is at the high end with respect to the total share of each policy-imposing country's imports from China that it affects with TTBs; by 2011, only India had a higher share of its total imports from China subject

Figure 4b presents an alternative way of characterizing the trading partners affected by Turkey's TTB use by differentiating between whether the TTB-impacted imports were from a PTA member or non-member. Over the first decade of the 2000s, a substantially higher share of imports from PTA non-members are subject to Turkey's TTBs than are its imports from PTA members. This is consistent with cross-country results from Prusa and Teh (2010) that PTA outsiders are more likely to face the incidence of antidumping than PTA insiders. Nevertheless, the general trend since 2002 is that Turkey's imports from both PTA members and PTA non-members are increasingly becoming subject to Turkey's TTBs.

One potential economic concern is therefore that Turkey's imposed TTBs increasingly (implicitly) discriminate against PTA non-members. In addition to Turkey's consumers facing costs by having to pay higher initial tariffs to import from PTA non-members than from Turkey's PTA members (e.g., due to the preferences embodied in the customs union with the EU), imports from these PTA non-members may also be more likely to be subject to additional antidumping, safeguard, or countervailing duties. The efficiency concern with Turkey applying an increasingly discriminatory trade policy that further differentiates between PTA members and non-members is if it creates additional scope for *trade diversion* (Viner, 1950), by which Turkish welfare suffers because consumers end up sourcing from relatively inefficient foreign suppliers because of discriminatory preferences.

#### 3.2.3 Turkey's particularly important TTBs in effect in 2011: "Cascading" use of flexibilities?

According to the World Bank's *Temporary Trade Barriers Database*, Turkey had 127 antidumping measures, 10 safeguard measures and 1 countervailing measure in effect at the end of 2011. Turkey applies TTBs to import products in a number of different industrial sectors, including sizeable shares of imports in textiles and apparel, metals, electrical machinery, plastics and rubber, and stone and glass (Karacaovali, 2011).

Table 3 presents a ranking of Turkey's "top 10" TTBs in effect in 2011, by estimated size of impacted imports. Not surprisingly, four of the top 10 of Turkey's TTBs concern the global safeguards policy — a set of import restrictions that negatively affects multiple foreign export sources

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<sup>&</sup>lt;sup>18</sup> These are upper bounds to the true amount of impacted trade given that this is based on bilateral import data at the 6-digit Harmonized System level and TTBs are frequently applied at a much more disaggregated level. Furthermore, while the approach takes care to base the estimates on bilateral data and application of policy, it does not adjust for the possibility that trade diversion from non-targeted sources may replace bilateral imports destroyed because of the imposed TTB.

simultaneously.<sup>19</sup> The list of major import products that Turkey covers with TTBs presents some cause for economic concern regarding Turkey's industrial competitiveness. While the list does contain examples of TTBs applied to *end-consumer* products (e.g., footwear; travel goods, handbags and similar containers; made-up textiles) most of these major TTBs are applied to key industrial inputs. Important examples include multiple TTBs involving cotton or synthetic yarn or fibers, and industrial chemicals and plastics (MEG, PVC, and PET). New import restrictions on inputs impose higher costs on domestic downstream industries in Turkey and work to decrease the competitiveness of these industries. It negatively affects Turkish firms' ability to compete both in the domestic market (against imports from other foreign competitors) and in third markets as exporters.

The pattern of products and industries listed in Table 3 also creates a concern that downstream competitiveness may suffer substantially and result in a tide of "cascading contingent protection" (Hoekman and Leidy, 1992) that can take place if policymakers impose new import restrictions early in the value chain. For example, Turkey's import restrictions on petrochemicals and plastics may make it more costly for Turkish firms to produce man-made fibers (that require such products as inputs), thus making these firms less competitive. These firms' newfound loss of competitiveness with respect to imported fibers then spurs their demand for new import restrictions on fibers. But imposition of new import restrictions on fibers makes it more costly for Turkish firms further downstream that produce textiles and then made-up textiles and apparel, making these firms less competitive as well. Their loss of competitiveness with respect to imported textiles and apparel then spurs their demand for new restrictions on imports of textiles and apparel – i.e., the increases in applied MFN and PTA tariffs documented earlier in Table 2.

The *implication* is that imposing new import restrictions at the beginning of the value chain can ultimately put at risk the international competitiveness of an entire downstream industry. This can also affect patterns of foreign direct investment, if Turkish firms and other foreign firms choose against investing in Turkey (where access to key industrial inputs is too costly due to TTBs) in favor of other markets.

<sup>&</sup>lt;sup>19</sup> While a policy-imposing country like Turkey could replicate the outcome of a safeguard by imposing antidumping on the same product from multiple foreign sources simultaneously, in legal terms a different antidumping measure would be applied to firms from each country. (This is legally different from one safeguard measure that applies to imports from multiple sources simultaneously.)

These data raise a final policy concern that the potential forces of "cascading contingent protection" impose particularly complex *coordination* issues thus impacting the incentives and ability for Turkey's policymakers to *remove* TTBs. TTBs currently covering many downstream and upstream segments of the value chain for a particular industry (e.g., from petrochemicals to synthetic fibers and yarns to textiles and apparel) may require a coordinated removal of the trade barriers so as to best neutralize the overall impact to firms throughout the industry. For example, a Turkish firm may be more willing to have policymakers remove a tariff on a competing foreign firm's *output* if it would be offset by the contemporaneous removal of a separate Turkish import tariff on that Turkish firm's *inputs*. However, Turkey's current institutional system assesses removal of each product's TTB as an independent policy decision without consideration of spillover effects through input-output linkages.

#### 3.2.4 The duration problem of Turkey's TTBs

Another concern for a number of economies that are active users of TTBs is the sluggishness with which policymakers are able to remove such *temporary* trade barriers. Indeed, the stock of Turkey's import products covered by TTBs has been increasing during the 2008-11 period mainly because of policymakers' failure to *remove* these policies in a timely manner (see again Figure 2).

First, antidumping is a policy that, under the sunset review provisions of the WTO, is supposed to be removed five years after the date of application. As of the end of 2011, 70 percent (89 of the 127) of the antidumping measures that Turkey had in effect had been in place for longer than 5 years.<sup>20</sup> However, it is important to note that Turkey has not been universally unable to remove applied antidumping measures. On a trade-weighted basis, the sharp decline in the imports covered by TTBs in 2009 illustrated in Figure 2b is due to Turkey's removal of antidumping barriers on steel billets from Russia, Ukraine and Moldova described earlier that covered a large amount of imports and which had been in effect since 1995. An open question is what made removal of this particularly economically sizeable set of import restrictions possible – even at the height of uncertainty with the global economic crisis – and yet other temporary barriers have not been removed.

Second, global safeguards are typically applied for 3 or 4 years, and that is inclusive of a phaseout period in the run-up to their removal. In especially difficult circumstances, WTO rules permit the

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<sup>&</sup>lt;sup>20</sup> Moore (2006) provides an early assessment of the United States' difficulties in removing previously-imposed antidumping import restrictions despite the Sunset Review provisions introduced in the WTO as a result of the Uruguay Round negotiations.

safeguard to be extended for another 4 years. In practice, the fact that WTO rules specifically allow for trading partners to seek compensation from a safeguard-imposing country (typically through tariff retaliation to rebalance concessions) for safeguards imposed longer than 3 years usually results in WTO members terminating that form of trade barriers at the end of 3 years. Nevertheless, as Table 4 indicates, Turkey had 13 imposed safeguard measures come up for termination during 2008-11, and 9 were granted extensions. In many instances, the extensions led to a policy life that long exceeded 4 years. As Table 3 indicates, a number of these imposed safeguards cover a sizeable share of Turkey's imports.

Third, there are other instances in which TTB policy "switching" has taken place – i.e., the simple transfer of import products under one type of TTB policy to another. For example, in January 2011, Turkey removed antidumping measures on imports of Polyethylene Terephthalate (PET) from seven countries (India, Thailand, South Korea, Malaysia, Indonesia, China; and Taiwan, China) that had been in effect since 2006. By March 2011, Turkey had initiated a global safeguard investigation on the exact same, 12-digit tariff line product code for PET and subsequently applied new safeguard import restrictions on these products by September 2011. For the safeguard investigation, it is worth noting that the seven trading partners which had been part of the previous antidumping case were no longer major PET suppliers to the Turkish market; it is likely that trade diversion had resulted in Pakistan and Iran – countries not targeted by the initial antidumping measures – having 75 percent of the Turkish import market by 2011 (WTO 2012b, p. 7).

The sluggishness of Turkey's antidumping and safeguard removals raises potential economic concerns. For example, if initial application of the policy is motivated on the grounds that negative macroeconomic shocks can be a reasonable trigger to allow a temporary resort to flexibilities through limited application of new import protection, then one might expect the symmetric removal of previously applied temporary trade barriers coinciding with improvements in macroeconomic conditions.

#### 4 Trading Partners' Potential Impact on Turkey's Use of Flexibilities

Trading partners could be an additional potential channel for influence over Turkey exercising its import policy flexibilities. In this section we examine three possible mechanisms through which trading partners can affect Turkey's use of flexibilities: the potential impact of Turkey's current account imbalance, the

potential for retaliatory use due to Turkey's exporters being targeted abroad; and the potential for trading partners to file formal WTO dispute settlement challenges.

#### 4.1 Turkey's current account imbalance

Turkey's substantial current account imbalance is a potential macroeconomic contributor to its overall resort to import policy flexibilities. As Figure 1b illustrated, Turkey's recent export growth has not kept up with its increase in imports, thus leading to a widening current account deficit. While perhaps misplaced, particularly severe trade imbalances sometimes result in policymakers taking drastic action to cut imports through exercise of trade policy flexibilities.

In terms of export markets, the European Union has been the major recipient of Turkey's trade through much of recent history. Figure 5 illustrates that between 1999 and 2007, a remarkably consistent share of 56-59 percent of Turkey's exports each year went to the European Union. This share had increased slightly, though not remarkably, after formation of the free trade agreement in the mid-1990s. However, the Great Recession beginning in 2008 has changed the pattern of Turkey's exports substantially. The share of Turkey's total exports that were destined for export to the European Union fell by a full 10 percentage points from 58 percent in 2007 to 48 percent by the end of 2010.

The explanation for the rapid de-emphasis of the European Union market for Turkey's exports has little to do with EU trade policy changes implemented during this period. Table 5 rules out much of this potential explanation by documenting all of the European Union's trade policy changes that the Global Trade Alert has reported were expected to impact Turkey's trade. Two important implications from the table stand out. First, only a limited set of Turkey's products and a small value of Turkey's exports were likely to be directly impacted by these EU policy changes - a few agricultural products (dairy, sugar, cereals) and a few steel products (pipes and tubes) affecting up to \$100 million of Turkey's exports to the EU.<sup>21</sup> Second, a number of the policy changes listed in the table are actually with regards to the EU liberalizing its policy – e.g., the termination or suspension of import duties, the termination of antidumping investigations without the imposition of a trade barrier, etc. Indeed, the largest amount of estimated trade impacted is associated with the conclusion of an EU antidumping investigation in 2009 that resulted in no new trade barriers being imposed.

<sup>21</sup> On the other hand, some of the Table 5 policy changes for sugar and cereals were designed to further expand EU exports. It is possible that this could affect Turkish firms either through increased competition within Turkey or increased export competition vis-à-vis EU firms in third markets.

Instead, macroeconomic conditions abroad are the more likely culprit for the rapidly declining share of Turkey's total exports being sent to the European Union. First, weak economic growth in the EU since 2008 and its ongoing debt crisis has led to weak EU demand for imports overall; this disproportionately affects Turkey since the EU is such a large destination source for its exports. A second contributing explanation for the decline in the relative importance of the EU market for Turkey's exporters has been the more rapid growth of other economies around the world during the recovery from the Great Recession, as well as the relative weakening of the Turkish lira toward some of these economies since 2010 (see again Figure 1b).

Consider Figure 5. As the panels illustrate, at the same time that Turkey has been exporting relatively less to the EU (and also the United States, see middle panel), Turkey's share of exports to other countries in the Middle East and North Africa (MENA) region has grown substantially — e.g., between 2004 and 2010, the share of Turkey's total exports sent to the MENA region increased by nearly ten percentage points, from 14 to 24 percent. The lowest panel of Figure 5 illustrates Turkey's substantial export growth to Iraq, especially since 2002, and there have been moderate relative increases in exports to other MENA countries as well. On the other hand, Turkey has had relatively less success in exporting to China and the other major emerging economies.

#### 4.2 Are trading partners using *their* flexibilities to impact Turkey's exports?

A second potential explanation for Turkey's TTB use worth investigating is that they are being applied in retaliation for Turkey's exporters being targeted with TTBs abroad. The data for Turkey indicate clearly that foreign trade barriers such as antidumping and other TTBs are *not* major current causes of concern for Turkey's exporters and are thus not a likely major influence on Turkey's own use of such flexibilities toward its own imports. As Figure 6 illustrates, by 2011 roughly one tenth of one percent of Turkey's exports were subject to these forms of trade barriers. This is quite different when compared to other emerging economies like China – e.g., Figure 3b indicates that 10.8 percent of China's exports to emerging markets and roughly 3.2 percent of its products to high-income markets are impacted by TTBs. And whereas Figure 6 illustrates that Turkey's exporters were rightly concerned about foreign antidumping use in the late-1990s when up to 5 percent of its exports were subject to foreign-imposed TTBs, the concern has dissipated steadily over the first decade of the 2000s.

According to Table 6, there were only ten foreign antidumping measures on Turkish exports in effect as of 2011: three imposed by the United States (with two of them having corresponding

countervailing duties) and one each by the much smaller markets of Canada, India, Israel, Dominican Republic, Ukraine, Pakistan, and South Africa. Overall, these foreign antidumping actions affected a very small amount of Turkey's exports. Furthermore, the European Union has not had any antidumping measures applied against Turkey's exports since 2009.<sup>22</sup> The lack of foreign TTB activity against Turkey's exporters during the first decade of the 2000s and the relative strength of the Turkish lira during much of this period is also consistent with the cross-country evidence from Bown and Crowley (2013b, forthcoming) regarding how such policies are applied – i.e., trading partners typically impose such import restrictions against exporters with weak (or depreciating) currencies, not strong local currencies like Turkey's exporters have confronted over much of the first decade of the 2000s.

#### 4.3 Trading partners and WTO dispute settlement

The third channel through which foreign trading partners could impact Turkey's use of trade policy flexibilities is through formal WTO dispute settlement challenges. For example, in February 2012, India decided to initiate formal WTO proceedings under the DSU in order to challenge the legitimacy of Turkey's 2011 extension to its global safeguard on cotton yarn that was first imposed in 2008; this could signal the beginning of a new trend.<sup>23</sup> Tables 7 and 8 list Turkey's formal involvement in WTO dispute settlement proceedings during 1995-2012. Turkey has been a respondent in nine different WTO disputes, most of which have been filed by other emerging economies (e.g., Hong Kong SAR, China; India; Thailand; Brazil; Ecuador) that have challenged various Turkish import restrictions.

It is quite surprising that more formal WTO dispute settlement challenges to Turkey's TTBs, like the safeguard challenged by India, have not been raised to date given 1) the frequency with which antidumping and safeguards are challenged through formal dispute settlement overall at the WTO, 2) Turkey's TTBs negatively impact a substantial amount of foreign exports of other WTO members, 3) the higher frequency with which Turkey applies such TTBs relative to application by most all other WTO members, and 4) the frequency with which Turkey imposes such TTBs on imports from other *developing* 

<sup>&</sup>lt;sup>22</sup> However, the EU initiated one antidumping investigation on imports of certain Turkish iron and steel products in 2011 (preliminary measures were imposed in July 2012) and initiated another investigation on a set of related products in March 2012. See Table 5.

<sup>&</sup>lt;sup>23</sup> Interestingly, and perhaps related to India's initiation of formal dispute settment proceedings, Turkey revoked the safeguard on cotton yarn in December 2012, even though it had previously announced in 2011 that it was extending it at that point for an additional three years.

countries, as developing countries have continued to use WTO dispute settlement (including against other developing countries) to regain lost export access to foreign markets.<sup>24</sup> And while Turkey has little experience as a complainant in WTO disputes as it has only filed two cases on behalf of its exporters since 1995, Table 8 documents that it is relatively experienced overall given its extensive participation as an interested third party in thirty different disputes during this period, covering many different policy and topic areas, including antidumping and safeguards. Thus, it would be somewhat unexpected if Turkey's use of TTBs *continued* to escape increased legal challenges through trading partners filing formal WTO dispute settlement proceedings.

#### 5 Conclusions

Since the worldwide financial crisis began in 2008, Turkey has joined almost all major economies by going through a sustained period of uncertainty and volatility with regards to its trade and trade policy. Turkey's economy managed a remarkable recovery after the major initial negative shock to real GDP and increase in unemployment. Turkey's policymakers have largely withstood protectionist pressure to make comprehensive change to the relatively liberal import regime during the Great Recession. Nevertheless, there are a number of policy concerns arising based on trends in the data from 2008-11 regarding Turkey's exercising trade policy flexibilities through changes to its applied tariffs and use of antidumping, safeguards, and other TTB policies.

With respect to trade policy toward its imports, Turkey has accessed various institutional "flexibilities" during 2008-11 to implement *new* trade barriers. Recent increases to applied tariffs in the textiles and steel industry alone may affect up to 9 percent of Turkey's manufacturing imports. Newly available data from the World Bank's *Temporary Trade Barriers Database* indicate Turkey's antidumping and safeguards in effect by 2011 are estimated to impact another 4.4 percent of Turkey's imports. While implementing new import restrictions through the flexibilities permitted by the WTO and preferential trade agreements may be in line with international rules, the economic impact is that they do contravene some of the effectiveness of relatively low applied import tariffs that Turkey's policymakers had previously implemented.

<sup>&</sup>lt;sup>24</sup> A number of Turkey's applied TTBs affect developing economy exports covering tens of millions of dollars (Table 3). Bown and McCulloch (2010, Table 6, p. 57) documents many examples, and covering much smaller amounts of trade, of formal WTO disputes that developing countries have initiated by using the Advisory Centre on WTO Law.

There are a number of particular concerns with Turkey's use of antidumping and safeguards. First, policymakers are frequently *extending* the duration of imposed antidumping and safeguards barriers well *beyond* the period that WTO rules indicate they are supposed to be removed. Second, there is evidence that imposed new trade barriers cover upstream (petrochemicals, fibers and yarns) and downstream (made-up textiles and apparel) segments of the textiles industry. These particular barriers affect the sector's competitiveness locally and in global markets, and their piecemeal application across the industry complicates the difficulty facing policymakers regarding how to coordinate policy removal. Third, the application of discriminatory new import restrictions reflects a special concern with China's exports, and there is also evidence of additional implicit discrimination in favor of countries already receiving sizeable tariff preferences through existing trade agreements; such additional discrimination could impose new trade diversion costs on the Turkish economy.

A final goal of this paper has been to highlight trends, patterns and puzzles arising from scrutiny of the detailed, micro-level data regarding Turkey's access to trade policy flexibility in order to stimulate additional theoretical and empirical research on a number of policy-relevant questions. For example, why does a country access flexibilities for some products but not others? Furthermore, why does it choose one policy instrument over another? What affects the decision in one instance to raise applied MFN tariffs and hold PTA tariffs unchanged and in another instance to raise both sets of applied tariffs? Alternatively, why do policymakers sometimes avoid raising applied tariffs altogether but instead turn to more formal TTBs? When accessing TTBs, what affects the choice between using a global safeguard versus antidumping? What is the impact of WTO dispute settlement and the evolving DSU jurisprudence regarding trade policy flexibilities on how policymakers access these policies? Finally, what do answers to these and other questions regarding use of trade policy flexibilities imply for the overall design of trade agreements and the commitments that countries can be expected to take on under cooperative trade policy?

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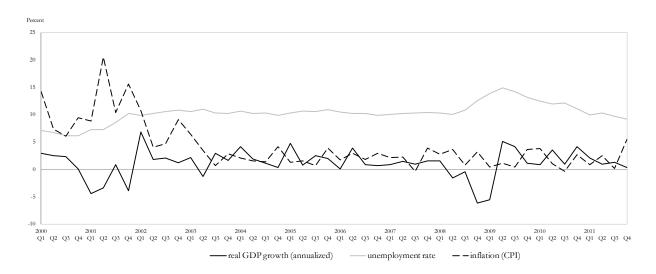
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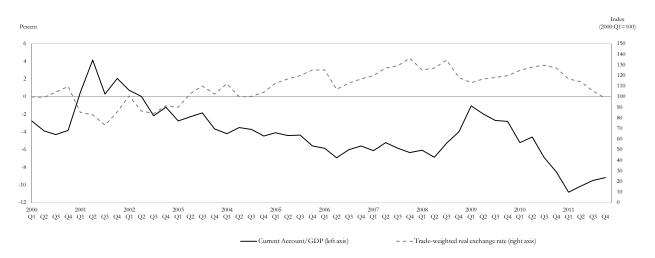
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Figure 1. Turkey's Macroeconomic Indicators, 2000-2011

#### a. GDP growth, Unemployment and Inflation



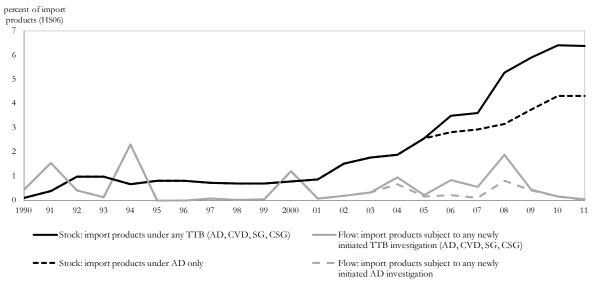
### b. Real exchange rate and Current account position



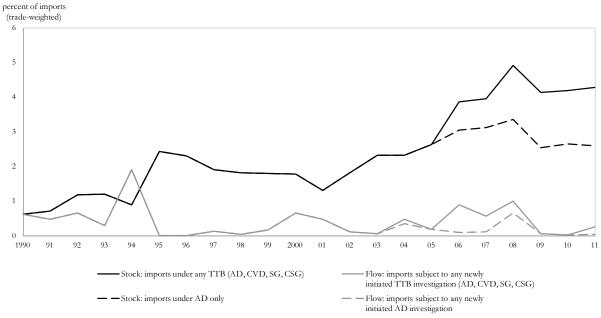
Source: constructed by the author from quarterly data from OECD, USDA, and IMF's Direction of Trade Statistics.

Figure 2. Turkey's Manufacturing Imports Affected by its Use of Formal Temporary Trade
Barriers, 1990-2011

#### a. By share of total count of HS06 import products



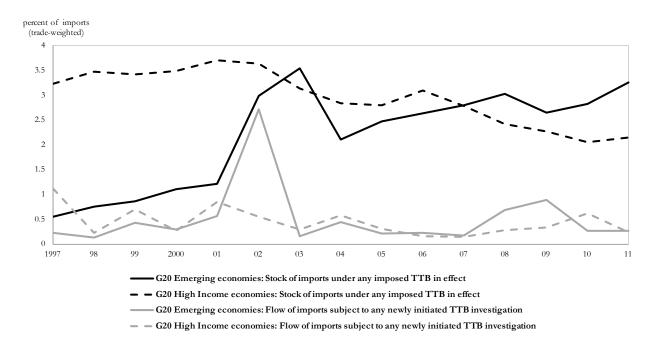
#### b. Trade-weighted by share of value of bilateral HS-06 imports



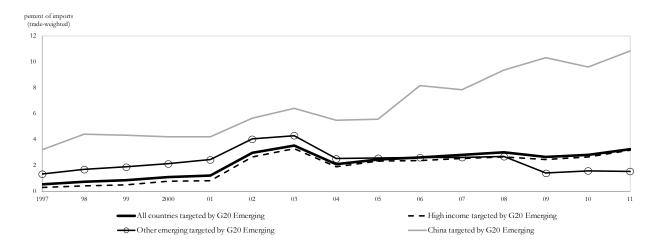
Source: Panel a is constructed by the author based on methodology in Bown (2011) from annual data in Bown (2012) matched to 6-digit Harmonized System import data in UN Comtrade from WITS. Panel b is taken from Bown (2013), Figure 1a. AD= antidumping, CVD=countervailing duty, SG=global safeguard, CSG=China-specific transitional safeguard, TTB=temporary trade barrier.

Figure 3. G20 Economy Imports Affected by Formal Temporary Trade Barriers, 1997-2011

#### a. G20 High Income versus G20 Emerging Economies' Use of TTBs (trade-weighted)



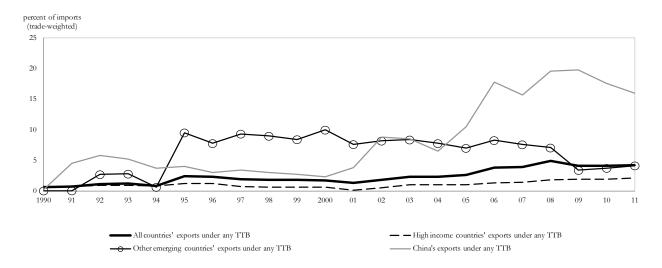
#### b. Export Sources Impacted by G20 Emerging Economy Use of TTBs (trade-weighted)



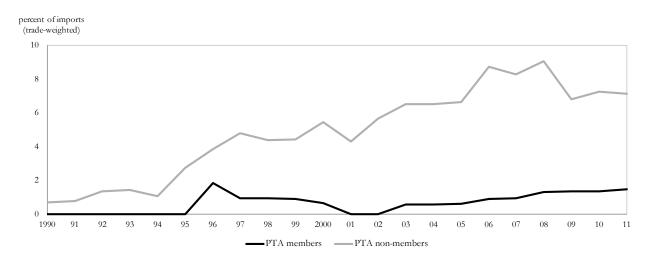
Source: Bown (2013), Figure A1b and Figure A2a, respectively. Shares of nonoil imports. G20 high income economies include Australia, Canada, European Union, Japan, South Korea, and the United States. G20 emerging economies include Argentina, Brazil, China, India, Indonesia, South Africa and Turkey. TTB=temporary trade barrier.

Figure 4. Trading Partners Affected by Turkey's Use of Formal Temporary Trade Barriers, 1990-2011

# a. TTB-affected share of imports from China, other emerging (non-China) economies, and high-income economies

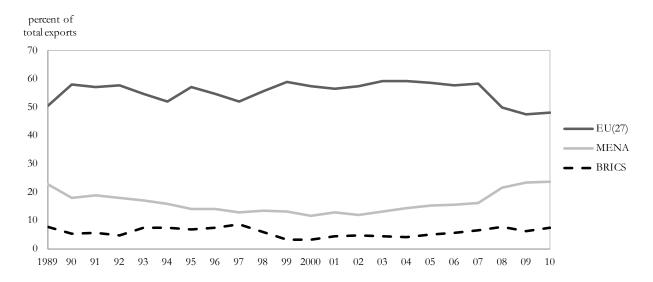


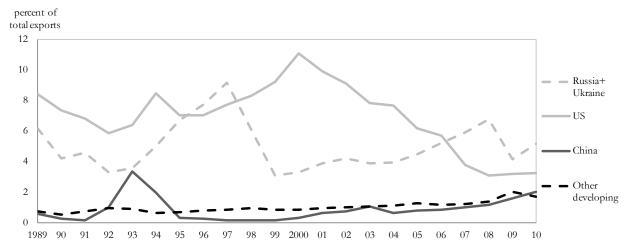
#### b. TTB-affected share of imports from Turkey's PTA members and PTA non-members

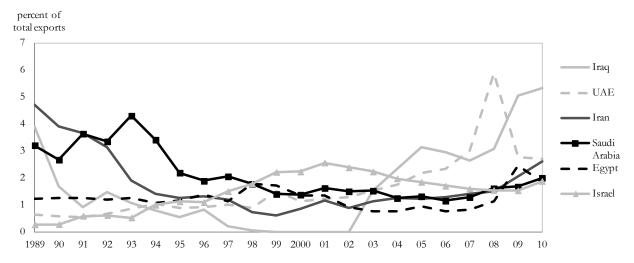


Source: Panel a is from Bown (2013), Figure 1b, panel b is constructed by the author based on the import-share methodology in Bown (2011) from annual data in Bown (2012) matched to 6-digit Harmonized System import data in UN Comtrade from WITS. TTB=temporary trade barrier. PTA=preferential trade agreement.

Figure 5. Turkey's Key Export Markets, 1989-2010

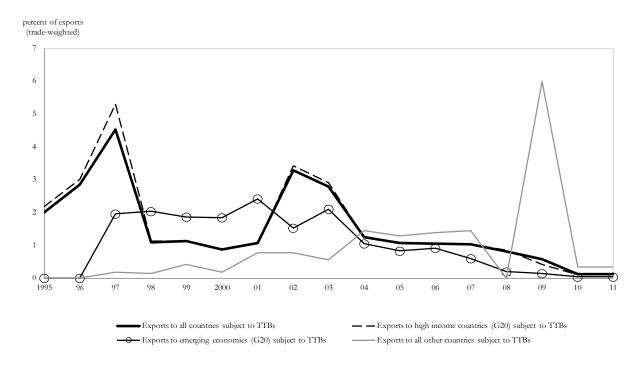






Notes: Turkey's total non-oil merchandise export data in UN Comtrade from WITS compiled by the author. MENA= Middle East and North Africa. BRICS=Brazil, Russia, India, China, South Africa. UAE=United Arab Emirates.

Figure 6. Trading Partners' Temporary Trade Barriers Against Turkey's Exports, 1995-2011



Source: Figure 2 of Bown (2013). High-income G20 economies include Australia, Canada, European Union, Japan, South Korea, and United States. Emerging G20 economies include Argentina, Brazil, China, India, Indonesia, Mexico, and South Africa. "Other" (non-G20) TTB-imposing countries include Pakistan, Peru, Thailand, Colombia, Malaysia, Philippines, Chile, New Zealand, Israel, and Taiwan, China.

Table 1. Turkey and European Union Import Policy Indicators, 2007

Policy indicator	All products	Manufacturing products	Agricultural products
Turkey			
Tariff binding product coverage	50.4	42.8	
Simple average tariff binding	28.3	16.9	60.1
Simple average MFN applied tariff	10.0	4.8	46.7
Trade-weighted applied tariff (including preferences)	1.8	1.0	17.6
Trade Tariff Restrictiveness Index (TTRI)	1.3		
Overall Trade Restrictiveness Index (OTRI)	3.8		
European Union			
Tariff binding product coverage	100.0	100.0	
Simple average tariff binding	5.4	3.9	15.1
Simple average MFN applied tariff	5.2	3.8	15.0
Trade-weighted applied tariff (including preferences)	3.0	2.4	11.8
Trade Tariff Restrictiveness Index (TTRI)	5.1		
Overall Trade Restrictiveness Index (OTRI)	6.4		

Sources: WTO (2008, 2009) and World Bank (2008). Indicators presented as percentages.

Table 2. Turkey's Imports Affected by Trade Policy Flexibilities in Effect in 2009-11

Trade Policy and Product	Estimate of Imports (millions of 2010 US \$)
Tariff Increases (year of policy change)	7,932.3
Flat rolled steel products: increase in MFN tariff from an initial range of 5-6 percent to a new range of 13-14 percent (2009), partial scaling back of MFN tariff to 9-10 percent (2010). In both instances, PTA member tariffs were unchanged.	3,087.3
Textiles: increase in MFN tariff from an initial range of 4-12 percent to a new range of 12-30 percent (2011), PTA member tariffs changed from an initial range of 0-9.6 percent to a new range of 3-27 percent (2011).	4,793.0
Agriculture products in which tariffs increased	52.0
Ethyl alcohol: increase in MFN tariff from an initial level of 3 percent to a new range of 10-30 percent (2009)	41.4
Breamfish: increase in tariff level from 0 percent to 34 percent [EU members] or 37 percent [EU non-members] (2010)	10.6
Tariff Decreases (year of policy change)	484.5
Agriculture products	
Certain meat: decrease in tariff level from 225 percent to 30-75 percent (2011)	249.3
Certain live bovine animals: decrease in tariff level from 135 percent to 0-40 percent (2011)	235.2
Certain sheep meat: decrease in tariff level from 225 percent to 30 percent (2011)	0
All Formal TTBs in effect at end of 2011	3,851.9
Antidumping only	2,133.8
Global safeguards only	1,712.4
Countervailing duties only	5.7

Notes: tariff policy changes taken from notifications in Global Trade Alert and WTO (2012a) matched to HS06 import data for 2010. Estimates of TTBs in effect taken from Bown (2013).

Table 3. Turkey's Top 10 Temporary Trade Barriers in Effect in 2011, by Estimated Import Value

	TTB Policy and Import Product	Year of initiation (imposition)	Initial year of expected removal	Imports (millions of current US dollars)
1.	Global safeguard on footwear	2006 (2006)	2009 (extended to 2012)	561
2.	Global safeguard on cotton yarn	2008 (2008)	2011 (extended to 2014)	435
3.	Antidumping on polyvinyl chloride (PVC) from the EU	2001 (2003)	2008	376
4.	Global safeguard on polyethylene terephthalate (PET)	2011 (2011)	2014	284
5.	Global safeguard on travel goods, handbags and similar containers	2007 (2008)	2011 (extended to 2014)	247
6.	Antidumping on polyvinyl chloride (PVC) from United States	2001 (2003)	2008	202
7.	Antidumping on yarn of man-made or synthetic or artificial staple fibers from India	2008 (2009)	2014	149
8.	Antidumping on certain made-up textile articles and fabrics made of artificial or synthetics fibers from China	2009 (2010)	2015	118
9.	Antidumping on mono ethylene glycol (MEG) from Kuwa	ait 2008 (2010)	2015	110
10.	Antidumping on polyester textured yarn from China	2007 (2008)	2013	93

Notes: data on antidumping, safeguards, and TTBs constructed by the author from Bown (2012) and matched to HS06 import data in UN Comtrade from WITS, based on methodology of Bown (2011).

Table 4. Turkey's Safeguards Up for Revocation during 2008-11

Policy and Product	Year of initiation	Year final measure imposed	Year of initial expected removal	Year extension granted
Global Safeguards				
Activated earth and clays	2004	2005	2008	
Voltmeters and ammeters	2004	2005	2008	
Footwear	2006	2006	2009	2009
Salt	2006	2006	2009 (revoked in 2010)	
Vacuum cleaners	2006	2006	2009	2009
Steam smoothing irons	2006	2006	2009	2009
Motorcycles	2006	2007	2009	2009
Frames and mountings for spectacles	2007	2008	2011	2011
Travel goods, handbags and similar containers	2007	2008	2011	2011
Certain electrical appliances	2007	2008	2011	2011
Cotton yarn	2008	2008	2011	2011
China-specific safeguards				
Float glass	2005	2006	2009	

Notes: Data constructed by the author from Bown (2012).

Table 5. Turkey's Export Products Affected by Changes to EU Trade Policy, 2009-12†

Exported Product	Voor		ate of EU imports from Turkey nillions of US \$)
Product	Year	EU Trade Policy Change (n	illions of US \$)
Dairy products	Jan 2009	Reintroduction of export refunds for milk and milk products, butter and butteroil	0.1
	July 2009	Measures to "stabilise" markets for certain dairy products	2.6
	April 2011	Opening to tender export refunds on certain milk products	negligible
Sugar	Jan 2010	Additional out-of-quota sugar exports	negligible
	Jan 2011	Additional import duties for certain products in the sugar sector	53.8
	Nov 2010	*Temporary suspension of import tariffs for the CXL concessions sugar quota during the marketing year 2010/2011	negligible
	Mar 2011	*Temporary suspension of import tariffs for an exceptional tariff quota of sugar	negligible
Cereals	Feb 2011	*Temporary suspension of customs duties on certain cereal products for the 2010/2011 marketing year	60.7
	Mar 2011	*Suspension of import duties for certain products in the cereals sector	77.9
Welded tubes and pipes	Sep 2009	*Termination of antidumping investigation on welded tubes and pipes from Ukraine, Belarus and Turkey	445.5
	Mar 2012	Initiation of antidumping investigation on welded tubes and pipes from Ukraine, Macedonia and Turkey	167.1
Pipe and tube fittings	Nov 2011	Initiation of antidumping investigation on certain tube and pipe fittings from Russia and Turkey	2 10.4

Source: compiled by the author from Global Trade Alert and Bown (2012) matched to HS06 import data in UN Comtrade from WITS from the year prior to the EU policy action. \*Indicates trade liberalization of import-restricting policy. †Through March 30, 2012.

Table 6. Turkey's Exports Affected by Foreign Antidumping in Effect in 2011

Trading Partner (imposition year)	Product	Antidumping Measure	Estimated exports (millions of US \$)
(imposition year)		7 minual ping measure	(
Canada (2003)	Steel structural tubing	6.9% - 30.0%	8.5
Dominican Republic (2011)	Steel rods and bars	-	14.0
India (2008)	Hydrogen peroxide	Price undertaking	1.3
Israel (2010)	Stretch film rolls	Price undertaking	8.3
Pakistan (2011)	Hydrogen peroxide	25.61%	-
South Africa (1999)	Acrylic blankets	Specific duty	-
Ukraine (2008)	Refrigerators and freezers	-	-
<b>US</b> (1986)	Welded carbon steel pipe and tube	1.26% - 23.12%	-
<b>US</b> (1996)	Pasta	60.87% - 63.29%	15.1
<b>US</b> (2008)	Light-walled rectangular pipe and tube	27.04% - 41.71%	19.9

Notes: data on antidumping constructed by the author from Bown (2012) using the methodology described in Bown (2011) and matched to HS06 import data in UN Comtrade from WITS. "-" indicates the data were missing or not available.

Table 7. Turkey as Complainant and Respondent in Formal WTO Disputes, 1995-2012

WTO Dispute(s)	Respondent	Complainant	Issue under Dispute	Year Initiated, Resolution		
	Turkey as respondent					
DS29	Turkey	Hong Kong SAR, China	Restrictions on imports of textile and clothing products	1996, no formal bilateral solution (see DS34)		
DS34	Turkey	India	Restrictions on imports of textile and clothing products	1996. mutually agreed solution in 2001		
DS43	Turkey	USA	Taxation of foreign film revenues	1996, mutually agreed solution in 1997		
DS47	Turkey	Thailand	Restrictions on imports of textile and clothing products	1996, no formal bilateral solution (see DS34)		
DS208	Turkey	Brazil	Anti-dumping duty on steel and iron pipe fittings	2000, no formal bilateral solution, antidumping measure in effect as of 2011		
DS237	Turkey	Ecuador	Certain import procedures for fresh fruit	2001, mutually agreed solution in 2002		
DS256	Turkey	Hungary	Import ban on pet food from Hungary	2002, no formal bilateral solution		
DS334	Turkey	USA	Measures affecting the importation of rice	2005, Turkey adopted the panel report in 2007 and removed measures		
DS428	Turkey	India	Safeguard measures on imports of cotton yarn (other than sewing thread)	2012, ongoing		
			Turkey as complainant			
DS211	Egypt	Turkey	Definitive anti-dumping measures on steel rebar	2000, Egypt adopted panel report in 2002 and removed measures		
DS288	South Africa	Turkey	Definitive anti-dumping measures on blanketing	2003, no formal bilateral solution, anti-dumping measure imposed removed in 2004		

Source: compiled by the author from the WTO website.

Table 8. Turkey as Interested Third Party in Formal WTO Disputes, 1995-2012

	WTO Dispute(s)	Respondent	Complainant	Issue under Dispute
1.	DS32	US	India	Measures affecting imports of women's and girls' wool coats
2.	DS33	US	India	Measures affecting imports of woven wool shirts and blouses from India
3.	DS174	EU	US	Protection of trademarks and geographical indications for agricultural products and foodstuffs
4.	DS189	Argentina	EU	Anti-dumping on carton-board imports from Germany and anti-dumping on imports of ceramic tiles from Italy
5.	DS248, DS249, DS251, DS252, DS253, DS254, DS258, DS259	US	EU, Japan, South Korea, China, Switzerland, Norway, New Zealand, Brazil	Safeguard measures on imports of certain steel products
6.	DS260	EU	US	Provisional safeguard measures on imports of certain steel products
7.	DS290	EU	Australia	Protection of trademarks and geographical indications for agricultural products and foodstuffs
8.	DS294	US	EU	Laws, regulations and methodology for calculating dumping margins (zeroing)
9.	DS295	Mexico	US	Anti-dumping on beef and rice
10.	DS357	US	Canada	Subsidies and other domestic support for corn and other agricultural products
11.	DS362	China	US	Measures affecting the protection and enforcement of intellectual property rights
12.	DS365	US	Brazil	Domestic support and export credit guarantees for agricultural products
13.	DS366	Colombia	Panama	Indicative prices and restrictions on ports of entry
14.	DS375, DS376, DS377	EU	US; Japan; Taiwan, China	Tariff treatment of certain information technology products

Table 8. Turkey as Interested Third Party in Formal WTO Disputes, 1995-2012 (cont)

	WTO Dispute(s)	Respondent	Complainant	Issue under Dispute
15.	DS379	US	China	Anti-dumping and countervailing duties on certain products
16.	DS381	US	Mexico	Measures concerning the importation, marketing and sale of tuna and tuna products
17.	DS392	US	China	Certain measures affecting imports of poultry
18.	DS394, DS395, DS398	China	US, EU, Mexico	Measures related to the exportation of various raw materials
19.	DS397	EU	China	Anti-dumping on certain iron or steel fasteners from China
20.	DS399	US	China	Measures affecting imports of certain passenger vehicle and light truck tyres
21.	DS405	EU	China	Anti-dumping on certain footwear
22.	DS406	US	Indonesia	Measures affecting the production and sale of clove cigarettes
23.	DS415, DS416, DS417, DS418	Dominican Republic	Costa Rica, Guatemala, Honduras, El Salvador	Safeguard on imports of polypropylene bags and tubular fabric
24.	DS426	Canada	EU	Measures relating to the feed-in tariff program
25.	DS431, DS432, DS433	China	US, EU, Japan	Measures related to the exportation of rare earths, tungsten and molybdenum
26.	DS434	Australia	Ukraine	Certain measures concerning trademarks and other plain packaging requirements applicable to tobacco products and packaging
27.	DS436	US	India	Countervailing measures on certain hot- rolled carbon steel flat products from India
28.	DS437	US	China	Countervailing duty measures on certain products from China
29.	DS440	China	US	Anti-dumping and countervailing duties on certain automobiles from the United States
30.	DS449	US	China	Countervailing and anti-dumping measures on certain products from China

Source: compiled by the author from the WTO website.