THE EFFECTIVENESS OF INTERNATIONAL TRADE AGREEMENTS FOR RESTRICTING TAX PROTECTIONISM IN BRAZIL

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I. INTRODUCTION: AN OVERVIEW OF FREE TRADE AND PROTECTIONISM

Suppose that a village has two carpenters. In a workweek, carpenter John is capable of making either two tables or six chairs. Carpenter Henry, using the same amount of time, can make four tables, or eight chairs. Henry is clearly the better carpenter, since he is capable to deliver a higher output than John regardless of what product he makes. However, for each table made, John would have to waive the income from the sale of three chairs. Henry, on his turn, would only have to give up selling two. This entails that the opportunity cost of making a table is relatively higher for John than for Henry. Likewise, making chairs is less profitable for Henry than it is for John. For this reason, it would be cheaper for John to make chairs, and buy tables from Henry should he need them, than to make the tables himself. For Henry, the opposite is true: it would be cheaper to make tables, and buy chairs from John, than to make chairs in his shop. If each carpenter specializes in what he does best, the total output of chairs and tables will reach its best possible configuration, maximizing the aggregate wealth of both of them and, by extent, the village.

This illustrates the following notion: specialization promotes efficiency by allocating production to the party that has the lowest opportunity cost for providing any given product or service. Economists refer to this concept as the principle of comparative advantage (Mankiw, 2012). It is the reason why trade makes everyone better off, increasing the total wealth of society. It is also a universally valid principle: it works for two carpenters in a village, and for hundreds of thousands of firms across the world. Comparative advantage is not only the reason why people should trade with their neighbors, but also why free trade among nations makes all of them richer.

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Free trade, though, has its winners and losers. If a country does not partake in international trade, and local producers have a comparative advantage over foreign competitors, prices at home are lower than international prices. When the country decides to engage in free trade, local producers, being relatively more efficient, raise their prices to international levels both within and outside the country's borders. Therefore, these producers obtain a surplus at the expense of local consumers, selling fewer items domestically at a higher price, and exporting the rest of their production. Conversely, when local producers are less efficient than foreign competitors, consumers are able to purchase imports at lower prices, and obtain a surplus at the expense of local producers corresponding to the price difference between domestic and international goods. However, in each of these circumstances, the gains obtained by the winner exceed the losses suffered by the loser, improving economic efficiency and increasing overall wealth.[2]

Because free trade does make some people worse-off, it is natural that some would advocate against it, and call for protectionist measures.[3] I assume that significant political pressure in this regard is unlikely to come from consumers, as free trade grants them access to a wider diversity of products and services, and to lower prices in general. Additionally, even if free trade were to benefit local producers only, which seems unlikely, consumers, being numerous and having diverse interests, would find it difficult to make organized lobby against it. For this reason, and for the purposes of this paper, I define protectionism as a set of measures applied by government with the purpose of limiting the comparative advantage of foreign firms, and artificially foster the production of local firms.

If protectionism is costly, why is protectionist lobby so often successful? Since it is fair to assume that governments are aware of the consequences of their actions, it follows that protectionist measures, as frequent as they are, are likely to have an underlying rationality. In order to explore this issue, Johnson (1965) adopts the premise that politicians attempt to gain and hold power by promising and implementing policies to satisfice their citizens. This satisfaction derives partly from privately provided goods and services, and partly from the collective consumption of goods and services provided by government at the cost of private consumption (i.e. funded by taxes and other means of transferring wealth from private citizens to government). He argues that there exists a collective preference for industrial production, in the sense that, for several reasons,[4] citizens are usually willing to relinquish a portion of their income to promote industrial production at higher levels than would be achievable under perfectly free trade. Therefore, industrial production above the equilibrium in a free market may be seen as a collective consumption good, provided by government at the joint expense of individual citizens, in order to fulfill their demand and obtain political gains.

2 Mathematical demonstrations of this argument can be found in economics textbooks, such as Mankiw (2012), as well as specialized articles, such as Johnson (1965). Feenstra (1992) finds sizable losses from deadweight and quota rents associated with protectionism, and argues that other costs that should be considered in these losses, such as the exercise of market power by local producers and the waste of resources due to increased demand for local production.
3 There are several arguments in favor of protectionism, all of which have been extensively countered by economic theory (see, for example, Mankiw (2012), and Slemrod (1994)). For this reason, I will not approach them here.
4 According to the author, these reasons may include national pride, rivalry with other countries, the power of industrialists and unions to distribute income to themselves through political means, etc.

Governments can distort foreign trade and raise domestic production by several ways. Many of these alternatives are the so called "non-tariff barriers", and include carbon footprint requirements, currency manipulation, and sanitary conditions. Others, however, are explicitly tax-related. This paper concerns the latter. Part 1 approaches the concepts of tax protectionism and discrimination, as well as the most common solutions for preventing them. Part 2 presents the institutions of international law designed to promote free trade, and evaluates issues that may hamper their effectiveness. Part 3 analyses the Brazilian tax system and trade policy, assessing the effectiveness of the current legal framework against protectionism.

II. TAX PROTECTIONISM

The classical method of tax protectionism is the assessment of tariffs. A tariff is the equivalent of an excise tax on the consumer: its proceeds are enjoyed by the producer, to the extent that he produces the good, and by the government, to the extent that the producer is unable to compete with imports (Johnson, 1965). An alternative to tariffs, albeit less common, is to subject imports to heavier consumption taxes. Except for differences in transparency,[5] I consider these forms of taxation equivalent, as they work much in the same way.

Trade distortions caused by tariffs can be avoided by simply not levying them. Distortions from consumption taxes, on their turn, can be prevented by treating similar goods equally, regardless of their origin. Normally, goods are deemed similar if it is possible to use one product instead of the other for satisfying a comparable need or taste, without significant change of consumption utility for the consumer (Choi, 2003).

Although tax protectionism is often associated with discrimination against foreign goods, it can also be made against investments in or from other countries, as well as against the movement of labor. Thus, governments may set inequitable rules for income taxation based on the location of its source and on the residence of its earner. The purpose of this practice may be to increase tax revenue, or to enhance domestic wealth by artificially attracting investments and labor that would be best allocated abroad if tax reasons were not considered.

Traditionally, the debate about tax discrimination has sought to prevent income taxes from distorting the placement of investments across borders. Slemrod (1994) argues that, from a global perspective, production efficiency is only achieved if investments face the same risk-adjusted pre-tax rates of return, regardless of where they are made or of the nationality of who makes them. According to him, by treating international capital with tax neutrality, individual countries could benefit from the reduction of production inefficiency. Three basic standards were devised to promote locational tax neutrality.[6] The first is capital export neutrality ("CEN"), according to which the tax system cannot discriminate between inbound and outbound investments. CEN in satisfied when countries tax the worldwide income of its residents, but allow them to offset the taxes paid abroad with those due at home. The second standard is national

5 This imposes significant monitoring costs to foreign countries and producers, and is very effective in distorting consumer incentives to confer an advantage to local products.
6 Graetz (2003) provides an extensive survey on the concepts, implications and international law reflections of these standards.

neutrality ("NN"), according to which countries that only seek to maximize their own welfare should tax the entire foreign income of their residents, allowing a deduction of taxes paid abroad. Finally, capital import neutrality ("CIN") dictates that the return of capital should be taxed at the same total rate, regardless of the residence of the investor. CIN requires that international tax rates be harmonized.

All of these methods are objectionable. As NN does not allow foreign tax credits, it promotes a measure of double taxation, and, for this reason, it is hardly adopted (Slemrod, 1994). In addition, CEN and NN disregard the fact that labor and capital can (and do) move across jurisdictions in search for better after-tax returns, regardless of the tax neutrality provided by their original country of residence. CIN, on its turn, is often not considered a valid choice of policy since it is unrealistic to expect that tax rates can be unified outside very specific contexts.

Productive efficiency, however, requires more than locational neutrality. Studies[7] have shown that a significant share of foreign investments consists in changes of capital ownership, reflecting differences in productivity between firms. Consistently with Slemrod's argument and with the principle of comparative advantage explained in Part 1, the lack of tax-induced distortions in matching investors and investments across borders is also a requirement for global wealth maximization. Grounded on this perception, Desai and Hines (2003) departed from traditional analysis and proposed a different set of tax neutrality standards, based in ownership. The first, called capital ownership neutrality ("CON"), concerns the maximization of global welfare and requires that countries, collectively, adopt either territorial or worldwide taxation. CON is argued to be efficient because, otherwise, firms would have an incentive to allocate investments in countries that maximized the after-tax rate of return, regardless of the pre-tax rate of return. This is especially true for companies subject to exclusive territorial taxation at home, which would be more prone to investing in countries with lower taxes. The second standard, called national ownership neutrality ("NON"), concerns the maximization of national welfare regardless of the actions of other countries, and requires that the residence country refrain from taxing foreign income. The authors argue that this alternative promotes efficiency because investing abroad does not reduce domestic tax revenue, subject to the condition that equally productive investment from foreign firms can offset the reallocation of investment overseas by domestic firms.[8]

Based on the discussions on locational and ownership neutrality, Mason and Knoll (2012) developed the concept of competitive neutrality, which primarily concerns the allocation of labor. According to them, competitive neutrality is obtained when tax systems do not distort the matching of workers and jobs. This principle is violated when taxes are charged differently according to the residence of workers or the source of their income. For instance, taxes are non-uniform when they assess residents on their net income, and non-residents on their gross income. Other examples include exempting foreign income, favoring foreign work, or limiting foreign tax credits, favoring domestic work.

7 See several references in Desai and Hines (2003).
8 Kane (2006) makes meaningful criticism to these standards, but acknowledges that the concept of ownership neutrality is a valuable contribution to the debate on international taxation and free trade.

The first way to achieve competitive neutrality would be for all countries to adopt worldwide income taxation, while allowing unlimited foreign tax credits. The second would be for all countries to adopt an "ideal deduction", under which they would tax cross-border income in two stages: first, by applying source taxes on the same basis for residents and non-residents, and second, by taxing the worldwide income of their residents, allowing a deduction of the taxes paid in the first stage. The authors provide extensive mathematical demonstrations of why these methods would not interfere with the matching of workers and jobs according to the comparative advantage principle. However, a possible objection is that their implementation requires coordinated multilateral effort among states, which faces substantial transaction costs.

Mason and Knoll (2012) also contribute to the tax neutrality debate by proving simple guidelines for locational and competitive neutrality policies. These guidelines can be summarized by the following table, adapted from their work (p. 1074):

	CEN, or "locational neutrality"	**CIN, or "leisure neutrality"**	**Competitive Neutrality**	
			via Worldwide Taxation	**via Ideal Deduction**
Source Taxes	Permitted without restriction	Permits only uniform source taxes	Permitted without restriction	Permits only uniform source taxes
Residence Taxes	Permits only uniform residence taxation, specifically worldwide taxation with unlimited foreign tax credits	Not permitted[9]	Permits only uniform residence taxation, specifically worldwide taxation with unlimited foreign tax credits	Permits only uniform residence taxation with deductions for source taxes

9 The only way that residence taxes would not distort the amount of savings (where capital is concerned) or leisure (where labor is concerned) is if they are not levied at all. However, they could be neutral in what concerns the allocation of savings or leisure among different countries if rates were harmonized.

Although the theoretical debate regarding protectionism, tax protectionism and tax discrimination is paramount to promoting global welfare, so are the mechanisms set in place by law – especially international law – to make free trade policies enforceable. In the next section, I will address some of the legal and institutional frameworks that are currently available to uphold free trade.

III. THE INTERNATIONAL REGULATION OF TAX PROTECTIONISM

Sovereignty is a fading concept. As meticulously narrated and analyzed by Jackson (2006), globalization has undermined the capacity of nation states to exercise the supremacy of political authority and the monopoly of force within their own borders, as well as to regulate the international movement of citizens and to freely choose their foreign policy. Interdependency has become the norm, and as the ability of governments to fulfill the expectations of their citizens with their countries' own resources has greatly diminished, the resort to trade is mandatory. Protectionist pressures from home, then, need to be balanced with the practical necessity of trade. Countries attempt to achieve this balance by further weakening sovereignty, and submitting to the regulation of foreign trade by international law. This can be done by joining the World Trade Organization ("WTO"), as most countries have, by creating free trade areas (such as the North-American Free Trade Agreement – "NAFTA") and customs unions (such as the European Union or the South Common Market – "MERCOSUR"), and by entering into bilateral trade agreements with other countries.

The WTO was created in 1995 as result of a decades-long effort to promote free trade in a worldwide level.[10] It binds its members to nearly thirty different agreements, which contain provisions that seek to curb protectionism in several ways. The tax provisions of the WTO treaties can be divided in two main categories: non-discrimination rules, and subsidy rules. According to non-discrimination rules, a country cannot tax products, services or rights imported from member states more heavily: (i) than if they were produced domestically (this is called the National Treatment rule – "NT"); or (ii) than if they were imported from other countries (this is called the Most-Favored Nation rule – "MFN"). Subsidies, on their turn, are considered unlawful if they concern a specific industry, and if they are contingent upon export performance. Tax incentives that may be regarded as unlawful subsidies include (Silveira, 2011): (i) exemption from a) indirect taxes on goods acquired for export, and b) revenue or income taxes on export; (ii) deemed tax credits for exports; (iii) tax base manipulation favoring exports; (iv) extended deadlines for tax collection; and (v) collection of these taxes according to payment plans. Due to their range, subsidy rules promote significant restrictions in the choice of tax policies that can be adopted by member states.

10 Folsom et al. (2009) provide an overview of the negotiation rounds that lead to the formation of the WTO.

However, sound these rules may seem, I would argue that their effectiveness in promoting free trade is limited. Since WTO agreements allow preferential tariffs for developing countries, as well as for trade partners in customs unions and free trade areas, they endorse non-uniform tariffs and therefore tax-induced distortions in the consumption choices within a country's borders, as well as in investment choices outside of it.[11] Likewise, the requirement that subsidies must be industry-specific does not discourage countries from horizontally subsidizing their exporters. Regardless of whether subsidies are specific or across-the-board, they violate neutrality in consumption choices overseas, as well as in the scope of domestic investments choices (i.e. in comparison to a no-tax scenario, export subsidies increase the rate of return of investments in exporting industries, making investments in industries serving the local market comparatively less attractive). The underlying idea of this paper is that to promote free trade, countries should be prevented from adopting measures that distort markets by manipulating comparative advantages. This is not achieved by the WTO. A pessimistic claim would be that this is not even truly achievable, as it would be unrealistic to expect that the WTO, being a multilateral body with over 150 members in which rules and decisions are made primarily by consensus, could ever extricate the significant protectionist pressures that its members endure (or sometimes exert, depending on their choice of policy).

Partly because of WTO's institutional difficulties, and partly because agreements with fewer parties can go well beyond the WTO's scope (including subjects as investments, labor, environment and competition), regional and bilateral agreements have become the leading edge of international trade law and policy (Folsom, Gordon, Spagnole, & Fizgerald, 2009). Such agreements include NAFTA, MERCOSUR, the European Union, and others. Though innately discriminatory, these agreements can be regarded as a second best alternative towards global freer trade.

As explained by Feenstra (1992), regional trade agreements may bring welfare gains or losses to its members. If a free trade area maintains substantial tariff and non-tariff barriers against outsiders, the additional trade from partner countries can bring losses relative to the goods that could have been bought at a lower cost from outsider firms. This is called "trade diversion", and it causes efficiency losses within the trade area, as well as demand losses to outsiders.[12] Conversely, if the free trade area promotes an increase in trade from partner countries that produce goods more efficiently than domestic firms, "trade creation" occurs, to the advantage of all parties concerned. If trade diversion effects are substantial, the efficiency losses to outsiders can be intensified by losses in economies of scale (i.e. the avoidance of duplication of fixed costs across firms), caused by the foregone gains from producing to larger markets (Feenstra, 1992).

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11 Suppose that the products of a firm in country A are subject to a 15% tariff in country B, because of the MFN. Country B, however, grants a tariff exemption to country C, which is a developing country. If tariffs were uniform, the firm from country A, having a comparative advantage for producing there, would not have an incentive to move elsewhere. As a result of the preference, though, if the after-tax return of setting a plant in country C for supplying country B offsets the productivity losses that this would entail, the firm from country A would act rationally by building a factory in country C. Country C wins, because it receives an investment that would not otherwise have happened. The consumers in country B also "win", but only because now they face a smaller loss than before. If the tariff preference were given to country A instead, they would buy the firm's products at a better price than the firm can offer by producing in country C (and without the deadweight cost of the tariff, as well as other costs mentioned in note 2 supra). Country A loses, because income and jobs have now been relocated to country C, productivity differences notwithstanding. The firm's productivity losses are borne by country B's consumers. In summary, this scenario puts country A at a comparative disadvantage, providing country C a comparative advantage, at the expense of country B's consumers. The losses incurred by country A and by country B's consumers exceed the gains obtained by country C.

12 This problem is inherent to non-uniform taxes and trade barriers, and its rationale is explained in note 11 supra.

This section has demonstrated that the current institutional and legal frameworks for international commerce, while having the declared purpose of promoting trade liberalization, have imbedded distortions and are ineffective to deal with all forms of protectionism, as defined in Part 1. The next section will analyze Brazilian tax and trade policy, and evaluate whether Brazilian protectionism can be curbed by current international law.

IV. THE BRAZILIAN TAX AND TRADE POLICIES

For reasons of constitutional law and public finance, Brazil has virtually one tax for each type of transaction. The power to tax is generally divided as follows: municipalities can tax urban property and most types of service; states can tax transactions involving goods and certain utilities (energy, transportation and telecom), as well as donations and inheritance; the federal union is competent to tax transactions involving income, revenue, industrialized goods, foreign trade, rural property, credit and foreign exchange, payroll, and others. Each of these entities (the union, 27 states and approximately 5,5 thousand municipalities) has the power to create mandatory filings and establish its own penalties.

At the international level, Brazil adopts CEN-like policies by taxing the worldwide income of its residents, generally allowing unlimited foreign tax credits. However, it violates competitive neutrality by assessing non-uniform income taxes on residents (based on net income, following progressive rates) and non-residents (based on gross income, at flat rates). Transfer pricing rules are largely based on compliance with pre-determined formulae, which ignore economic methods of determining whether transactions have followed arm's length standards. Imports are subject to indirect taxes that are not necessarily recoverable as credits, what makes them, in practice, a form of tariff. Certain taxes are assessed on different bases for imports and domestic transactions, also violating competitive neutrality. In addition, the importation of technology and technical services is subject to a "technology tax", assessed on the exporter's gross income, in what many understand to be a violation of the double taxation treaties signed by Brazil (Bonilha, et al., 2005).

Subsidies abound. Exports are generally exempt from indirect taxes. Investments in the Amazon region benefit from several tax exemptions and reductions, and many specific industries are subject to preferential tax regimes, such as oil and gas, aviation, automotive, and manufacturing in general. Research and development projects are also highly incentivized, especially through enhanced deductions. Some tax incentives target exports, such as the refunding of currency exchange and technology taxes for eligible manufacturers (expired in 2012), and tariff and tax exemptions for various imports used in the manufacturing of exports and in the rendering of IT services overseas. The distortionary effects of measures of this kind have been previously explained.

Brazil is a WTO and MERCOSUR member, and does not have a free trade agreement with any large nation. The 2013 WTO report on Brazil (WTO, 2013) provides a detailed, but only descriptive, overview of its economy, its tax system and other issues affecting its foreign trade policy, such as non-tax subsidies. A recent qualitative analysis of the country's trade policy, however, was performed by the International Chamber of Commerce (ICC, 2013). According to the ICC, Brazil is the closest of all G-20 economies, scoring "below average" in trade openness and foreign direct investment openness, and "very weak" in trade policy.[13] The quality of trade policy was evaluated through the average level of tariffs (low is better), the complexity of tariff profile (considering the tariff binding levels, share of duty free tariffs in total tariff lines, and share of tariff peaks), non-tariff barriers and the number of antidumping actions (low is better),[14] as well as the efficiency of import procedures. An interesting remark is that Brazil's MERCOSUR trading partners also perform poorly in the ICC ranking, which might be an indication of trade diversion.[15]

Because of this scenario, it does not come as a surprise that several of Brazil's trading partners, especially the European Union, Canada and Japan, are questioning its trade policy and threatening to file claims in the WTO.[16] Their main complaint is that the county is increasingly using its indirect taxes as a form of subsidizing exports and overtaxing imports, which is not inconsistent with the presented tax framework. So far, there have been 14 claims filed against Brazil in the WTO, only two of which resulting in relevant policy changes.[17] Furthermore, the Brazilian government has been receiving negative criticism for its protectionist measures from the local private sector, which is increasingly seeing MERCOSUR as an obstacle to trade and advocating liberalization.[18]

13 Brazil received an average score of 2.2 out of 6. The only item in which it was considered to have an "average" performance was "trade enabling infrastructure" (3.5), consisting of logistics performance and communications infrastructure. Brazil's other grades were 2.1 in "trade openness", 1.7 in "trade policy", and 2.3 in "FDI openness".
14 Brazil had 83 antidumping measures in place in 2012, a number that the WTO deems "significant" (WTO 2013) (p. 10).
15 This hypothesis was not tested by examining current data. Econometric works analyzing whether MERCOSUR promotes trade creation or trade diversion include Bohara, Gawande and Sanguinetti (2004), Gautto (2012), and others.
16 As reported by Valor Econômico, on June 24 and 25, 2013. Available at http://www.valor.com.br/carreira/3171722/politica-comercial-do-brasil-vai-debate-na-omc, and
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17 See DS46 and DS332.
18 As reported by Valor Econômico on May 27, 2013. Available at http://www.valor.com.br/brasil/3139392/alianca-do-pacifico-preocupa-no-brasil.

V. CONCLUSION

Even if future WTO claims brought by its trading partners foster specific changes in Brazil's trade policy, the effective promotion of free trade would require a significant overhaul in the Brazilian tax and legal systems. Based on the rationale adopted by Johnson (1965), I consider a comprehensive reform unlikely in the short run, since the current tax-induced distortions derive from the country's political circumstances. However, rising foreign and domestic pressures for trade liberalization can help inducing a different scenario, bringing in a hopeful perspective.

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