

Chapter 10

The Impact of TTIP on Brazil

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The world is facing a significant transformation process supported by new paradigms: revolutionary innovations in all fronts, new information technologies, huge and speedy mobility of capital, invention of risky financial tools, and globalization of production. The impact of these phenomena on trade and trade activities is strong and drastic, leaving not much time for the postponement of decisions.

The trading system is facing serious challenges caused by these transformations: difficulty in concluding the 15-year-old multilateral negotiation at the World Trade Organization (WTO); the multiplication of preferential trade agreements (PTAs); and the necessity to reinvent trade rules used to support global value chains.

Given the difficulties encountered in the Doha Round to adapt old trade rules to new realities, the United States and the European Union (EU) decided to launch a new profile of PTAs, including mega-regional trade agreements such as the TTIP (Transatlantic Trade and Investment Partnership) and the TPP (Trans-Pacific Partnership), encompassing half of world trade.

More than the reduction of tariffs, these mega-agreements aim to define a new structure and new modalities for all kinds of non-tariff barriers to trade, along with new rules for important trade-related issues such as investment and competition, and new concerns as environment, climate, labor, food scarcity, animal welfare, privacy standards and mounting consumer pressure.

Brazil, as a global but relatively small international trader, has opted for giving priority to the multilateral track, where it assumed it could influence the game and better defend its interests. However, the conclusion of the Doha Round is more difficult to achieve than expected.

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Moreover, most countries have chosen another path: to increase their trade through negotiations of PTAs. On the one hand, this strategy creates new market opportunities. On the other hand, it results in the fragmentation of international trade regulation, creating conflicts and lack of transparency.

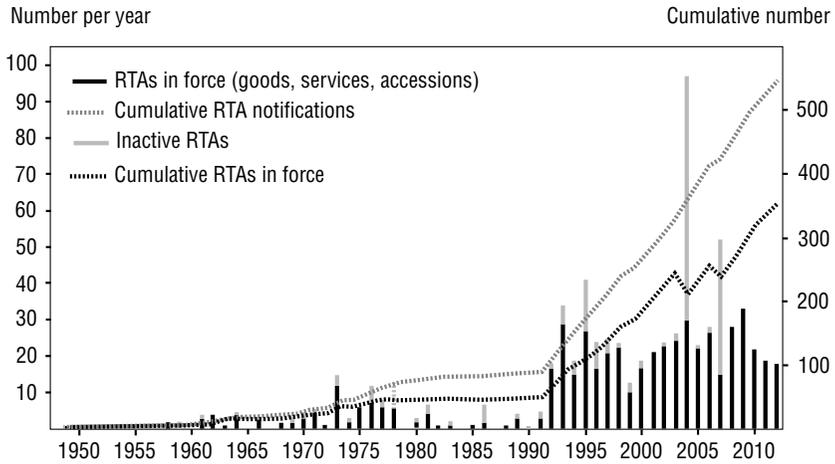
Nonetheless, this new reality must be confronted. The EU is changing its priorities from the WTO and smaller PTAs and has opted for a new challenge—a negotiation with its most controversial trade partner, the United States. The creation of the TTIP is a revolutionary initiative for the trading system. It will surely benefit the two parties to the negotiation. But at the same time it will create an uncertain scenario for all other trade partners, because, due to its size, it will establish a new system of rules, probably in conflict with the WTO because it will discriminate between elements that are included and elements that are excluded from this PTA. New rules will occur in areas expanding WTO rules (WTO-plus), such as services and intellectual property, but rules will also be generated in new areas, such as environment, climate change, labor, investment and competition (WTO-extra rules).

A study of current TTIP proposals demonstrates quite clearly that the main focus of this agreement will be on the elimination of non-tariff barriers and the creation of better regulatory coherence. The most important proclaimed achievement will be the construction of the 21st century trading system. For outsiders, this raises concerns regarding the role to be played by the WTO.

The Growth of Preferential Trade Agreements

International trade is undergoing significant and complex change that represents a great challenge to Brazilian foreign trade policy. The deadlock in multilateral negotiations under the WTO Doha Round has led major players in international trade, notably the United States and the European Union, to focus on the negotiation of preferential trade agreements (PTAs), where they could advance trade rules, lower trade barriers and promote integration with their partners, signaling the rules they want for the present century.

Figure 1. Preferential Trade Agreements Notifications (1948–2012)



Source: WTO Secretariat.

Figure 1 shows that there has been a huge increase in the number of Preferential Trade Arrangements (PTAs) in the past years, pointing to the importance that these agreements have acquired in the regulation of international trade flows.

The first generation of PTAs sought to reduce or eliminate tariffs in goods between partners. This preferential access could either increase international trade flows, due to the market liberalization promoted by the agreement (trade creation) or to divert flows from more competitive players (trade diversion).

The following generation of PTAs has promoted, besides tariff reductions, the negotiation of rules on subjects not fully addressed by the multilateral system, establishing a relevant framework of trade regulation on the regional level, affecting not only the partners of the respective PTA, but also influencing multilateral negotiations.

The current generation of PTAs keeps the trends of the previous agreements, but go further. These deep-integration PTAs promote greater coordination and harmonization between trade partners, facilitating the establishment of production chains on the regional level, contributing to the major trade phenomenon of the 21st century:

global value chains. The TTIP between the EU and the United States, and the TPP between the United States, Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam, are the most ambitious negotiations of these next generation PTAs.

The negotiations of these two agreements present an ambitious agenda, with substantial elimination of tariffs in goods, enlargement of market access in services and government procurement, harmonization and mutual recognition of technical, sanitary and phytosanitary measures.

Besides ambitious schedules of preferential tariffs, modern PTAs have a broad regulatory framework to deal with bilateral international trade flows of goods and services. This set of rules deals with several trade-related activities and may have a direct impact on market access of the preferential trade partners. These rules, whether WTO-plus or WTO-extra, often surpass the scope of the agreements of the multilateral trading system, and encompass themes not regulated by the WTO.

This proliferation of PTAs, with rules that promote deep integration between partners, has an important effect on international trade flows, since countries that participate in these agreements have a wider market access, provided both by the reduction of tariff and non-tariff barriers, as well as harmonization of trade rules, trade facilitation, and other factors. Yet countries that do not participate in any PTA tend to suffer losses in their share of exports to other countries, because products from preferential partners have preferential access, and can be more competitive when enjoying the benefits conferred by the PTA.

Preferential Trade Agreements and Brazil

For many years Brazil has prioritized multilateral negotiations in detriment of preferential ones. The rationale behind this option was that the country would have greater bargaining power if negotiating in the multilateral forum together with other developing countries. But with the stalemate of the Doha Round, Brazil needs to change its strategy and reformulate its trade policy. Two priorities deserve deep

discussion: the participation of Brazil in new PTAs and the participation of Brazil in a world of global value chains. Immobilization will result in the isolation of Brazil in international trade.

A relevant issue for the Brazilian agricultural sector will be the negotiation by the EU of preferential tariff quotas for the United States. These quotas shall impact and reduce the global tariff quotas offered by the EU in its agricultural market and can significantly harm Brazilian exports.

In addition, the enlargement of market access of the trade partners participating in these two agreements shall have as an effect not only the increase in trade flows between these parties, but can also reduce flows from other players such as Brazil to these destinations (trade diversion), since Brazilian products will not face this privileged market access.

The agreements will also include several WTO-plus and WTO-extra rules such as enhanced intellectual property protection, as proposed by the United States in the TPP, regulation of e-commerce, competition rules, liberalization and protection of investments, regulation of trade related aspects of state owned enterprises, provisions on small and medium sized enterprises, rules of international supply chains, among other themes.² One major concern in the development of WTO-plus rules in PTAs is that they will eventually affect all trade players and not only the ones that have directly participated in the negotiation of the PTA.

The rules of deep integration negotiated within those agreements, which regulate behind-the-border barriers, such as technical regulations and intellectual property, are likely to be extended to all other players, since these rules imply in a modification of the countries' national legislation to be applied to all goods or services trade within the territory of the respective country. Therefore, Brazilian products are likely to face technical and sanitary standards negotiated within the TTIP or

²Fergusson I, Cooper, W., Jurenas, R., and Williams, B., *The Trans-Pacific Partnership Negotiations and Issues for Congress*, Congressional Research Service Report for Congress, June 2013, pp. 47–48; and *Interim Report to Leaders from the Co-Chairs EU-US High Level Working Group on Jobs and Growth*, June 2012.

enhanced intellectual property protection in patents registered in any of the TPP partners, which may also damage Brazilian exports.

Brazil will have to adapt to several of the requirements present in these two agreements without having participated in the drafting such rules, and thus, without being able to advance its own interests and perspectives in the regulation of such themes. Therefore, if the country does not participate in this movement toward negotiation of 21st century PTAs, it will become a rule-taker instead of a rule-maker, bearing all the costs related to its late arrival to this new generation of international trade rules.

The TPP and the TTIP are likely to promote much deeper economic integration among their respective members, resulting in the elimination of several trade barriers, regulatory harmonization, and creation of regional value chains. The benefits of this deep integration include an increase in business opportunities (trade in goods and services and investments) among the partners as well as the exchange of know-how and technology through the internationalized production chain, enhancing the countries' competitiveness and negatively affecting trade partners that do not participate in this process of regional integration.

This chapter presents simulations that show the costs of Brazil's isolation. Assuming that Brazil does not sign any PTA with significant trade partners, and that the TTIP enters into force, this chapter presents the impact of these agreements on Brazil's productive sectors and its main macroeconomic variables.

TTIP and Brazil

This chapter analyzes TTIP's implications for Brazil by considering four different hypotheses. The first considers the effects on Brazil of a TTIP that only reduces U.S.-EU tariff barriers. The second considers the effects of tariff reduction plus a partial reduction of non-tariff barriers. The third examines the implications of a complete reduction of these barriers. A final "audacious" alternative is assumed in which Brazil participates in the TTIP under both a partial reduction of agri-

cultural tariffs by the U.S. and EU markets, and under a full liberalization of their agricultural markets.³

Simulation 1—Impact of TTIP on Brazil

This simulation presents the impact of the TTIP negotiations on the Brazilian economy. Three different hypotheses are proposed: (i) a full tariff reduction between the United States and the EU; (ii) full tariff elimination plus a 50% reduction of non-tariff barriers (NTB); and (iii) full elimination of both tariffs and NTBs.

Results

Under the first hypothesis—full tariff reduction only between the United States and the EU—Brazilian exports to the United States and the EU fall by 0.6%, a decrease of \$0.4 billion. Brazilian imports from the United States and the EU would fall by 0.4%, a decrease of \$0.3 billion.

Under the second hypothesis—full U.S.-EU tariff elimination plus a 50% reduction of U.S.-EU non-tariff barriers (NTB), the most probable scenario—Brazil's exports to the United States and the EU fall by 5%, a decrease of \$3.8 billion. Brazilian imports from the United States and the EU would fall by 4%, a decrease of \$3.1 billion.

Under the third hypothesis—full elimination of both U.S.-EU tariffs and NTBs—Brazil's exports to the United States and the EU fall by 10%, a decrease of \$7.8 billion. Brazilian imports from the United States and the EU would fall by 8%, a decrease of \$6.4 billion.

These comparisons indicate the opportunities lost to Brazil by remaining outside such negotiations. In addition, since a TTIP agreement is likely to boost U.S. and EU competitiveness and spark additional U.S. and EU exports, Brazil's overall share of world trade is likely to decline.

The simulation also presents differing results for particular sectors.

³The methodology used to estimate non-tariff barriers was adopted from Ecorys, *Non-Tariff Measures in EU-US Trade and Investment—An Economic Analysis*, Report prepared for the European Commission, 2009, http://trade.ec.europa.eu/doclib/docs/2009/december/tradoc_145613.pdf

TTIP results in small losses for most of Brazil's agricultural sectors, with a slightly better scenario according to the level of liberalization of NTBs. One factor that should affect Brazilian agricultural exports to the EU is that any preferential tariff quotas offered by the EU to the United States should affect other countries' market access to the EU, since the global tariff quotas will be shared by many partners, with the United States benefiting from a larger share of such a global quotas. The simulation indicates that Brazilian agriculture would benefit from the elimination of U.S.-EU NTBs.

For Brazilian industry, TTIP results are mixed, with in gains for a number of sectors and losses for others. This can be explained by the fact that the increase of trade flows and economic integration between the EU and the United States would create some demand for exports from other countries as well.

When the elimination of U.S.-EU non-tariff barriers is taken into account, the negative impact to Brazil is more significant with regard to sectoral GDP and trade flows. The trade gains of TTIP will be obtained less through tariff negotiations than through negotiations of non-tariff barriers, including technical barriers, sanitary and phytosanitary measures, trade facilitation, among others, which nowadays are the real barriers to trade.

Considering only the elimination of only tariff barriers in the TTIP, the simulation shows that the impacts on Brazil is negative, but not too significant, representing:

1. losses of around 1% in GDP in 16 agrobusiness sectors of 20 sectors considered.
2. losses of around 1% in GDP in 9 industrial sectors of 21 sectors considered.
3. losses in the trade balance in 14 agrobusiness sectors of 20 sectors considered, mainly coffee, meat and meat products.
4. losses in the trade balance in 8 industrial sectors of 21 sectors considered, mainly leather products, non-metallic products, and motor vehicles and components.

Under the hypothesis of tariff elimination and a 50% reduction on NTB, the results are:

1. losses of 1%–3% in GDP in 15 agrobusiness sectors of 20 sectors considered.
2. losses of 1%–2% in GDP in 14 industrial sectors of 21 sectors considered.
3. losses in the trade balance in 14 agrobusiness sectors of 20 sectors considered, mainly soya, animal feed, coffee, meat and meat products.
4. losses in the trade balance in 8 industrial sectors of 21 sectors considered, mainly leather products, non-metallic products, motor vehicles and components, and transport material.

Simulation 2—Impact of Brazil’s Participation in TTIP on the Brazilian Economy

This “audacious” simulation presents the impact to the Brazilian economy of a hypothetical participation of the country in the TTIP negotiations.

The hypothesis assumed for such participation are: (i) a full liberalization of both tariff and NTBs; (ii) a 50% reduction of tariffs in agriculture for the United States and the EU and a full liberalization of all other tariffs and NTBs; and (iii) a 50% liberalization of the EU and U.S. agricultural sectors, 50% liberalization of Brazil’s industry and services and a full liberalization of non-tariff barriers for all partners.

When Brazil adheres to the TTIP, its exports register a significant increase:

1. a full liberalization of tariffs and NTBs for TTIP results in a strong increase of 126% of Brazilian exports, corresponding to a \$95.4 billion raise.
2. a 50% reduction of agricultural tariffs plus a full liberalization of all other tariffs and NTBs results in an increase of 102% of the country’s exports, corresponding to \$77.3 billion.
3. a 50% reduction of EU and U.S. agricultural tariffs, a 50% reduction of Brazilian industrial tariffs and a full liberalization of non-tariff barriers for all partners, boost Brazilian exports by 121%, corresponding to \$91.5 billion.

4. finally, in a more realistic scenario of 50% reduction of EU and U.S. agricultural tariffs, a 50% reduction of Brazilian industrial tariffs and a 50% reduction of non-tariff barriers for all partners, Brazilian exports increase by 67.6%, corresponding to \$51.1 billion.⁴

In the TTIP, there is a very noticeable increase in the exports of agricultural products, which explains the gains in the land value and the valorization of the Brazilian real.

Regarding imports, when Brazil participates in the TTIP:

1. full liberalization of tariffs and NTBs results in an increase of 54% increase in Brazilian imports from the United States and the EU, a \$43.1 billion rise.
2. a 50% liberalization in agricultural tariffs and a full liberalization in other tariffs and NTBs results in a 46.5% increase in Brazilian imports from the United States and the European Union, a rise of \$37.2 billion.
3. a 50% liberalization of the U.S. and EU agricultural sectors, a 50% liberalization in the Brazilian industrial sector and a full liberalization of non-tariff barriers for all partners results in a 34.9% increase in Brazilian imports from the United States and the EU, a rise of \$27.9 billion.
4. finally, in a more realistic scenario of 50% reduction of EU and U.S. agricultural tariffs, a 50% reduction of Brazilian industrial tariffs and a 50% reduction of non-tariff barriers for all partners, Brazilian imports from the United States and the EU increase by 52.9%, a rise of \$ 42.3 billion.⁵

The second simulation also presents different results for particular sectors of the economy.

Assuming Brazilian participation in TTIP, there are highly significant gains for the majority of Brazil's agricultural sectors in all three scenarios. This presents the greatest opportunity costs of Brazil remaining outside the transatlantic integration process.

⁴Values from Secex (US\$ F.O.B.) for 2012.

⁵Ibid.

The impact on Brazilian industry is mixed, with both losses and gains, partly due to the impact of exchange rates.

The audacious hypothesis of including Brazil as a part of TTIP presents a substantial gain for Brazilian agriculture, but as expected, losses for several of Brazil's industrial sectors due to the overvaluation of exchange rates and the consequent increase of industrial imports. To make this hypothesis viable, two important tasks are needed: the Brazilian industry must face arduous work to improve its competitiveness, and the Brazilian government should also play its role through active economic policies.

In summary:

1. gains from 3% to more than 4% in GDP in 13 agrobusiness sectors of 20 sectors considered.
2. losses of 1% to 3% in GDP in 19 industrial sectors of 21 sectors considered.
3. gains in the trade balance in 13 agrobusiness sectors of 21 sectors considered, mainly soya, animal feed, vegetal oils, coffee, meat and meat products.
4. gains in the trade balance in 8 industrial sectors of 21 sectors considered, mainly leather products, petroleum products; and
5. losses in the trade balance of paper and pulp, chemical, non-metallic products, motor vehicles and components, machinery and electronic products.

Conclusion of a U.S.-EU TTIP without Brazilian integration into pan-Atlantic commerce will represent a serious threat to Brazil. Not only will Brazil lose international markets, it will be left behind in the negotiations of international trade rules. It will lose its present role as relevant global rule-maker and assume a secondary role as passive rule-taker.

In a time of global value chains, Brazil's integration with these two major economies is fundamental to the survival of Brazilian industry.

The analysis presented in this chapter shows clearly that the negotiation of an agreement between Brazil and the EU, now in its final phase, is an important step forward and should be concluded rapidly, before the finalization of the TTIP negotiations.

But a second step should also be considered seriously—that of an agreement with the United States. There is no “trade logic” in an agreement with the EU without an agreement with the United States in the case of a successful TTIP.

With the TTIP, a new opportunity is open to Brazil. It is time for Brazil to review its priorities and to reevaluate losses and gains. The costs of Brazil’s isolation in the world because of Mercosul’s difficulties should be re-examined with care. It is time for action!

Technical Annex: Simulations on the Impact of TTIP for Brazil

The GTAP computable general equilibrium model was used in the simulations to evaluate the first round effects of the costs and opportunities for Brazil of the conclusion of the TTIP.⁶ The GTAP model is a global comparative static applied general equilibrium model. The model identifies 57 sectors in 153 regions of the world. Its system of equations is based on microeconomic foundations providing a detailed specification of household and perfect competitive firm behavior within individual regions and trade linkages between regions. In addition to trade flows the GTAP model also recognizes global transportation costs.

The GTAP model qualifies as a Johansen-type model. This model estimates the impacts of external shocks (gains and losses of a PTA) through a comparative static modeling (before and after the shock). The solutions are obtained by solving the system of linearized equations of the model. A typical result shows the percentage change in the set of endogenous variables (GDP, exports and imports, exchange rate and land value) after a policy shock is carried out, compared to their values in the initial equilibrium, in a given environment. The schematic presentation of Johansen solutions for such models is standard in the literature.⁷

The GTAP 8 database combines detailed bilateral trade, transport and protection data characterizing economic linkages among 129

⁶For a description of the standard GTAP model, see Hertel, T.W., *Global Trade Analysis: Modeling and Applications*. Cambridge: Cambridge University Press, 1997.

⁷See Dixon, P. B., Parmenter, B. R., Powell, A. A., & Wilcoxon, P. J., “Notes and Problems in Applied General Equilibrium Economics,” in C. J. Bliss & M. D. Intriligator (eds.), *Advanced*

regions, together with individual country input-output data bases which account for inter-sectorial linkages within regions. The dataset is harmonized and completed with additional sources to provide the most accurate description of the world economy in 2007 (the last available data base for GTAP).

The main applied protection data used in the GTAP 8 data base originates from ITC's MacMap database, which contains exhaustive information at the tariff line level. The ITC database includes the United Nations Conference on Trade and Development's (UNCTAD's) Trade Analysis and information system (TRAINS) data base, to which ITC staff added their own data. The model transforms all specific tariffs in ad valorem tariffs.

In order to capture the first round effects, the simulations were carried out using a standard GTAP hypothesis, which considers perfect factor mobility for labor and capital and imperfect factor mobility for land and natural resources. National aggregate supply of factors of production is exogenous and production technology for firms is given.

The way the economy variables are affected by horizontal reductions in bilateral import tariffs of the TTIP partners will depend on the resulting behavior of domestic relative prices. Domestic relative prices of the TTIP partners will be altered in such a way that import competition from the PTA partner will be favored, as the economy becomes more preferentially open to trade. Overall efficiency in resource allocation tends to be improved and, by the same token, possible gains from trade may take national welfare a step up.

Notwithstanding the aggregate benefits from improved resource allocation, regions might be adversely affected through re-orientation of trade flows—trade diversion—as relative accessibility changes in the system. Thus bilateral aggregate gains from trade are not necessarily accompanied by generalized regional gains in welfare. This issue of trade diversion versus trade creation has been an important one in the international trade literature, especially in the case of welfare evaluations of preferential trade agreements.

Textbooks in Economics vol. 32. Amsterdam: North-Holland, 1992; and Dixon, P. B., & Parmenter, B. R., "Computable General Equilibrium Modelling for Policy Analysis and Forecasting," in H. M. Amman, D. A. Kendrick, & J. Rust (eds.), *Handbook of Computational Economics* vol. 1, pp. 3–85. Amsterdam: Elsevier, 1996.