

17-11 Will the Proposed US Border Tax Provoke WTO Retaliation from Trading Partners?

Chad P. Bown
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Chad P. Bown is senior fellow at the Peterson Institute for International Economics. He thanks William Cline, Caroline Freund, Gary Hufbauer, Junie Joseph, Petros Mavroidis, and Steve Weisman for helpful discussions and comments.

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President Donald Trump and his Republican allies in Congress are proposing major reforms to the US corporate tax system that would slash the corporate income tax rate and replace lost revenues with a new destination-based cash flow tax (DBCFT).¹ The new tax would include a border tax adjustment that would subject US imports to the tax and exempt US exports. A third and critical element of the plan is a provision allowing US producers to deduct domestic wage costs in a manner not available to foreign companies.

A major economic concern with the border tax adjustment blueprint, which House Speaker Paul Ryan and House Ways and Means Committee Chair Kevin Brady support, is its potential to reduce US imports and promote US exports in a way that could violate international trade rules. Because of the size of the US economy, the trade distortions resulting from the tax would punish US trading partners, putting pressure on them to retaliate immediately.

World Trade Organization (WTO) rules establish a framework for understanding how the policy response of

trading partners to a US tax reform would proceed. The potential retaliatory costs to US exporters associated with elements of the Ryan-Brady blueprint could be large. If the reform is found to violate WTO rules by restricting US imports, trading partners could be authorized to retaliate by an estimated \$220 billion annually. If the new US tax is found to implicitly subsidize exports, partners could be authorized to retaliate by an additional \$165 billion annually. The United States would face some of the combined \$385 billion in retaliation almost immediately upon implementing the tax, through the imposition of countervailing duties (CVDs) by trading partners. Whereas a country like the United States might typically have four or more years before facing the prospect of WTO-related retaliation in other cases, the scenario here may be very different.

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The expected costs of US failure to consider its WTO obligations are so large that policymakers must take them into account as they draft the tax reform. If they do not, trading partner recourse to WTO-sanctioned trade retaliation may quickly create the need for additional US efforts to re-reform the tax code. The uncertainty created could counteract many of the otherwise positive anticipated effects of tax reform for economic growth.

Most of these costs are likely avoidable if US policymakers address them at the design stage of tax reform and engage with key trading partners. Strong legal and economic arguments can probably be made that a DBCFT with a (nondiscriminatory) border tax adjustment is WTO-consistent. If, however, US policymakers are unwilling to address international concerns before legislating changes, independent “scoring” efforts should take into account the expected costs to the US economy of authorizable trading partner retaliation.

1. For the Ryan-Brady blueprint, see Ways and Means Committee (2016).

THE DESTINATION-BASED CASH FLOW TAX, BORDER TAX ADJUSTMENT, AND WTO LEGAL OBLIGATIONS

Under the WTO, the United States, along with more than 160 other countries, has committed itself to certain norms of policy behavior. The United States was an architect of the WTO system that includes provisions to protect members from backdoor trade discrimination. Loss of market access can arise through many channels, including through domestic tax and regulatory policies.

The United States has always had considerable leeway over implementation of its domestic tax system under the WTO, as well as under the 1947 General Agreement on Tariffs and Trade (GATT) that preceded it. The main constraint is that domestic systems not violate the basic rules on “National Treatment on Internal Taxation and Regulation” (GATT Article III). National treatment mandates that once importers of a good have paid its tariff to get across a border, the good should be treated like a domestically produced good in terms of any additional taxes or regulations. If the imported good ends up subject to additional taxes or regulations that domestically produced good do not face, there is discrimination and an inconsistency with Article III.

A DBCFT is similar to a value-added tax (VAT). Both are designed to tax at the point of “destination” or consumption.² An idealized VAT is nondiscriminatory, in that it applies to all goods consumed within national boundaries, regardless of the origin of production.

Border tax adjustments are typically part of VAT schemes. They are not discriminatory as long as the adjustment leaves like goods in the destination country paying the same tax rate, irrespective of the country of origin.

Current US political rhetoric³ makes one set of issues worth clarifying. A border tax adjustment is not a trade policy, an import tariff, or an export subsidy. It does not reduce imports, promote exports, or affect national competitiveness. In a typical VAT regime, a border tax adjustment does not violate Article III provisions on national treatment.

2. This analysis follows the economic arguments laid out in Freund (2017).

3. In a recent interview with the *Financial Times*, Peter Navarro, the head of President Trump’s new White House National Trade Council, is quoted as stating: “The unequal treatment of the US income tax system under biased WTO rules is a grossly unfair subsidy to foreigners exporting to the US and a backdoor tariff on American exports to the world that kills American jobs and drives American factories offshore. . . . President Trump promised during the campaign he would put an end to this unfair treatment of our income tax, and the House [Ryan-Brady] border adjustable proposal offers one possible option among several” (Shawn Donnan, “Trump’s top trade adviser accuses Germany of currency exploitation,” *Financial Times*, January 31, 2017).

As Freund (2017) illustrates, a VAT has neutral economic effects; it cascades through the production chain, leaving imported products facing the same tax rate as domestically produced like goods. This equivalence for destination-based taxes holds regardless of how important imported intermediate inputs are in domestically produced goods (i.e., regardless of how integrated a US producer is in global supply chains).⁴

In principle, a border tax adjustment in a DBCFT scheme could be designed not to have discriminatory trade effects. But the Ryan-Brady plan contains a provision that allows companies that produce goods in the United States, but not abroad, to deduct wage costs from the DBCFT.⁵ This feature would have a discriminatory effect on trade flows, at least in the short run, before exchange rates and prices fully adjusted to the new tax. Freund (2017) identifies how the wage deduction component of the DBCFT creates differential tax rates across firms.⁶

The main economic issues are thus (1) what (discrimination) arises during this short-run period, in which there is a substantial disruption to real economic activity and trade flows, as tax reform–induced price adjustments work their way through the economy, and (2) how long the short-run period lasts.⁷ At one extreme is the rosy scenario arising in theoretical models: Exchange rates and prices adjust immediately, and real economic activity is not affected even in the short run.⁸ The analysis in this Policy Brief examines the alternative: the case in which adjustment is not immediate.

4. Arguments over the long-run nondiscriminatory nature of border tax adjustments under VAT regimes have a long intellectual history (see Johnson and Krauss 1970, Grossman 1980, and Feldstein and Krugman 1990). Cline (2017) takes an alternative view, arguing that the Ryan-Brady DBCFT is likely to have protectionist effects even in the long run.

5. Auerbach and Holtz-Eakin (2016) argue that the DBCFT in the Ryan-Brady plan is economically equivalent to a VAT with a payroll subsidy.

6. There are other questions concerning the full equivalence between a DBCFT and a uniform VAT. Auerbach et al. (2017, 19), for example, argue that “equivalence is unlikely to hold, for instance, if there is a large untaxed sector, or significant variation in business tax rates across sectors, or in respect of real-world VATs for which rate differentiation is commonly extensive. The wider political economy of taxation clearly plays a role here. Nor does the result hold with imperfect competition.”

7. In their cross-country empirical study of national implementation (or changes in) VAT regimes, Freund and Gagnon (2017) find that prices adjust in the long run via changes in the real exchange rate and that there are no long-run trade distortions, at least as measured by changes in the trade balance.

8. See, for example, Auerbach and Holtz-Eakin (2016), Auerbach et al. (2017), and Feldstein (2017) for the broad neutrality arguments of the DBCFT.

The antidiscrimination provisions of GATT Article III are the most important international legal-economic concern. However, legal scholars have noted other potential problems with a cash flow tax when viewed through the lens of GATT/WTO law and jurisprudence.⁹ Although the GATT/WTO has permitted border adjustments for product-specific taxes, such as a VAT, it has taken issue with border adjustments for income taxes. It is therefore possible for the WTO to reject a DBCFT by finding that it is an income tax. That discussion is put to the side here. The emphasis is on whether other economic concerns would arise even if proponents could convince the WTO that the DBCFT is consistent with earlier jurisprudence—by, say, convincing it that the DBCFT is similar to a subtraction-method VAT.

There are three broad motivations for using economic considerations to focus on WTO implications of the Ryan-Brady plan. First, independent of whether the DBCFT is an income or product tax under prior GATT/WTO law, the deduction for domestic (but not foreign) wage costs could end up having discriminatory trade effects and interpreted as a violation of GATT Article III on national treatment.

Second, even if a general DBCFT is permissible, trading partners may still subject the Ryan-Brady plan to a viable WTO legal challenge under the option WTO members retain of filing a nonviolation nullification or impairment (NVNI) claim under GATT Article XXIII: 1(b).¹⁰ This provision allows countries to bring disputes forward even if no specific GATT Articles have been violated.¹¹ While NVNI

disputes are relatively rare and are certainly more difficult to win, trading partners may resort to such a complementary approach if all else fails, especially if they suffer large economic losses arising through trade channels.

Third, US policymakers need to understand the potential costs of the policy if a pure GATT/WTO legal construct were to strike down the DBCFT. The WTO typically utilizes estimates of trade distortions arising from a policy to establish the level of compensatory retaliation.

ECONOMIC COSTS TO THE UNITED STATES OF A DESTINATION-BASED CASH FLOW TAX THAT VIOLATES WTO PROVISIONS

Retaliation by trading partners may arise through two channels: WTO dispute settlement and the use of CVDs. This section considers each.

The WTO Dispute Settlement Process

When one country files a WTO complaint against another, the WTO establishes a panel to consider each side's legal arguments. The panel then issues a ruling. Many panel reports are appealed to the WTO's standing Appellate Body. If the panel rules that the policy violates the WTO and the ruling is upheld on appeal, the country has a "reasonable period of time" to bring the policy into compliance. Only if it fails to act or the WTO finds that the revised tax continues to violate WTO rules can trading partners seek compensation in the form of trade retaliation.

Authorization of retaliation arising from a WTO dispute can take four or more years from the time the tax reform was implemented.¹² Even at the stage at which retaliation is implemented, the WTO does not mandate that the country rescind a WTO-illegal policy. Countries can choose to suffer the costs of trading partner retaliation rather than reform a WTO-illegal policy.¹³

Since the dispute settlement mechanism was implemented, in 1995, WTO member countries have brought more than 500 formal legal challenges to trading partner policies under its provisions. The United States has been

9. Hufbauer and Lu (2017) provide an extensive discussion of these legal issues. See also Joel P. Trachtman, "The International Aspects of the Republican Tax Plan (Probably) Violate WTO Law," IELP Blog, December 1, 2016 (<http://worldtradelaw.typepad.com/ielpblog/2016/12/the-international-aspects-of-the-republican-35-international-tax-plan-probably-violate-wto-law.html>).

10. See, in particular, Staiger and Sykes (2013) and the NVNI language in the original GATT 1947's Article XXIII:

"1. If any contracting party should consider that any benefit accruing to it directly or indirectly under this Agreement is being nullified or impaired or that the attainment of any objective of the Agreement is being impeded as the result of (a) the failure of another contracting party to carry out its obligations under this Agreement, or (b) the application by another contracting party of *any measure, whether or not it conflicts with the provisions of this Agreement, or* (c) the existence of any other situation, the contracting party may [have recourse to the dispute resolution process]" (emphasis added).

11. The canonical motivation for NVNI derives from the basic result from economic theory that any import tariff can be replicated by the combination of a domestic consumption tax and domestic production subsidy, two policies that—if applied generally—are permitted under the WTO. One way to prevent countries from eroding the market access rights implied by their import tariff reductions negotiated and

bound under the GATT without imposing excessively stringent discipline on domestic policies (e.g., consumption taxes and production subsidies) was to allow for trading partners to retain access to NVNI complaints.

12. Horn, Johannesson, and Mavroidis (2011, table 22) show the average length of time that disputes taking place between 1995 and 2010 spent at each phase of the WTO's full dispute resolution process.

13. Because it was politically unable to bring its ban on hormone-treated beef into compliance with WTO rulings, for example, for many years the European Union simply lived with the costs of US retaliation (Johnson 2015).

one of the system's biggest participants: It has brought more than 100 cases and served as the defendant in more than 100 disputes. It is involved in many disputes simply because it is a major player in international commerce (as Bown and Reynolds 2015 show, formal litigants in WTO trade disputes tend to be the countries with a lot of trade at stake in the disputed products).

Most WTO disputes are resolved without requiring exhaustion of the legal process. Hundreds of cases have received formal legal decisions, but only 13 disputes have reached the "Article 22.6" phase of the WTO process.¹⁴ The Article 22.6 process establishes an upper limit on how much

Retaliation by trading partners may arise through two channels: WTO dispute settlement and the use of countervailing duties.

the complaining country is authorized to retaliate at the end of a dispute. The complaining country is then relatively free to choose how to implement the authorized retaliation (e.g., what products to target with its retaliatory tariffs).

Table 1 documents the 13 disputes in which the WTO set retaliation limits. The United States was involved in two as a complainant country and seven as a respondent. The WTO dispute with the largest authorized retaliation was the *US-FSC* (Foreign Sales Corporation) dispute, in which the European Union was permitted to retaliate against \$4 billion in annual US exports. The smallest authorized retaliation was the *EC-Hormones* dispute, which Canada litigated over the European Union's limits to Canadian exports of hormone-treated beef. It authorized Canada to retaliate by restricting EU exports by C\$11 million annually. The most recent case involved the challenge by Canada and Mexico of the United States' country of origin labeling (COOL) regulation for beef and pork products. The WTO ultimately authorized Canada and Mexico to retaliate by roughly \$1 billion a year.¹⁵

14. There are even fewer WTO disputes in which retaliation was authorized and implemented. For example, in the recent *US-COOL* dispute, the WTO established the retaliation limit, but the United States repealed the disputed policy and the case ended before Canada and Mexico could implement the retaliation (Bown and Brewster forthcoming). Other examples in which retaliation was authorized but not implemented include *US-Gambling* and *EC-Bananas III (Ecuador)*. In *US-Upland Cotton*, Brazil was authorized to retaliate, but the United States staved off retaliation by sending a direct financial transfer to Brazil instead. Bown and Pauwelyn (2010) present an interdisciplinary volume of collected research on the first 10 WTO retaliation episodes listed in table 1.

15. In a trade dispute that Mexico brought against the United

Retaliation If a Border Tax Adjustment Is Deemed an Import-Restricting Violation of National Treatment

More than half of the disputes in table 1 involved some type of import restriction. Examples include the inappropriate application of a trade policy directly (such as the quantitative restrictions of the *EC-Bananas III* or *EC-Hormones* disputes¹⁶) as well as domestic regulations that distort trade (such as the illegal US consumer product labeling issue in *US-COOL*).

The WTO has developed a "trade effects" formula to determine the amount by which trading partners are permitted to retaliate after disputes involving WTO-illegal import restrictions. The formula takes the difference in export revenue between an unobserved (counterfactual) state of the world (in which the importing country imposed a WTO-legal policy) and the real world (in which the country imposed a WTO-illegal policy that is the subject of the dispute).¹⁷ That lost export revenue then establishes the upper limit to the value of imports that the complaining country is subsequently permitted to eliminate through its tariff retaliation. Put differently, the WTO establishes a value of trade that the trading partner is equivalently allowed to eliminate as "compensation" at the end of a dispute if the respondent country refuses to reform its policy.

If the WTO finds that the US border tax adjustment violates national treatment by discriminating against imports, how might it apply the trade effects formula in establishing the level of trading partner retaliation? The WTO requires two pieces of information to implement the formula.¹⁸ The first is the counterfactual level of US imports (i.e., the level of US imports had the WTO-illegal policy not been imposed).

States in a separate NAFTA forum over Mexican trucking services exports, a NAFTA panel authorized Mexico to retaliate by eliminating \$2.4 billion of US exports annually beginning in 2009 (US Department of Commerce 2011). The retaliation remained in effect until 2011, when the United States introduced a program allowing Mexican trucks to operate in the United States, at which point Mexico phased out the retaliation.

16. The EC import ban on hormone-treated beef is essentially a quantitative restriction in which the quantity of permitted imports is zero.

17. For a more expansive discussion of the implementation of trade effects formulas, see Bown and Ruta (2010). For its implementation in the *US-COOL* dispute, see Bown and Brewster (forthcoming).

18. In actual WTO disputes, as opposed to prospective analysis undertaken here, the opposite takes place. I.e., the "real world" level of trade is observed after a WTO-illegal policy has been imposed, and the counterfactual level of trade requires estimating in actual Article 22.6 calculations, as it is the level of trade that would have arisen had a WTO-legal policy been in place during the period under dispute.

Table 1 WTO disputes reaching the stage of Article 22.6 retaliation determination

Year of report	Number	Dispute/complainant	Award by WTO arbitrators
1999	DS27	<i>EC–Bananas III</i> (United States)	US\$191.4 million
1999	DS26	<i>EC–Hormones</i> (United States)	US\$116.8 million
1999	DS48	<i>EC–Hormones</i> (Canada)	C\$11.3 million
2000	DS27	<i>EC–Bananas III</i> (Ecuador)	US\$201.6 million
2000	DS46	<i>Brazil–Aircraft</i> (Canada)	US\$344.2 million
2002	DS108	<i>US–FSC</i> (European Community)	US\$4.043 billion
2003	DS222	<i>Canada–Aircraft Credits and Guarantees</i> (Brazil)	C\$247.797 million
2004	DS136	<i>US–1916 Act</i> (European Community)	No specific amount but related to size of any potential damage payments EC firms have to pay arising under the 1916 Antidumping Act
2004	DS217	<i>US–Offset Act (Byrd Amendment)</i> (Brazil, Canada, Chile, EC, India, Japan, Korea, Mexico)	72 percent of the value of payments made the previous year under the Continued Dumping and Subsidy Offset Act of 2000
2007	DS285	<i>US–Gambling</i> (Antigua and Barbuda)	US\$21 million
2009	DS267	<i>US–Upland Cotton</i> (Brazil)	Annual formula computed and applied based on size of continued US subsidy
2015	DS384	<i>US–COOL</i> (Canada)	C\$1.054 billion (roughly US\$805 million)
2015	DS386	<i>US–COOL</i> (Mexico)	US\$227.758 million

FSC = foreign sales corporations; COOL = country of origin labeling

Source: Bown and Brewster (forthcoming).

Here the counterfactual is taken to be US goods imports in 2016, or \$2.2 trillion.¹⁹

The second is US imports with the WTO-illegal policy in place. As the border tax adjustment policy has not yet been implemented, an estimate is needed. The approach here is to showcase the main insights by providing a transparent, but back-of-the-envelope, estimate that requires only a few assumptions and economic parameters. The first involves the likely features of the policy under the Ryan-Brady plan. The second are economic assumptions that affect the impact on trade flows.

Suppose the United States imposes a 20 percent border tax adjustment and the WTO finds that it violates national treatment by allowing domestic but not foreign producers to deduct wage costs. For ease of exposition, suppose that the US wage costs eligible for deduction are about 50 percent of total costs and that the resulting trade-distorting effect in the short run is equivalent to a 10 percent import tax.²⁰

19. This analysis ignores the possibility that the border tax adjustment might also distort US imports and exports of services. There is a legal question as to the extent to which a border tax adjustment would be subject to WTO rules over services arising under the General Agreement on Trade in Services (GATS); for a discussion, see Hufbauer and Lu (2017).

20. Lawrence (2015) documents the declining labor share in recent years. He finds the labor share in US value added to have been 52 percent in 2011. The 50 percent share is likely a conservative estimate; Cline (2017) suggests 70 percent.

Establishing the impact of a newly imposed 10 percent import tax on trade flows then requires an estimate of the trade elasticity with respect to tariffs, which is assumed to be 1.²¹ With an elasticity of 1, a 10 percent import tax would eliminate 10 percent of US imports, or \$220 billion annually, from the initial level of \$2.2 trillion.

The trade effects formula would suggest that trading partners could be authorized collectively to retaliate by eliminating up to \$220 billion of US exports—more than 50 times the size of the largest previous case.²² And while making adjustments to the assumptions and elasticities would affect the size of the total level of retaliation, there are no reasonable assumptions that would yield retaliation limited to \$4 billion—i.e., the largest case facing the WTO to date.

21. This estimate is also likely to be conservative. In his most recent survey of the economics research literature, Limão (2016) reports an estimated elasticity of 3.1. With an elasticity of 3.1 and a policy equivalent to a 10 percent import tax, US imports would fall by \$682 billion.

22. However, \$220 billion in authorizable retaliation is also an upper limit, in that it includes a handful of trading partners affected by the US discrimination that are not members of the WTO. Such countries would not be permitted to use (or participate in) the WTO's dispute settlement procedures, though they could retaliate outside the system. Nevertheless, most countries that are not members of the WTO are least developed countries or fragile states and are thus not major trading partners of the United States (Bown 2015).

Which US trading partners might be authorized to retaliate the most? Table 2 provides estimates of annual bilateral levels of retaliation under the trade effects formula for individual trading partners; some are many times larger than the WTO has authorized in any previous dispute. China, for example, could be authorized to retaliate by eliminating \$46 billion of US exports a year, and the European Union could be authorized to eliminate \$42 billion. Eleven trading partners could be authorized to retaliate by at least \$4 billion a year.

Retaliation and Countervailing Duties If a Border Tax Adjustment Is Deemed an Export Subsidy

Next consider the possibility that trading partners challenge the US border tax adjustment because it acts like a WTO-illegal export subsidy. In export subsidy disputes, WTO arbitrators rely on a different formula to establish the limit to trading partner retaliation. In these disputes, trading partners have been authorized to retaliate and eliminate trade flows equivalent to the size of the export subsidy payment (see Bown and Ruta 2010). Table 1 lists WTO disputes using this formula, including *Brazil–Aircraft* (Canada), *US–FSC* (European Community), *Canada–Aircraft Credits and Guarantees* (Brazil), and *US–Upland Cotton* (Brazil).

Suppose that the 20 percent border tax adjustment in the Ryan-Brady plan includes a rebate for US production that is exported. Following the logic of Freund (2017), it is not the export rebate that creates the short-run trade distortion; the distortion arises because domestic producers can deduct wage costs that foreign producers of products competing in foreign markets cannot. Assume that US wage costs are 50 percent of total costs and that in the short run the 20 percent border tax rebate has the same trade-distorting effect as a 10 percent US export subsidy. US good exports could be expected to rise from \$1.5 trillion in 2016 to \$1.65 trillion as a result of the tax adjustment.

In disputes over export subsidies, the WTO does not rely on the trade effects formula. Instead, it sets the level of permissible retaliation by trading partners as that which eliminates trade flows equivalent to the size of the US subsidy payment. An export subsidy of 10 percent on \$1.65 trillion of US exports yields an US export subsidy payment of \$165 billion. Therefore, trading partners would be permitted to retaliate by raising their tariff against US exports to eliminate \$165 billion of US trade.²³

Four additional points are in order. First, a formal WTO dispute over the export subsidy component of a US border tax

23. The formula used in export subsidy disputes allows for a higher level of retaliation (\$165 billion) than the trade effects formula applied to an export subsidy dispute (\$150 billion).

Table 2 Estimated retaliation, by trading partner (billions of dollars)

Trading partner	Retaliation amount
China	46
European Union	42
Mexico	29
Canada	28
Japan	13
Six other countries	4
Total	220

Note: Estimated WTO-authorized annual retaliation by selected trading partners in response to US border tax adjustment deemed an import-restricting violation of national treatment. Does not include potential retaliation for export subsidy violations.

adjustment is not the only means of retaliation. If the illegal export subsidy increases US trade to a partner and injures the partner's import-competing sector, the partner can address the subsidy directly, without a dispute. Under the WTO's Agreement on Subsidies and Countervailing Measures, the trading partner can initiate a CVD investigation under its domestic CVD law and impose import tariffs almost immediately. These tariffs would be equivalent to the WTO-illegal export subsidy payment affecting the trade to its market.²⁴

Second, the most important implication of partner access to CVDs is the speed at which trading partners can retaliate. Unlike the four-year timeline before retaliation might arise under a formal WTO dispute, trading partners can apply CVDs within months of initiating an investigation.

Third, use of CVDs shifts the burden of proof. Suppose the United States initiates a WTO dispute over the trading partner's application of CVDs. It could take four or more years to resolve the dispute, during which the retaliatory CVD remains in place. Furthermore, the legal issue in the US-initiated WTO dispute becomes focused on how the trading partner conducted its CVD investigation, not on whether the border tax adjustment with wage deduction was an export subsidy. A US challenge to a trading partner's CVD could be successful in getting the CVD removed (after four years), but the dispute is unlikely to establish that the underlying US border tax adjustment was WTO-consistent.

24. This point raises the question of which trading partners would bother to use the WTO to address the export subsidy component of the US border tax adjustment. Complaints may be lodged by trading partners with firms that compete with US exports in third markets, as opposed to their domestic market, making it impossible to impose CVDs. An example is the subsidy affecting US exports of Boeing aircraft to China, which compete with the European Union's exports of Airbus aircraft. The European Union would have to use a WTO dispute to address such a concern.

Fourth, all three forms of trading partner response could arise. Some countries could file disputes focusing on the WTO-illegal import restriction, others could file disputes on the WTO-illegal export subsidy affecting trade to third markets, and a third set could simply use CVDs to address illegal subsidies of US exports to their domestic market. Under the assumptions here, \$385 billion a year of US exports could be subject to elimination under retaliation after formal WTO dispute settlement and trading partner use of CVDs.

Motivating but Caveating These Results

Even with a DBCFT that includes a border tax adjustment and wage deduction, real exchange rates and prices are likely to adjust over the long run, leaving no real effect on US economic activity and trade flows. However, the current WTO system works in the short run. If trading partners perceive strong adverse trade effects upon US implementation of the tax reform, they are unlikely to wait for the long run to arrive. They may respond by imposing CVDs and filing disputes, and the WTO will be forced to confront the evidence based on the short-run effects put before it. The last section of this Policy Brief proposes some approaches to address this institutional shortcoming of the WTO agreements.

It is also important to recognize that WTO arbitrators in these disputes are typically trained in trade law and diplomacy, not general equilibrium economics (although the WTO Secretariat has historically provided technical assistance from PhD economists in the Economics Research Division, see Bown 2010). If the US tax reform is implemented in a manner that leads to a WTO dispute, it is difficult to predict the outcome with much certainty, including how the WTO might interpret revelations in the data.²⁵ Such a dispute could have systemic implications for the WTO.

CAN THE UNITED STATES KNOWINGLY IGNORE TRADE AGREEMENTS WITH IMPUNITY? FOUR COMMON ARGUMENTS DISPELLED

Many arguments are commonly used to downplay the need for the United States to consider international legal obligations or the potential for a retaliatory response. This section addresses some of the arguments likely to arise in the context of a border tax adjustment dispute.

Argument 1: A No single country would bring a WTO suit against the United States out of fear of retaliation

This argument is weak for several reasons. First, countries often form coalitions to bring a collective grievance against a trading partner. The United States has done so on numerous occasions, most recently by filing a dispute with the European Union that challenged China's export restrictions on raw materials. The United States has frequently faced complaints from multiple countries working together over a common policy grievance.

Second, this argument is less relevant the larger the levels of bilateral trade losses from discriminatory application of a border tax adjustment. WTO disputes tend to involve the countries whose trade is highly affected by the disputed policy (Bown and Reynolds 2015). Even in the scenario described above, in which the border tax adjustment acts like a 10 percent import tax, 11 trading partners each face collective annual export losses of \$4 billion or more.

Third, the European Union is reportedly already taking the steps necessary to pursue a dispute if the tax reform plan is discriminatory.²⁶

Argument 2: Fear that a dispute would lead President Trump to pull the United States out of the rules-based trading system would prevent countries from bringing a case

Some disputes are considered too big for the system to handle; trading partners therefore make the rational choice not to bring them, prioritizing long-run maintenance of the system over losses associated with one bilateral trade skirmish. One potential example of this type of dispute avoidance is concern over the WTO-consistency of currency manipulation.

This argument is weak because even trading partners concerned about the "systemic" threat of a border tax adjustment dispute may take the risk. Countries may put sufficiently high probability that four years from now the United States has a new president and new Congress that may be more sympathetic to US legal obligations and international cooperation.

Argument 3: WTO disputes take at least four years to resolve

This argument is also sometimes floated in the context of proposals to implement potentially WTO-inconsistent import protection. One example was the US steel import safeguard that the Bush administration imposed in 2002

25. As one example, Bown and Brewster (forthcoming) argue that the WTO arbitrators in the *US-COOL* Article 22.6 calculation erred by establishing a level of retaliation by Canada and Mexico that appeared too large, given market conditions in place at the time.

26. Shawn Donnan, Barney Jopson, and Paul McClean, "EU and others gear up for WTO challenge to US border tax," *Financial Times*, February 13, 2017.

(Pauwelyn 2004). Nine WTO members immediately challenged it through formal dispute settlement, and it remained in place for nearly two years before the dispute resolution process triggered its removal.

This argument is faulty for two reasons. First, if the border tax adjustment is deemed a US export subsidy, any trading partner with an injured import-competing sector could apply CVDs against US exports almost immediately. The period in which the United States would be able to get away with an illegal policy would be short.

Second, if in 2021 the United States is forced to re-reform the tax code in a way that is WTO compliant, the new system may reflect fundamentally different political priorities if a new president and Congress are in power.

Argument 4: If only one trading partner were to challenge the tax reform, the United States could buy it off and avoid retaliation

Suppose the United States convinces all WTO members except for one not to file a WTO dispute. If just one country objected to the border tax adjustment, the United States could exempt that country's exports from the tax in order to avoid conflict. Alternatively, suppose one trading partner is so important—say, Canada, because of a free trade agreement—that the United States chose not to apply the border tax adjustment to that one country's exports to the United States.²⁷

Such an approach would introduce a clear new violation of the WTO (this time of Article I, or most-favored-nation treatment). This would almost certainly lead to disputes launched against the United States by the rest of the WTO membership.

A US STRATEGY FOR TAX REFORM THAT IS DURABLE AND CONSISTENT WITH THE WTO

Ensuring the long-run durability of tax reform requires that the United States take into consideration its international implications. One important international consideration is that the tax plan be nondiscriminatory and provide equal taxation treatment of domestic production and similar imported goods. The current proposal appears likely to provide discriminatory treatment that would distort trade flows, at least in the short run. Tax reformers should attempt to fix those elements of the plan.

27. Somewhat analogously, when the United States and some other countries have applied safeguard import restrictions under the Agreement on Safeguards, they do not apply them on a most favored nation basis as they exempt free trade agreement partners from the application.

Perhaps the most obvious way to do so would be for the United States to adopt a VAT. Absent that possibility, how best to fix the current proposal depends on other goals of the reform and constraints. If an important motivation for the domestic wage cost deduction in the Ryan-Brady plan is to offset the otherwise distortionary effects on labor of the existing US payroll tax, this goal could be achievable by

Any durable reform to the US tax system requires a frank airing and honest empirical assessment of the international implications of the policy.

implementing the DBCFT with the border tax adjustment, omitting the US labor cost deduction, and repealing the US payroll tax.²⁸ Alternatively, if it is not feasible politically to eliminate the US payroll tax, the United States could grant imports the same wage cost deduction from their US tax liability it grants competing US goods (Hufbauer and Lu 2017).

The second and complementary reform strategy should be to preemptively engage the WTO and key trading partners on the potential international implications of US tax reform. If there are elements of the US plan that are economically sound but inconsistent with existing WTO agreements, the United States could negotiate directly with key countries on the WTO law.

There are different paths to a negotiated solution within the WTO. One would be to amend the existing agreements. A second would be for the United States to request a waiver from WTO members if the ultimate US tax reform is likely to be WTO inconsistent;²⁹ such waivers have been granted in the past.³⁰

28. The rates of the proposal would require adjustment to ensure revenue neutrality and provide new funding sources for Social Security, Medicare, and other US social insurance programs.

29. The 1947 GATT Article XXV (Joint Action by the Contracting Parties), paragraph 5 states: "In exceptional circumstances not elsewhere provided for in this Agreement, the CONTRACTING PARTIES may waive an obligation imposed upon a contracting party by this Agreement; Provided that any such decision shall be approved by a two-thirds majority of the votes cast and that such majority shall comprise more than half of the contracting parties."

30. In 2012, for example, the European Union requested and was granted a waiver to offer tariff preferences to Pakistan after devastating floods there (WTO 2012). Such a waiver

In both negotiating strategies, the United States must be prepared to compensate trading partners if its tax reforms adversely affect trade, especially in the short run. The WTO agreements allow for countries to renegotiate the deal and rebalance concessions, if the need arises, without flouting the overall agreement.³¹ The United States should also consider the possibility that other countries may adopt similar DBCFT and border tax adjustment schemes.³²

was necessary because the European Union's bilateral import tariff preference offerings would otherwise have violated WTO rules on most favored nation treatment (GATT Article I).

31. More generally, the United States, like any other WTO member, is permitted to renegotiate its binding tariff commitments under the original 1947 GATT's Article XXVIII (Modification of Schedules) under the principle of reciprocity.

32. Auerbach et al. (2017) explore different scenarios in which different numbers of countries adopt a DBCFT.

REFERENCES

- Auerbach, Alan, Michael P. Devereux, Michael Keen, and John Vella. 2017. *Destination-Based Cash Flow Taxation*. Saïd Business School Working Paper 17-01. Oxford, UK: University of Oxford.
- Auerbach Alan, and Douglas Holtz-Eakin. 2016. *The Role of Border Adjustments in International Taxation* (November 30). Washington: American Action Forum.
- Bown, Chad P. 2010. The WTO Secretariat and the Role of Economics in DSU Panels and Arbitrations. In *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement*, ed. Chad P. Bown and Joost Pauwelyn, 391-433. Cambridge: Cambridge University Press.
- Bown, Chad P. 2015. *What's Left for the WTO?* CEPR Discussion Paper 11003. London, UK: Center for Economic Policy Research.
- Bown, Chad P., and Rachel Brewster. Forthcoming. US-COOL Retaliation: The WTO's Article 22.6 Arbitration. *World Trade Review*.
- Bown, Chad P., and Joost Pauwelyn, eds. 2010. *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement*. Cambridge: Cambridge University Press.
- Bown, Chad P., and Kara M. Reynolds. 2015. Trade Flows and Trade Disputes. *Review of International Organizations* 10, no. 2: 145-77.
- Bown, Chad P., and Michele Ruta. 2010. The Economics of Permissible WTO Retaliation. In *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement*, ed. Chad P. Bown and Joost Pauwelyn, 149-93. Cambridge: Cambridge University Press.
- Cline, William R. 2017. *The Ryan-Brady Cash Flow Tax: Disguised Protection, Exaggerated Revenue, and Increased Inequality*. PIIE Policy Brief 17-4. Washington: Peterson Institute for International Economics.
- Feldstein, Martin S. 2017. The House GOP's Good Tax Trade-Off. *Wall Street Journal*, January 5. Available at www.wsj.com/articles/the-house-gops-good-tax-trade-off-1483660843.
- Feldstein, Martin S., and Paul R. Krugman. 1990. International Trade Effects of Value-Added Taxation. In *Taxation in the Global Economy*, ed. Assaf Razin and Joel Slemrod, 263-282. Chicago: University of Chicago Press.
- Freund, Caroline. 2017. *Complications from the Border Adjusted Cash Flow Tax*. Forthcoming in PIIE Briefing 17-1. Washington: Peterson Institute for International Economics.
- Freund, Caroline, and Joseph Gagnon. 2017. *Consumption Taxes, Real Exchange Rates, and Trade Balances*. Forthcoming PIIE Policy Brief. Washington: Peterson Institute for International Economics.
- Grossman, Gene M. 1980. Border Tax Adjustments: Do They Distort Trade? *Journal of International Economics* 10, no. 1: 117-28.
- Horn, Henrik, Louise Johannesson, and Petros C. Mavroidis. 2011. The WTO Dispute Settlement System 1995-2010: Some Descriptive Statistics. *Journal of World Trade* 45, no. 6: 1107-138.
- Hufbauer, Gary Clyde, and Zhiyao Lu. 2017. *Border Tax Adjustments: Assessing Risks and Rewards*. Policy PIIE Policy Brief 17-3. Washington: Peterson Institute for International Economics.
- Johnson, Harry, and Mel Krauss. 1970. Border Taxes, Border Tax Adjustments, Comparative Advantage, and the Balance of Payments. *Canadian Journal of Economics* 3, no. 4: 595-602.
- Johnson, Renée. 2015. *The US-EU Beef Hormone Dispute*. Congressional Research Service Report R40449. Washington: Congressional Research Service.

- Lawrence, Robert. 2015. *Recent Declines in Labor's Share in US Income: A Preliminary Neoclassical Account*. NBER Working Paper 21296. Cambridge, MA: National Bureau of Economic Research.
- Limão, Nuno. 2016. Preferential Trade Agreements. In *The Handbook of Commercial Policy*, vol. 1A, ed. Kyle Bagwell and Robert W. Staiger, 279–367. Amsterdam: Elsevier/North Holland.
- Pauwelyn, Joost. 2004. WTO Victory on Steel Hides Deficiencies. *Jurist*, January 23. Available at www.jurist.org/wayback/forum/Pauwelyn1.php.
- Staiger, Robert W., and Alan O. Sykes. 2013. Non-Violations. *Journal of International Economic Law* 16, no. 4: 741–75.
- US Department of Commerce. 2011. *Mexico Retaliation: NAFTA Trucking Dispute*. Washington. Available at www.trade.gov/mas/ian/build/groups/public/@tg_ian/documents/webcontent/tg_ian_002692.pdf (accessed on February 13, 2017).
- Ways and Means Committee, US House of Representatives. 2016. *A Better Way: Our Vision for a Confident America—Tax* (June 24). Washington. Available at http://abetterway.speaker.gov/_assets/pdf/ABetterWay-Tax-PolicyPaper.pdf.
- WTO (World Trade Organization). 2012. Request for a WTO Waiver: Additional Autonomous Trade Preferences Granted by the European Union to Pakistan. G/C/W/640/Rev.2, January 20. Geneva.

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