The World Economy

The World Economy (2014)
doi: 10.1111/twec.12114

Trade Policy Flexibilities and Turkey: Tariffs, Anti-dumping, Safeguards and WTO Dispute Settlement

Chad P. Bown

Development Research Group, Trade and International Integration (DECTI), The World Bank, Washington, DC, USA

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 both 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. Potential costs include restraint on unilaterally optimal behaviour (e.g. imposition of Nash tariffs), diminished ability to extract rents from political lobbies or reduced policy sovereignty in the face of unexpected shocks.

In the modern trading system, a more complete understanding of the cost–benefit trade-offs associated with international agreements also requires coming to terms with the 'flexibilities' that countries utilise 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 major emerging economies especially have begun exercising flexibility through temporary trade barrier (TTB) policies such as anti-dumping, safeguards and countervailing duties on a large scale and with high frequency (Bown, 2011, 2013). Furthermore, the evidence presented below for Turkey indicates that there are a number of different policy instruments being used to access flexibility; thus, a singular focus 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 trade-offs and the interaction between commitment and

Thanks for useful discussions and comments from Robert Staiger, Kyle Bagwell, Aaditya Mattoo, Bernard Hoekman, Patrick Low, Giovanni Maggi, Anne Krueger, Alan Winters, Arvind Panagariya, Caglar Ozden, Erhan Artuc, Sübidey Togan, Refik Erzan, Kamer Ozdemir, two anonymous referees, and participants at the Stanford University conference on the Future of the WTO, the TÜSİAD-Sabanci University Competitiveness Forum in Istanbul, and the World Bank Trade CEM Workshop in Ankara. I am especially grateful to Mona Haddad for stimulating this research idea and for funding through the MDTF-II. I also thank Aksel Erbahar and Carys Golesworthy for outstanding research assistance. Any opinions expressed in this paper are the author's and should not be attributed to the World Bank. All errors and omissions are my own.

flexibility, there is a much more limited empirical understanding of the relationships. The lack of simultaneous empirical progress, especially with regard to emerging economies, is partly driven by the reality that how trade policy flexibilities are used requires informed analysis of highly detailed data that until recently were 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 modelling 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 US-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 European Union market. In each of the 10 years prior to the onset of the crisis, Turkey sent nearly 60 per cent of its goods exports to the EU; this had fallen to 48 per cent by 2010. Thus, ongoing weak EU import demand associated with the lengthy European debt crisis had acted 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. Even prior to the onset of the crisis, Turkey had substantial variation in its tariff commitments taken on through its preferential trading relationships – most important of which is a customs union with the EU – 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 revised both its applied most-favoured-nation (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 per cent of Turkey's manufacturing imports. Second, Turkey continued intensive use of the relatively formalised TTB policies of anti-dumping, 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 anti-dumping and safeguards has affected an increasing share of its trade over the first decade of the 2000s; starting from negligible levels, an estimated 4.4 per cent of the value of Turkey's manufacturing imports and 6.4 per cent of import product lines had become impacted by the trade barriers in effect by 2011. Thus, while Turkey's policymakers largely withstood protectionist pressure during 2008–11 to make comprehensive changes to its relatively liberal import regime, many new trade barriers were implemented under the various flexibilities at their disposal.

Without a better understanding of how Turkey may have benefited by exercising these particular trade policy flexibilities, the focus turns exclusively to a standard set of policy concerns made evident through careful 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 high frequency of trade policy changes generates additional uncertainty regarding market access, and this may impede any benefits arising from relationship-specific investment by trading partners' exporters (Handley and Limão, 2012).[1] Second, these concerns are exacerbated by frequent extensions to the duration of previously imposed anti-dumping 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 to cover upstream and downstream segments of important industries like textiles and apparel – that is, from industrial petrochemical inputs, to man-made fibres and yarns, to textiles and made-up products. Finally, Turkey's trade policy continues to reflect both concern with increased competition from export-oriented economies such as China and the possibility of additional implicit discrimination towards countries that are already receiving sizeable tariff preferences through existing PTAs which 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. For example, Bagwell and Staiger (2005) examine self-enforcing trade agreements among governments that acquire private information over time.[2] Their model can be used to shed light on basic empirical regularities associated with the GATT/WTO system; that is, negotiations take place over tariff bindings and applied flexibilities arise through use of TTB-like policies. Beshkar et al. (2012) develop a theoretical model and empirically examine the trade-off 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 motives for protection. The variety of trade policy instruments at work in Turkey also establishes it as an important case study in the related literature on trade policy substitution. Limão and Tovar (2011), for example, examine Turkey's tariff liberalisation 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 characterisation 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

[1] Francois and Martin (2004) provide an earlier treatment of the role of tariff commitments in reducing variability and uncertainty.

[2] 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 anti-dumping 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 et al., 2008) and tariff reductions associated with WTO accession negotiation (Bagwell and Staiger, 2011).

discussing policy implications and questions that some of these puzzles raise for future research.

2. TURKEY'S PRE-CRISIS TRADE POLICY REGIME AND THE SHOCK OF THE GREAT RECESSION

a. 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 indicators documented in Table 1.[3] As of 2007, Turkey's trade-weighted applied tariff on manufacturing products was only 1.0 per cent, and its simple average applied MFN tariff was only 4.8 per cent. 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.[4]

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 – the rate beyond which Turkey is legally committed not to raise its MFN tariff at the WTO – for its manufacturing products was 16.9 per cent, which was much higher than its MFN applied rate of 4.8 per cent. The implication is that, over the products for which Turkey had made WTO binding commitments, there remained substantial 'overhang' or 'water' in the tariff bindings – that is, 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 (42.8 per cent) 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 through its customs union with the EU.[5] First, two-way trade between Turkey and the EU is effectively duty free. Second, Turkey has subsequently 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 per cent 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. The trade policy indicators that take into account Turkey's tariff preferences and that trade weight these tariffs reveal Turkey as being even more open than do indicators that reflect only its MFN policies, given that so much of its trade is with PTA partners.

Furthermore, as the lower half of Table 1 indicates, the EU has legally bound 100 per cent of its tariff lines under the WTO, and the EU's applied tariffs are so close to its bindings that

[3] The World Bank (2010) leads with 'Turkey has one of the most liberal trade regimes, based on its 1.5 per cent MFN Tariff Trade Restrictiveness Index (TTRI). It ranks as the 5th 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.

[4] These indices take into account elasticities, and the OTRI also considers some non-tariff measures in addition to tariffs. For a methodological presentation of the construction of these measures, see Kee et al. (2009).

[5] Turkey has been in accession negotiations with the EU since 2005.

TABLE 1
Turkey and European Union Trade 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	–	–

Note:
Indicators presented as percentages.

Sources: WTO (2008, 2009) and World Bank (2008).

it does not frequently change its applied MFN tariffs. The main exception to the EU-Turkey customs union is that it did not cover trade in agricultural goods (except processed agricultural goods) and products covered by the treaty establishing the European Coal and Steel Community (ECSC). For all 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 a customs union member such as Turkey.[6] Put differently, WTO commitments like tariff binding coverage and elimination of binding overhang could be redundant for Turkey if 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 preventing Turkey from raising its MFN tariffs during 2008–11. Furthermore, there is no explicit evidence to indicate that Turkey's trade policy towards PTA non-members changed because of obvious external institutional forces outside of direct Turkish government influence – for example EU policymakers, did not substantially change their own MFN tariffs and thus put pressure on their customs union partners to do the same. Furthermore, Vandenbussche and Viegelahn (2011) indicate that even implicit forces – such as EU application of new TTBs on third countries – were unlikely to have been more than a small influence on Turkey's trade policy as the EU increased its import restrictions very little during the recent global economic crisis.[7]

[6] 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).

[7] In an assessment of why the EU's TTB import protection policies were left relatively unaffected by the crisis, Bown and Crowley (2013b) point to two central macroeconomic forces – the sharp and persistent real depreciation of the euro after 2009:Q4 and the 'switch' in behaviour by EU policymakers from applying new import restrictions on trading partners that were contracting (as had been the historical norm) towards only the relatively few with strong economic growth.

b. Turkey's Macroeconomic Conditions During 2008–11 and Pressures for New Import Restrictions

Turkey suffered a major economic contraction in 2008–09 that was synchronised with almost all major economies around the world. As the top panel of Figure 1 illustrates, Turkey's real GDP shrank by nearly 6 per cent (on an annualised basis) in both 2008:Q4 and 2009:Q1. The unemployment rate rose sharply and reached nearly 15 per cent 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 has 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 stabilised in 2011 at roughly 10 per cent of GDP. The size of the current account deficit signals a significant trade imbalance concern.

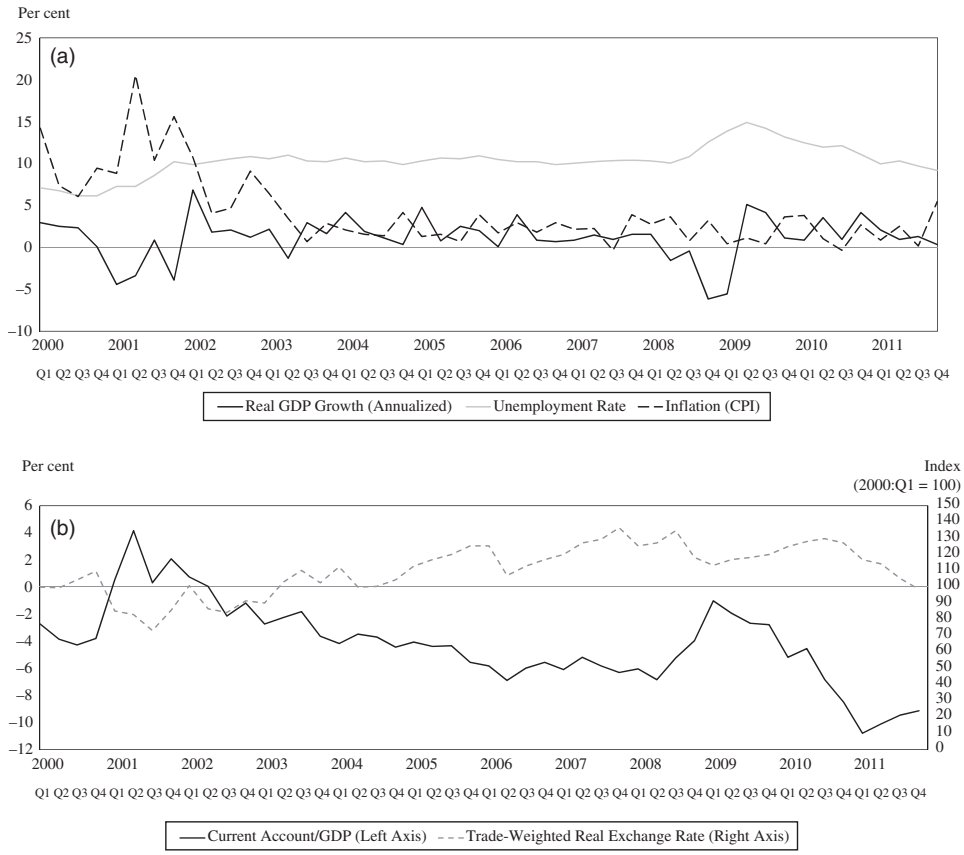
There is a substantial research literature examining the relationship between macroeconomic shocks and changes to national trade policy, although most of it is focused on high-income countries.[8] In a recent contribution, Bown and Crowley (2013c) present evidence over the period 1989–2010 that examines the relationship for Turkey and a set of twelve other emerging economies. On average, across these emerging economies, new import protection through TTB policies (discussed in more detail in subsection 3b below) is associated with recent appreciations in the real exchange rate. For Turkey, this would be consistent with a strengthening Turkish lira (illustrated in Figure 1a) that makes imports suddenly more price-competitive with domestic production and subsequently results 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 faced in the Great Recession period, especially 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 the face of it, 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 towards PTA non-members otherwise specified by its customs

[8] Knetter and Prusa (2003) and Bown and Crowley (2013b) 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.

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.

union with the EU. During 2008–11 in particular, Turkey even exercised flexibility by changing some of its applied trade policies towards PTA partners.

We begin by characterising 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, such as through the particular WTO Agreements on anti-dumping, 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. Second, even more formal provisions include Turkey's TTB policies such as anti-dumping, 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 legal scrutiny through the WTO's Dispute Settlement Understanding (DSU).

a. Changes to Turkey's Applied Import Tariffs

The terms of Turkey's customs union agreement with the EU 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.[9] The top portion of Table 2 lists a number of notable changes that Turkey made between 2009 and 2011 by exercising these particular flexibilities.[10] Table 2 also illustrates estimates of the imports (pre-policy change) that were impacted. Two increases in Turkey's applied MFN tariffs stand out as being particularly economically important; combined they are estimated to impact up to an additional 9 per cent of Turkey's manufacturing imports.[11]

First, Turkey increased its applied MFN tariff on flat-rolled steel products in 2009 by 8 percentage points (from a range of 5 to 6 per cent to 13 to 14 per cent) and eventually rolled back that tariff change by 4 percentage points (to a final range of 9 to 10 per cent) 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.[12] Furthermore, in each instance, the applied tariff towards PTA members was unchanged; the result has been to increase the size of tariff preference and implicit discrimination towards PTA members.

This particular MFN applied tariff increase is interesting given that the covered product lines are part of the list of ECSC Treaty 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 in this instance, as opposed to one of the alternative and more frequently used policy flexibilities described below, such as a global safeguard or a set of anti-dumping import restrictions.

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 per cent of which were from China. The tariff increases cover more than 460 different 6-digit harmonised system product lines and thus nearly 10 per cent of Turkey's import lines.[13] The changes to the tariff rates across PTA versus non-PTA member status also

[9] 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).

[10] Kee et al. (2013) 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 anti-dumping. Turkey did, however, also raise trade barriers significantly on certain agricultural products in this early period of the crisis.

[11] 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.

[12] These estimates are computed at the 6-digit HS level, the finest level of disaggregation consistently available for the time period under investigation. This is an upper bound since 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.

[13] 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. 8).

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% to a new range of 13–14% (2009), partial scaling back of MFN tariff to 9–10% (2010). In both instances, PTA *member* tariffs were unchanged.	3,087.3
Textiles: increase in MFN tariff from an initial range of 4–12% to a new range of 12–30% (2011), PTA member tariffs changed from an initial range of 0–9.6% to a new range of 3–27% (2011).	4,793.0
Agriculture products in which tariffs increased	52.0
Ethyl alcohol: increase in MFN tariff from an initial level of 3% to a new range of 10–30% (2009)	41.4
Breamfish: increase in tariff level from 0 to 34% [EU members] or 37% [EU non-members] (2010)	10.6
Tariff decreases (year of policy change)	**484.5**
Agriculture products	
Certain meat: decrease in tariff level from 225% to 30–75% (2011)	249.3
Certain live bovine animals: decrease in tariff level from 135% to 0–40% (2011)	235.2
Certain sheep meat: decrease in tariff level from 225 to 30% (2011)	0
All formal TTBs in effect at end of 2011	**3,851.9**
Anti-dumping only	2,133.8
Global safeguards only	1,712.4
Countervailing duties only	5.7

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

were not identical – Turkey increased its applied MFN tariff from an initial range of 4 to 12 per cent to a final range of 12 to 30 per cent, whereas it increased its applied PTA tariff over the same products from an initial range of 0 to 9.6 per cent to a final range of 3 to 27 per cent.

The discussion in subsection 3b (iii) below reveals a potentially important contributing explanation for Turkey's textile industry demands for a tariff increase and new import restrictions. Higher costs to cotton and synthetic yarns and fibre inputs that were due to Turkey's prior imposition of TTBs on these upstream products make domestic textile producers less competitive relative to foreign textile producers. A loss in competitiveness and injury to firms is a frequent trigger for demands for new import restrictions.

b. Anti-dumping, Safeguards and Other Temporary Trade Barriers

Temporary trade barrier policies of anti-dumping, countervailing (anti-subsidy) duties, global safeguards or the China-specific transitional safeguard are some of the most transparent and relatively formal ways through which policymakers across the WTO system exercise flexibility. These policies are relatively substitutable in that each is designed to provide a

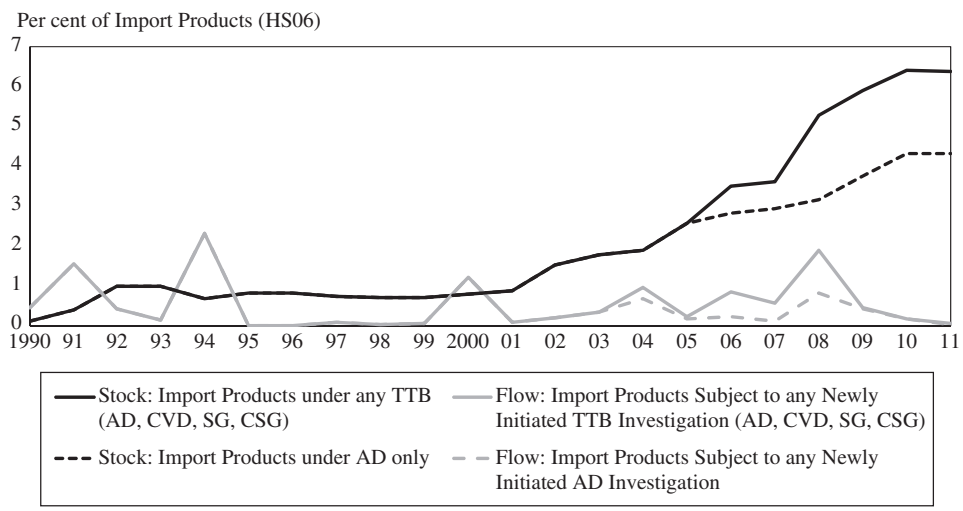
potentially WTO-consistent means to impose temporary import restrictions in response to demands from a domestic industry that produces a competing product that claims to be injured by imports.[14]

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 during 2008–11.[15] 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 per cent of its manufacturing imports.

(i) 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 6-digit harmonised system import product lines in manufacturing (non-oil) that are subject to TTBs. The solid black line refers to the cumulated 'stock' of imports subject to all Turkey's TTB policies each year – that is, 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

FIGURE 2
Turkey's Manufacturing Imports Affected by its Temporary Trade Barriers, 1990–2011



Sources: Constructed by the author based on methodology in Bown (2011) from annual data in Bown (2012) matched to 6-digit harmonised system import data in UN Comtrade from WITS. AD, anti-dumping; CVD, countervailing duty; SG, global safeguard; CSG, China-specific transitional safeguard; TTB, temporary trade barrier.

[14] 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 et al. (2008).

[15] Karacaovali (2011) provides an introduction to Turkey's application of TTBs with a description of its use through 2009.

anti-dumping policy only; the majority of imports that Turkey subjects to TTBs occur under the anti-dumping policy. The grey lines refer to the 'flow' of new products subject to Turkey's new import-restricting TTB policies for that year only.[16] 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 macroeconomic shocks as well as policy events. The first spike coincided with an economic crisis in 1994. Thereafter, Turkey began additional steps to liberalise its trade regime by joining the WTO in March 1995, by entering into the final phase of the formation of the customs union with the EU in December 1995, and thereby phasing in reductions to its applied PTA and MFN tariffs. As Figure 2 indicates, the second spike in new TTB coverage took place in 2000; this coincided with another macroeconomic crisis. Despite these relatively substantial negative macroeconomic shocks, however, the stock of imports covered by Turkey's TTBs remained relatively limited each year through 2004.

Since 2004, there has been an upward trend in the import coverage of Turkey's applied TTBs: by 2011, the share of Turkey's import product lines covered by TTBs had reached 6.4 per cent, up from 3.6 per cent in 2007 (immediately prior to the Great Recession) and only 1.9 per cent in 2004.

Furthermore, while Turkey's use of anti-dumping– as indicated by dashed black lines in Figure 2 – has been growing slightly, 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 TTB policies. The divergence 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; since the WTO's 1995 inception, Argentina, Brazil, China, the EU, India and the United States have all had episodes in which they applied safeguards over a significant share of their imports (Bown, 2011). Nevertheless, the relatively recent application of safeguards makes Turkey somewhat different. Since 2003, most 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 towards use of relatively similar TTB policies such as anti-dumping 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 2006–08 (see the grey lines in Figure 2), this mostly took place before the major global macroeconomic shocks of the Great Recession. Instead, increases coincided with a period of substantial appreciation of the Turkish lira. In contrast to other major emerging economies in the Group of 20 (G20), Turkey has had relatively less new TTB activity during 2009–11.[17] Nevertheless, the stock of Turkey's import products becoming impacted by Turkey's TTBs has continued to

[16] 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.

[17] Bown (2013), for example, reports that collective G20 emerging markets had TTB product coverage that was 13 per cent higher in 2011 than 2009, putting 2011 67 per cent higher than the pre-crisis (2007) levels.

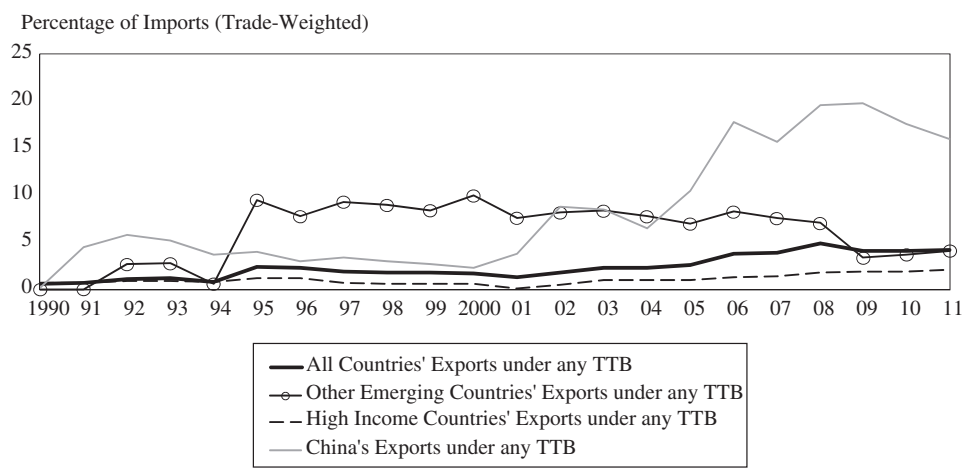
climb between 2009 and 2011 despite the reduced flow of industry requests for new TTBs. This continued growth in Turkey's share of imports impacted by TTBs is due to the failure to remove many of the previously imposed trade barriers under the basic guidelines provided by the WTO Agreements.

Finally, among the G20 emerging economies, 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).

(ii) Trading Partners Affected by Turkey's TTBs: Additional Implicit Discrimination?

Figure 3 presents a breakdown of the relative frequency with which trading partners are affected by Turkey's use of TTBs. From 2006–11, roughly 15–20 per cent of Turkey's imports from China each year were subject to some imposed TTB.[18] On the other hand, 4–7 per cent of Turkey's imports from all *other* emerging economies were subject to TTBs; the significant decline in 2008 was due to the removal of anti-dumping measures imposed since 1995 on steel billet imports from Russia, Ukraine and Moldova. Finally, only 1–2 per cent of imports from high-income trading partners were subject to TTBs.

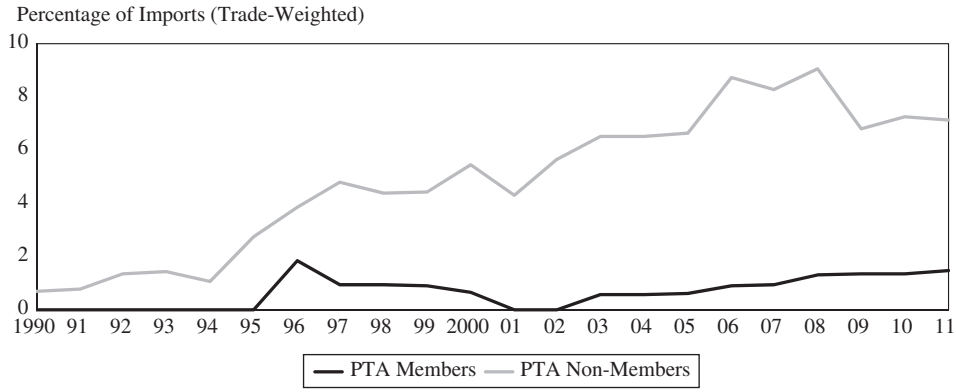
FIGURE 3
Trading Partners Affected by Turkey's Temporary Trade Barriers, 1990–2011, by Income Category



Sources: Bown (2013), Figure 1b. TTB, temporary trade barrier.

[18] Turkey is similar to India, Argentina, Brazil and most other emerging and high-income economy users of TTBs in that its TTBs disproportionately impact imports from China. Nevertheless, Turkey is at the high end of emerging economies 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 to TTBs (Bown, 2013; Table 1). In 2011, while 3.3 per cent of emerging economy imports from all sources were subject to a TTB, 10.8 per cent of their imports from China were subject to such import restrictions. This compares to 3.2 per cent of imports from high-income economies being subject to TTBs and only 1.6 per cent of imports from other emerging economies.

FIGURE 4
PTA Members and Non-members Affected by Turkey's Temporary Trade Barriers, 1990–2011



Source: Constructed by the author based on the import-share methodology in Bown (2011) from annual data in Bown (2012) matched to 6-digit harmonised system import data in UN Comtrade from WITS. PTA, preferential trade agreement.

Figure 4 differentiates 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 were subject to Turkey's TTBs than were 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 anti-dumping than PTA insiders.[19] 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. 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 Turkey's economic welfare suffers because consumers end up sourcing from relatively inefficient foreign suppliers.

(iii) 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 anti-dumping measures, 10 safeguard measures and one countervailing measure in effect at the end of 2011. Turkey applies TTBs to import products in a number of different industrial

[19] In their classification scheme of different PTAs, Prusa and Teh (2010) note that there are some rules associated with use of anti-dumping by the EU and Turkey in the Customs Union agreement. Nevertheless, the rules include items like information sharing, encouraging investigation outcomes through price undertakings as opposed to duties and extending the results of one jurisdiction's anti-dumping outcome against a third country to the other jurisdiction. The rules did not include a provision prohibiting the EU from using anti-dumping against Turkey or prohibiting Turkey from using anti-dumping against EU member states.

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.[20] Not surprisingly, four of the top 10 concern the global safeguards policy – a set of import restrictions that negatively affects multiple foreign export sources simultaneously.[21] 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 fibres, as well as 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.

A concern with the products and industries listed in Table 3 is that downstream competitiveness is suffering and could 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 inputs may make it more costly for Turkish firms to produce man-made fibres, thus making these firms less competitive. These fibre firms' newfound loss of competitiveness then spurs their demand for new import restrictions on fibres. But new import restrictions on fibres make it more costly for downstream Turkish firms that produce textiles and apparel. The textile and apparel firms' loss of competitiveness then spurs their demand for new restrictions on imports of textiles and apparel – that is, the increases in applied MFN and PTA tariffs documented earlier in Table 2.

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 fibres and yarns to textiles and apparel) may require a coordinated removal of the trade barriers so as to best neutralise 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.

[20] These are upper bounds to the true amount of impacted trade given that this is based on bilateral import data at the 6-digit harmonised 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.

[21] While a policy-imposing country like Turkey could replicate the outcome of a safeguard by imposing anti-dumping on the same product from multiple foreign sources simultaneously, in legal terms a different anti-dumping measure would be applied to firms from each country.

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	Anti-dumping 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	Anti-dumping on polyvinyl chloride (PVC) from United States	2001 (2003)	2008	202
7	Anti-dumping on yarn of man-made or synthetic or artificial staple fibres from India	2008 (2009)	2014	149
8	Anti-dumping on certain made-up textile articles and fabrics made of artificial or synthetics fibres from China	2009 (2010)	2015	118
9	Anti-dumping on mono ethylene glycol (MEG) from Kuwait	2008 (2010)	2015	110
10	Anti-dumping on polyester textured yarn from China	2007 (2008)	2013	93

Note:
Data on anti-dumping, 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).

(iv) The Duration Problem of Turkey's TTBs

Another concern for 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, anti-dumping 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 per cent (89 of the 127) of the anti-dumping measures that Turkey had in effect had been in place for longer than five years.[22] However, it is important to note that Turkey has not been universally unable to remove applied anti-dumping measures. On a trade-weighted basis, there was

[22] This phenomenon for Turkey is not necessarily endemic to the Great Recession or new. For an uncensored sample for a period ending in 2005, Cadot et al. (2007) find that, on average, Turkey's anti-dumping measures remained in effect for over seven years. Nor is this result limited to Turkey; Moore (2006), for example, provides an early assessment of the United States's difficulties in removing anti-dumping import restrictions despite the Sunset Review provisions introduced as a result of the Uruguay Round negotiations.

actually a sharp decline in the imports covered by TTBs in 2009 associated with Turkey's removal of anti-dumping barriers on steel billets from Russia, Ukraine and Moldova described earlier; these restrictions had been in effect since 1995 and covered a large share of imports. An open question is what made removal of this particularly sizeable set of import restrictions possible, even at the height of uncertainty with the global economic crisis, while other temporary barriers could not be removed.

Second, global safeguards are typically applied for three or four years, inclusive of a phase-out period in the run-up to their removal. In especially difficult circumstances, WTO rules permit the safeguard to be extended for another four 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 three years usually results in WTO members terminating that form of trade barrier at the end of three years. Nevertheless, as Table 4 indicates, Turkey had 13 imposed safeguard measures come up for termination during 2008–11, and nine were granted extensions. In many instances, the extensions led to a policy life that long exceeded four 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 – that is, the simple transfer of import products from under one type of TTB policy to another. For example, in January 2011, Turkey removed anti-dumping measures on imports of Polyethylene Terephthalate (PET) from seven countries (India, Thailand, South Korea, Malaysia, Indonesia, China and Taiwan) that had been in effect since 2006. By March 2011, Turkey

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	–

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

had initiated a global safeguard investigation on the 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 anti-dumping 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 anti-dumping measures – having 75 per cent of the Turkish import market by 2011 (WTO, 2012b, p. 7).

The sluggishness of Turkey's anti-dumping and safeguard removals raises potential concerns for policy design. For if the initial application of the policy is motivated on the grounds that negative macroeconomic shocks are a reasonable trigger for temporary application of new import protection, a still open question is whether there is a 'symmetric' effect that removals of previously applied temporary trade barriers should increasingly take place as macroeconomic conditions improved. The anecdotal evidence suggests that this has not necessarily been taking place, at least with respect to Turkey's improving macroeconomic conditions during 2010–11.

4. TRADING PARTNERS' POTENTIAL IMPACT ON TURKEY'S USE OF FLEXIBILITIES

Trading partners could also influence Turkey use of trade policy flexibilities. This section examines three possible channels through which trading partners can affect Turkey's use of flexibilities: Turkey's current account imbalance, retaliatory use motivated by Turkey's exporters being targeted abroad; and the response to trading partners that have filed formal WTO dispute settlement challenges.

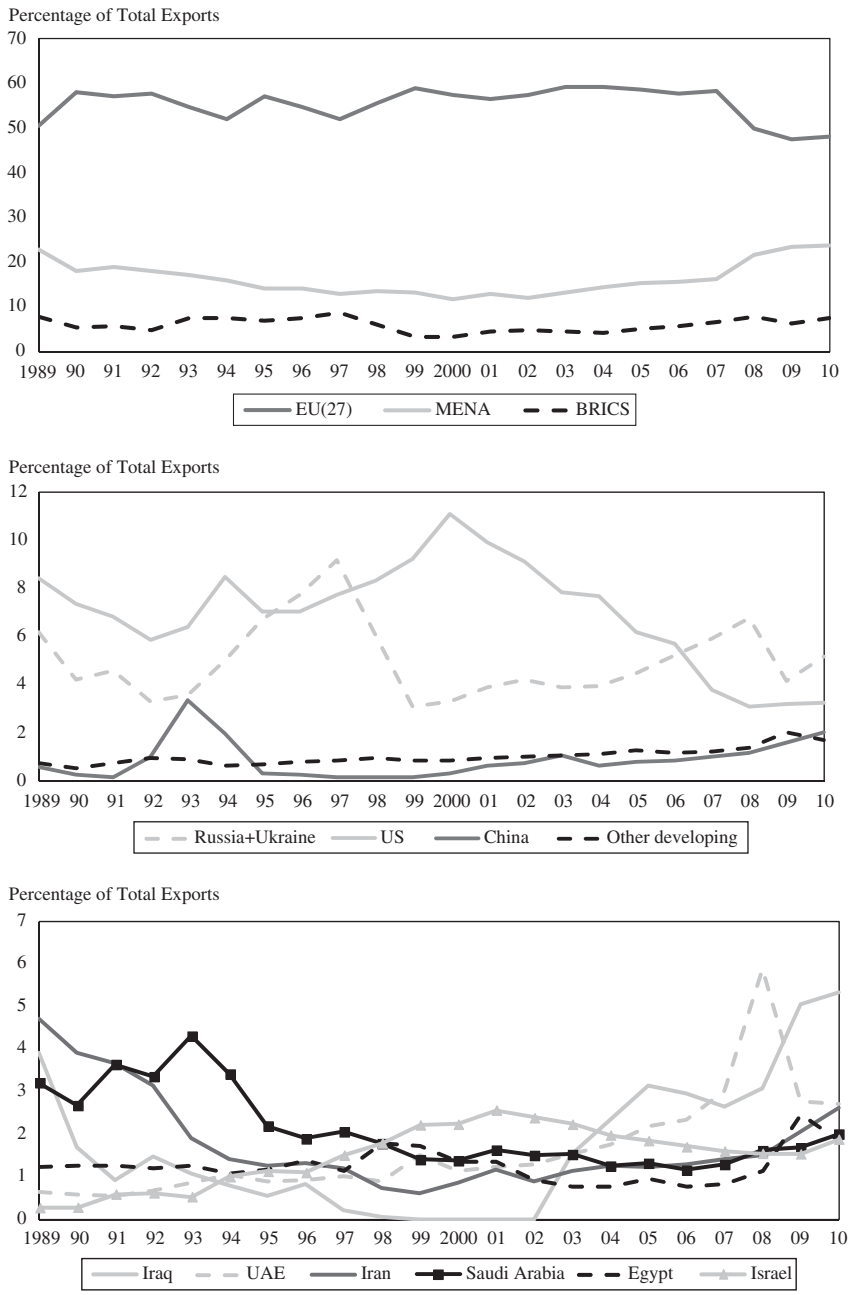
a. Turkey's Current Account Imbalance

Turkey's substantial current account imbalance is a potential macroeconomic contributor to its use of 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 EU 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 to 59 per cent of Turkey's exports each year went to the EU. This share increased slightly, although not remarkably, after formation of the free trade agreement in the mid-1990s. However, the Great Recession beginning in 2008 resulted in a substantial change to the pattern of Turkey's exports. The share of Turkey's total exports that were destined for export to the EU fell by a full 10 percentage points from 58 per cent in 2007 to 48 per cent by the end of 2010.

The explanation for the rapid de-emphasis of the EU 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 each of the instances in which the Global Trade Alert has identified an EU trade policy change that was 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

FIGURE 5
Turkey's Key Export Markets, 1989–2010



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

TABLE 5
Turkey's Export Products Affected by Changes to EU Trade Policy, 2009–12[a]

Exported Product	*Year*	*EU Trade Policy Change*	*Estimate of EU Imports from Turkey (Millions 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[b]	Negligible
	Mar 2011	Temporary suspension of import tariffs for an exceptional tariff quota of sugar[b]	Negligible
Cereals	Feb 2011	Temporary suspension of customs duties on certain cereal products for the 2010/2011 marketing year[b]	60.7
	Mar 2011	Suspension of import duties for certain products in the cereals sector[b]	77.9
Welded tubes and pipes	Sep 2009	Termination of anti-dumping investigation on welded tubes and pipes from Ukraine, Belarus and Turkey[b]	445.5
	Mar 2012	Initiation of anti-dumping investigation on welded tubes and pipes from Ukraine, Macedonia and Turkey	167.1
Pipe and tube fittings	Nov 2011	Initiation of anti-dumping investigation on certain tube and pipe fittings from Russia and Turkey	10.4

Notes:
(i) [a] Through 30 March 2012.
(ii) [b] Indicates trade liberalisation of import-restricting policy.

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.

products (pipes and tubes) affecting up to $100 million of Turkey's exports to the EU.[23] Second, a number of listed policy changes involve the EU liberalising its policy – for example, the termination or suspension of import duties, the termination of anti-dumping investigations

[23] 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.

without the imposition of a trade barrier, etc. Indeed, the largest amount of estimated trade impacted is associated with the conclusion of an EU anti-dumping investigation in 2009 that resulted in no new trade barriers being imposed.

Instead, macroeconomic conditions abroad are the more likely culprit for the rapidly declining share of Turkey's total exports being sent to the EU. 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 affected Turkey since the EU is such a large destination market for its exports. A second contributing explanation 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 towards some of these economies since 2010 (see again Figure 1b).

Consider the other panels of 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 –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 per cent. The lowest panel of Figure 5 illustrates Turkey's substantial export growth to Iraq, especially since 2002. On the other hand, Turkey has had relatively less success in exporting to China and the other major emerging economies.

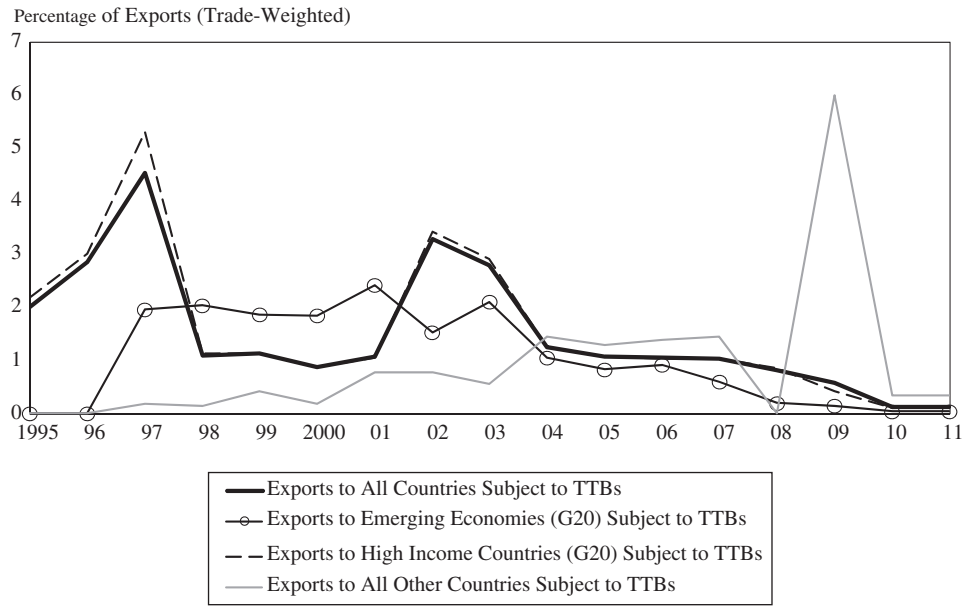
b. Are Trading Partners Using Their Flexibilities to Impact Turkey's Exports?

A second potential explanation for Turkey's TTB use is that they are applied in retaliation for Turkey's exporters being targeted with TTBs abroad. However, the data for Turkey indicate clearly that foreign trade barriers such as anti-dumping and other TTBs were not major causes of concern for Turkey's exporters and were thus not a likely major influence on Turkey's own use of such flexibilities towards its own imports during this period. As Figure 6 illustrates, by 2011, roughly one-tenth of one per cent of Turkey's exports were subject to these forms of trade barriers. This is quite different when compared to other emerging economies like China. And whereas Figure 6 illustrates that Turkey's exporters were rightly concerned about foreign anti-dumping use in the late-1990s when up to 5 per cent 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 anti-dumping 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 anti-dumping actions affected a very small amount of Turkey's exports. Furthermore, the EU has not had any anti-dumping measures applied against Turkey's exports since 2009.[24] 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, 2013c) regarding how such policies are applied – that is, trading partners typically impose such import restrictions against

[24] However, the EU initiated one anti-dumping 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.

FIGURE 6
Trading Partners' Temporary Trade Barriers against Turkey's Exports, 1995–2011



Note:
High-income G20 economies include Australia, Canada, EU, 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.

Source: Bown (2013, Figure 2).

exporters with weak (or depreciating) currencies, not strong local currencies like Turkey's exporters have confronted during this period.

c. 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 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.[25] Table 7 identifies Turkey's formal involvement in WTO dispute settlement proceedings as a complainant and respondent during 1995–2012.

Turkey has been a respondent in nine different WTO disputes, many of which have been filed by other emerging economies, including India, Thailand, Brazil and Ecuador. It is quite

[25] Interestingly, and perhaps related to India's initiation of formal dispute settlement 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.

TABLE 6
Turkey's Exports Affected by Foreign Anti-dumping in Effect in 2011

Trading Partner (Imposition Year)	*Product*	*Anti-Dumping Measure*	*Estimated Exports (Millions of US $)*
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	25.6%	–
South Africa (1999)	Acrylic blankets	Specific duty	–
Ukraine (2008)	Refrigerators and freezers	–	–
US (1986)	Welded carbon steel pipe and tube	1.3–23.1%	–
US (1996)	Pasta	60.9–63.3%	15.1
US (2008)	Light-walled rectangular pipe and tube	27.0–41.7%	19.9

Notes:
(i) Data on anti-dumping 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.
(ii) '–' indicates the data were missing or not available.

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 (i) the frequency with which anti-dumping and safeguards are challenged through formal dispute settlement overall at the WTO, (ii) Turkey's TTBs negatively impact a substantial amount of foreign exports of other WTO members, (iii) the higher frequency with which Turkey applies such TTBs relative to application by most all other WTO members, and (iv) the frequency with which Turkey imposes such TTBs on imports from other developing countries, as developing countries have continued to use WTO dispute settlement (including against other developing countries) to regain lost export access to foreign markets.[26] 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.

Finally, while Table 7 also reveals that Turkey has little experience as a complainant in WTO disputes – having filed only two cases on behalf of its exporters since 1995 – Turkey has formally engaged in thirty disputes as an interested third party during this period, covering many different policy and topic areas, including anti-dumping and safeguards.

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 regard to its

[26] 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.

TABLE 7
Turkey as Complainant and Respondent in Formal WTO Disputes, 1995–2012

WTO Dispute	*Respondent*	*Complainant*	*Issue under Dispute*	*Year Initiated, Resolution*
Turkey as respondent				
DS29	Turkey	Hong Kong	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, anti-dumping 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

Note:
Turkey also participated in thirty additional disputes during this period as an interested third party.

Source: Compiled by the author from the WTO website.

trade policy. Turkey's economy managed a remarkable recovery after the major initial negative shock to real GDP growth and increase in unemployment, and Turkey's policymakers 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 from trends in the data from 2008 to 2011 on Turkey's trade policy flexibilities, exercised through changes to its applied tariffs and use of anti-dumping, safeguards and other TTB policies.

With respect to trade policy towards 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 per cent of Turkey's manufacturing imports. Newly available data from the World Bank's *Temporary Trade Barriers Database* indicate Turkey's anti-dumping and safeguards in effect by 2011 are estimated to impact another 4–6 per cent 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, they do contravene some of the effectiveness of Turkey's relatively low applied import tariffs.

There are a number of particular concerns with Turkey's use of anti-dumping and safeguards. First, policymakers are frequently extending the duration of imposed anti-dumping 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, fibres 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 favour 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 do governments access flexibilities for some products but not others? Furthermore, why is one policy instrument chosen 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 anti-dumping? What is the impact of WTO dispute settlement and the evolving DSU jurisprudence regarding trade policy flexibilities on how policymakers access these policies?

Some of these questions may be only relevant for Turkey, given its unique relationship with the EU. Nevertheless, some questions have broader applicability – that is, to other countries involved in a free trade agreement or customs union, and to other developing economies considering the implications of different layers, types and depths of trade agreement commitments. Finally, improved understanding of the use of trade policy flexibilities, including the identification of potential limits to cooperative trade policy, may also have important implications for trade agreement design.

REFERENCES

Bagwell, K. and R. W. Staiger (1990), 'A Theory of Managed Trade', *American Economic Review*, **80**, 4, 779–95.

Bagwell, K. and R. W. Staiger (1999), 'An Economic Theory of GATT', *American Economic Review*, **89**, 1, 215–48.

Bagwell, K. and R. W. Staiger (2005), 'Enforcement, Private Political Pressure, and the General Agreement on Tariffs and Trade/World Trade Organization Escape Clause', *Journal of Legal Studies*, **34**, 2, 471–513.

Bagwell, K. and R. W. Staiger (2011), 'What Do Trade Negotiators Negotiate About? Empirical Evidence from the World Trade Organization', *American Economic Review*, **101**, 4, 1238–73.

Beshkar, M., E. Bond and Y. Rho (2012), 'Tariff Binding and Overhang: Theory and Evidence', Vanderbilt University Mimeo.

Bown, C. P. (2011), 'Taking Stock of Antidumping, Safeguards and Countervailing Duties, 1990–2009', *The World Economy*, **34**, 12, 1955–98.

Bown, C. P. (2012), *Temporary Trade Barriers Database* (Washington, DC: The World Bank). Available at: http://econ.worldbank.org/ttbd/ (accessed 30 May 2013).
Bown, C. P. (2013), 'Emerging Economies and the Emergence of South-South Protectionism', *Journal of World Trade*, **47**, 1, 1–44.
Bown, C. P. and M. A. Crowley (2013a), 'Self-enforcing Trade Agreements: Evidence from Time-varying Trade Policy', *American Economic Review*, **103**, 2, 1071–90.
Bown, C. P. and M. A. Crowley (2013b), 'Import Protection, Business Cycles, and Exchange Rates: Evidence from the Great Recession', *Journal of International Economics*, **90**, 1, 50–64.
Bown, C. P. and M. A. Crowley (2013c), 'Emerging Economies, Trade Policy, and Macroeconomic Shocks', Policy Research Working Paper No. 6315 (Washington, DC: World Bank).
Bown, C. P. and R. McCulloch (2010), 'Developing Countries, Dispute Settlement, and the Advisory Centre on WTO Law', *Journal of International Trade and Economic Development*, **19**, 1, 33–63.
Broda, C., N. Limão and D. E. Weinstein (2008), 'Optimal Tariffs and Market Power: The Evidence', *American Economic Review*, **98**, 5, 2032–65.
Cadot, O., J. de Melo and B. Tumurchudur (2007), 'Anti-dumping Sunset Reviews: The Uneven Reach of WTO Disciplines', CEPR Working Paper No. 6502 (London: CEPR).
Francois, J. F. and W. Martin (2004), 'Commercial Policy Variability, Bindings, and Market Access', *European Economic Review*, **48**, 3, 665–79.
Handley, K. and N. Limão (2012), 'Trade and Investment under Policy Uncertainty: Theory and Firm Evidence', Working Paper No. 17790 (Cambridge, MA: NBER).
Hoekman, B. M. and M. P. Leidy (1992), 'Cascading Contingent Protection', *European Economic Review*, **36**, 4, 883–92.
Hoekman, B. M. and S. Togan (eds.) (2005), *Turkey: Economic Reform and Accession to the European Union* (Washington, DC: The World Bank and CEPR).
Karacaovali, B. (2011), 'Turkey: Temporary Trade Barriers as Resistance to Trade Liberalisation with the European Union?', in C. P. Bown (ed.), *The Great Recession and Import Protection: The Role of Temporary Trade Barriers* (London, UK: CEPR and World Bank), 367–410.
Kee, H. L., A. Nicita and M. Olarreaga (2009), 'Estimating Trade Restrictiveness Indices', *The Economic Journal*, **119**, 534, 172–99.
Kee, H. L., C. Neagu and A. Nicita (2013), 'Is Protectionism on the Rise? Assessing National Trade Policies During the Crisis of 2008', *The Review of Economics and Statistics*, **95**, 1, 342–46.
Knetter, M. M. and T. J. Prusa (2003), 'Macroeconomic Factors and Antidumping Filings: Evidence from Four Countries', *Journal of International Economics*, **61**, 1, 1–17.
Limão, N. and P. Tovar (2011), 'Policy Choice: Theory and Evidence from Commitment via International Trade Agreements', *Journal of International Economics*, **85**, 2, 186–205.
Maggi, G. and A. Rodriguez-Clare (1998), 'The Value of Trade Agreements in the Presence of Political Pressures', *Journal of Political Economy*, **106**, 2, 574–601.
Maggi, G. and A. Rodriguez-Clare (2007), 'A Political-Economy Theory of Trade Agreements', *American Economic Review*, **97**, 4, 1374–406.
Mavroidis, P. C., P. A. Messerlin and J. M. Wauters (2008), *The Law and Economics of Contingent Protection in the WTO* (Cheltenham: Edward Elgar).
Moore, M. O. (2006), 'An Econometric Analysis of US Antidumping Sunset Review Decisions', *Weltwirtschaftliches Archiv*, **142**, 1, 122–50.
Prusa, T. J. and R. Teh (2010), 'Protection Reduction and Diversion: PTAs and the Incidence of Antidumping Disputes', Working Paper No. 16276 (Cambridge, MA: NBER).
Sykes, A. O. (2003), 'The Safeguards Mess: A Critique of WTO Jurisprudence', *World Trade Review*, **2**, 3, 261–95.
Togan, S. (2010), 'Turkey — Trade Policy Review 2007', *The World Economy*, **33**, 11, 1339–89.
Vandenbussche, H. and C. Viegelahn (2011), 'European Union: No Protectionist Surprises', in C. P. Bown (ed.), *The Great Recession and Import Protection: The Role of Temporary Trade Barriers* (London: CEPR and World Bank), 85–129.
Viner, J. (1950), *The Customs Union Issue* (New York: Carnegie Endowment for International Peace).
World Bank (2008), *World Trade Indicators* (Washington, DC: The World Bank). Available at: http://www.worldbank.org/wti/ (accessed 30 May 2013).

World Bank (2010), 'Turkey Trade Brief', *World Trade Indicators 2009/10: Country Trade Briefs* (Washington, DC: The World Bank). Available at: http://www.worldbank.org/wti/ (accessed 30 May 2013).
WTO (2008), *World Tariff Profiles 2008* (Geneva: World Trade Organization, International Trade Centre and United Nations).
WTO (2009), *World Tariff Profiles 2009* (Geneva: World Trade Organization, International Trade Centre and United Nations).
WTO (2012a), 'Trade Policy Review: Report by the Secretariat: Turkey', WT/TPR/S/259, Available at: http://www.wto.org/english/tratop_e/tpr_e/tp359_e.htm (accessed 17 January 2012).
WTO (2012b), 'Notification Under Article 12.1 (B) of the Agreement on Safeguards on Finding a Serious Injury or Threat Thereof Caused By Increased Imports: Turkey (Polyethylene terephthalate)', G/SG/N/8/TUR/13, 24 June.