

## Trade and Exchange Rates *Effects of Exchange Rate Misalignments on Tariffs*

Vera Thorstensen, Emerson Marçal and Lucas Ferraz\*

### Introduction

The issue of exchange-rate misalignments and their impact on trade is not new, but it has recently gained increased attention from economists, and a number of estimates of misalignments are available for all currencies in the world. It is relevant to note that misalignments are estimated against an equilibrium rate and not against some arbitrarily fixed point in the past.

The subject of currency and trade wars is gradually gathering interest among policymakers, experts and at the public domain at large. In the face of the magnitude of present misalignments and their clear impacts on trade, one may wonder why and how this issue is absent from trade rules and multilateral trade negotiations at the World Trade Organisation (WTO) in Geneva.

The genesis of the General Agreement on Tariffs and Trade (GATT), International Monetary Fund (IMF) and the World Bank in 1940s created a clear line between the GATT and IMF. One was to be responsible for trade liberalisation, and the other for exchange-rate and balance-of-payment stability. It is important to remember that, at the time, the multilateral trade rules were conceived under the dollar-gold standard. Even after the adoption of flexible exchange rates, during the 1970s the exchange rate subject was not incorporated either at the GATT nor, later, at the WTO.

This artificial construction created an illusion – that trade could be separated from exchange rates. While the world's big economies – the US and the European Union – dominated the trade scenario, whenever exchange-rate misalignments considerably affected trade, the issue was discussed between a few countries only, as demonstrated by the Plaza Agreement, in 1985. This Agreement was reached by the US, the UK, Germany, France and Japan, and the main purpose was to devalue the dollar. This

practice has been put into question since the beginning of the 2000s, when emerging countries started to become more prominent actors in the international arena.

### Some Recent Developments

In April and September 2011 and in November 2012, Brazil has presented three submissions to the *Working Group on Trade, Debt and Finance of the WTO*. In the first, a work programme was proposed, including academic research on the relationship between exchange rates and international trade (WT/WGTDF/W/53).

In the second, further analysis of trade instruments available in the multilateral trading system allowing members to redress eventual distortions caused by exchange-rate misalignments was requested (WT/WGTDF/W/56).

The third submission presented the discussion of the effects of exchange rate misalignment on trade instruments and analysed if any of the existing WTO rules were able to address such effects (WT/WGTDF/W/68).

The WTO Secretariat, at the request of the Working Group, also presented a review of literature on the relationship between exchange rates and international trade (Auboin and Ruta, 2011). The work brings together extensive research on the effects of exchange-rate volatility on trade flows, but it presents no specific study about the impacts exchange-rate misalignments have on WTO principles, rules and instruments. In short, the WTO analyses the subject from the perspective of the IMF, not of the WTO.

At present, the Doha Round of multilateral trade negotiations faces a serious impasse and one can question how the WTO can solve the exchange rate issue. The only reference to the question in the trading system is found in Article XV of the GATT which

\* Professors at the São Paulo School of Economics from Fundação Getúlio Vargas, Brazil and coordinators of the Centre on Global Trade and Investment.

establishes that countries shall not frustrate the objectives of the trade agreement through exchange-rate measures, nor the objectives of the exchange agreement through trade. This article, however, has never been tested by GATT or WTO panels.

Some experts also suggest the use of trade defence instruments, such as antidumping and countervailing measures as potential remedies, but their compatibility with WTO rules is uncertain. The main problem is that exchange-rate issues were never fully incorporated into WTO rules because they were always considered as matters managed by – and under the jurisdiction of – the IMF. With the intensification of the discussions on trade and exchange rate, the subject was considered at the G20 but, until now, the participating countries could not agree to a solution.

### Magnitude of the Problem

There are several models used to estimate the equilibrium exchange rate, such as purchasing power parity, the current-account equilibrium, the equilibrium of a country’s net external position of assets and liabilities, or the exchange rate based at the unit cost of the workforce. From the analysis of the different studies, it becomes clear that the magnitude of the exchange-rate misalignments can no longer be ignored.

The Exchange Rate Observatory of Fundação Getúlio Vargas (FGV) in São Paulo is currently

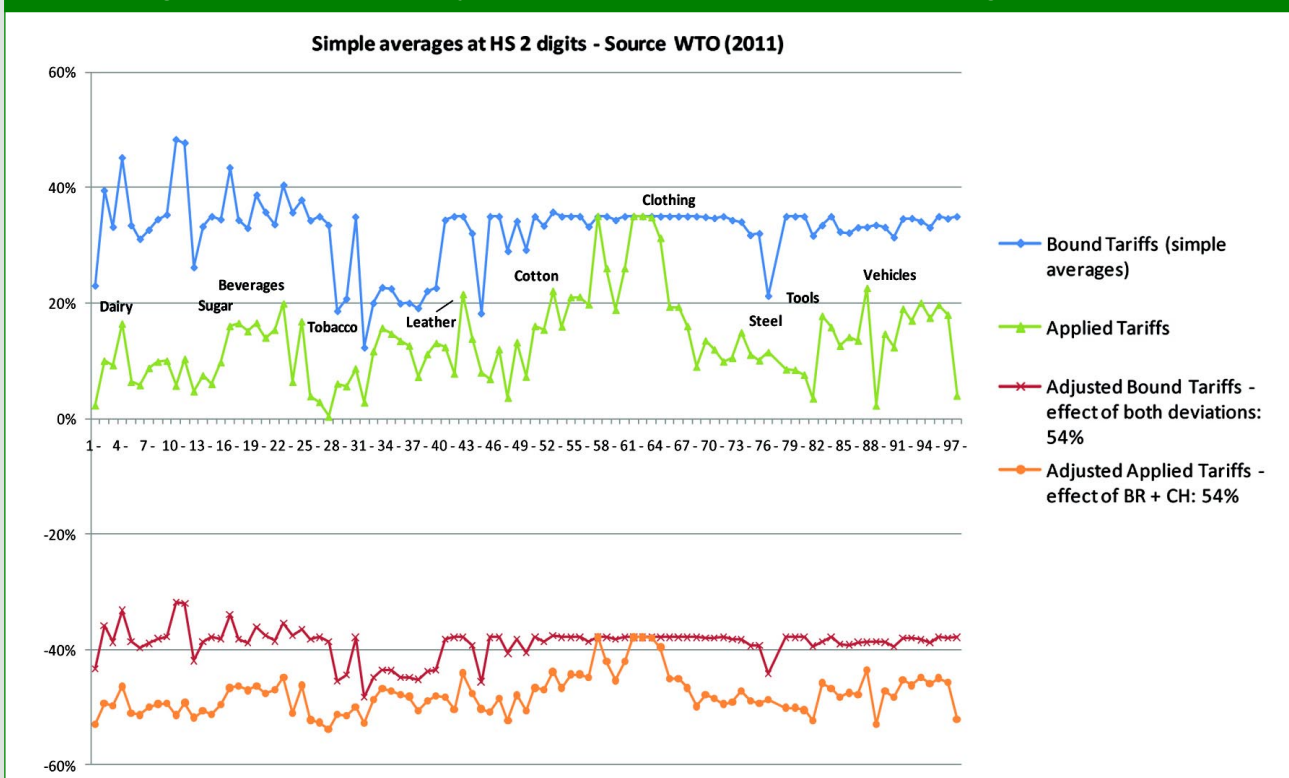
assessing the value of misalignments for the G20 currencies. Calculations for the end of 2011 show that the Brazilian Real was overvalued by 40 per cent, the US Dollar was undervalued by 7 per cent, and the Chinese Renminbi was undervalued by 14 per cent.

The next question to be raised is how such misalignments affect international trade policy instruments negotiated at the GATT/WTO over the last 60 years. The impacts of these misalignments on tariffs can be calculated in three steps:

- Creation of a graphical tariff profile for a country, that is, its simple-average bound and applied tariffs by category (foodstuff, minerals, textile, machinery and electronics)
- “Tariffication” of the exchange-rate misalignment
- Identification of its impact on import tariffs

Tariffs are a historical instrument for trade protection and one of the main negotiating subjects included in rounds of multilateral trade negotiations under the GATT/WTO. Its purpose is to allow an objective and transparent protection for agricultural and non-agricultural goods, and to be reduced over time, as a result of trade liberalisation. The difference between bound and applied tariffs represents an important space available for industrial policy purposes, the so called *policy space*, strongly defended by developing countries and highly criticised by developed countries.

**Figure 1: Brazil’s Tariffs x Adjusted Tariffs - Effects of Brazil + China Exchange Rate Deviations**



A quite realistic picture of each WTO member tariff protection's framework can be given by a graphic showing tariff averages for each chapter of the Harmonised Commodity Description and Coding System – HS (97 chapters), which includes: foodstuff, mineral, textiles, machines, electronics, vehicles and aircrafts, amongst others.

The concepts of tariff and tariffication are the core of the GATT/WTO logic. Endless hours have been spent in all negotiation rounds to estimate the *ad valorem* equivalent rates of several duties expressed on a monetary basis, such as specific rate duties and variable levies. Even in the cases of antidumping, countervailing measures and safeguards, the duties are equivalent to tariffs. According to this logic, exchange rate misalignments can also be tariffied through the calculation of a tariff equivalent. Just like tariffs, the effect of the exchange rate can be transferred to imported and exported goods' prices. Details of this methodology are presented in Thorstensen *et al* (2012).

Some simulations can be developed based on the estimates of exchange rate misalignments and its tariff equivalents, obtained through the tariffication of exchange rates, allowing an evaluation of the impacts of misaligned exchange rates on import tariffs.

In the case of Brazil, the outcome is surprising. For 2011, with a 40 per cent overvaluation, Brazil is virtually nullifying its bound tariffs and transforming its applied tariffs into import incentives of around 35

per cent. In other words, the exchange-rate misalignment has the effect of nullifying the market protection negotiated at the WTO and, even worse, of working as an incentive to imports.

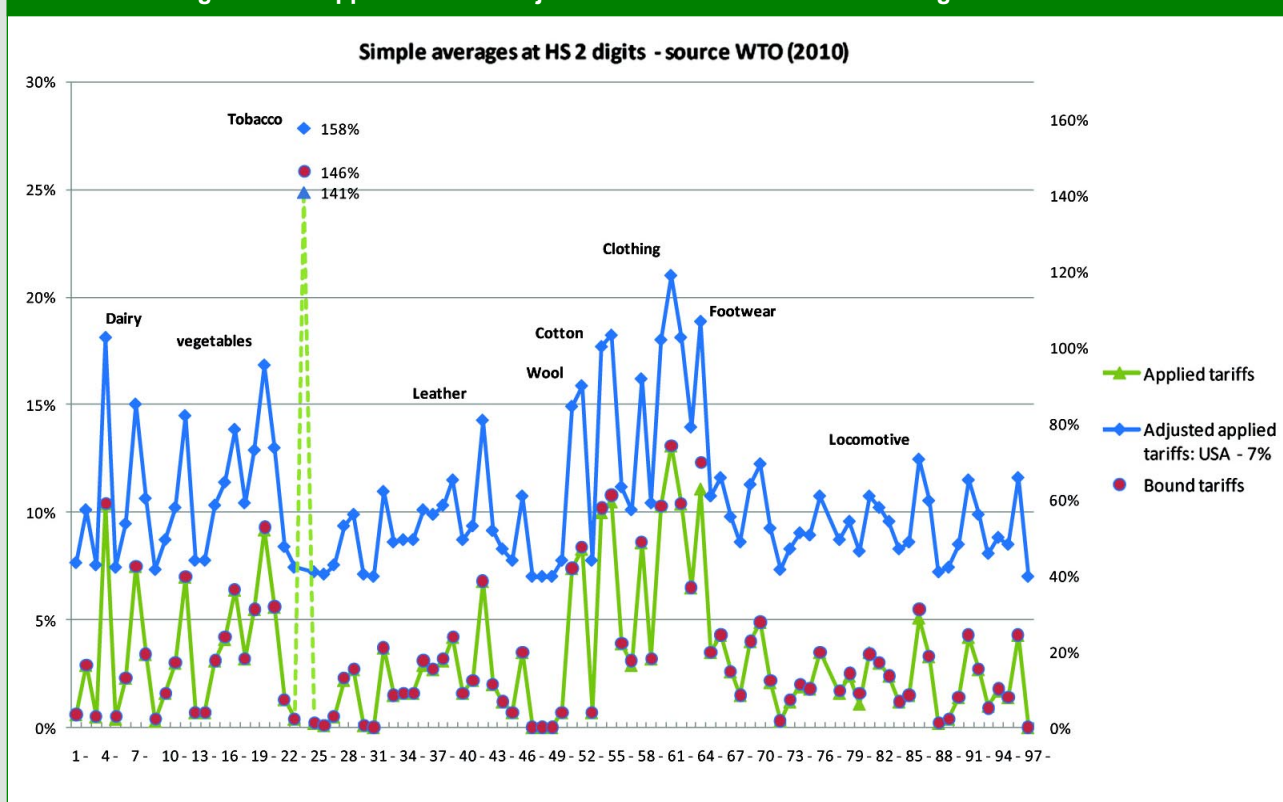
Again for Brazil, considering the accumulated impact of some undervalued exchange rates, such as those in the US, China and other Asian countries, in 2011, the effects on Brazilian tariffs are also alarming. For example, a 14 per cent undervaluation of China's exchange rate (or other similarly undervalued currency), when "tariffied" in conjunction with the Brazilian overvaluation of 40 per cent, will represent not only the nullification of Brazil's bound and applied tariffs, but also incentives to import. When faced with devaluated currencies, the WTO's negotiated tariff levels can be further affected, which shows that Brazil is offering a much larger market access than the one negotiated at WTO (Figure 1).

There are other important consequences regarding undervalued currencies. Following the methodology of tariffication for exchange-rate misalignments, the results will be an extra tariff to be added over the negotiated tariffs of countries with undervalued currencies, representing a new barrier against imports.

## Consequences

First, the bound tariffs negotiated at the WTO by these countries are being increased. This could represent a violation of Article II of the GATT that

Figure 2: US Applied Tariffs x Adjusted Tariffs - Effects of US Exchange Rate Devaluation





establishes that tariffs shall remain under the level bound at the respective schedules of concessions of each country. Thus, in the US market for example, the misalignment of the US Dollar, when tariffed, results in a tariff superior to the tariffs bound by the US at the WTO (Figure 2).

It is worth mentioning that these effects of exchange rate misalignments upon tariffs were already foreseen in GATT Article II:6, which states that:

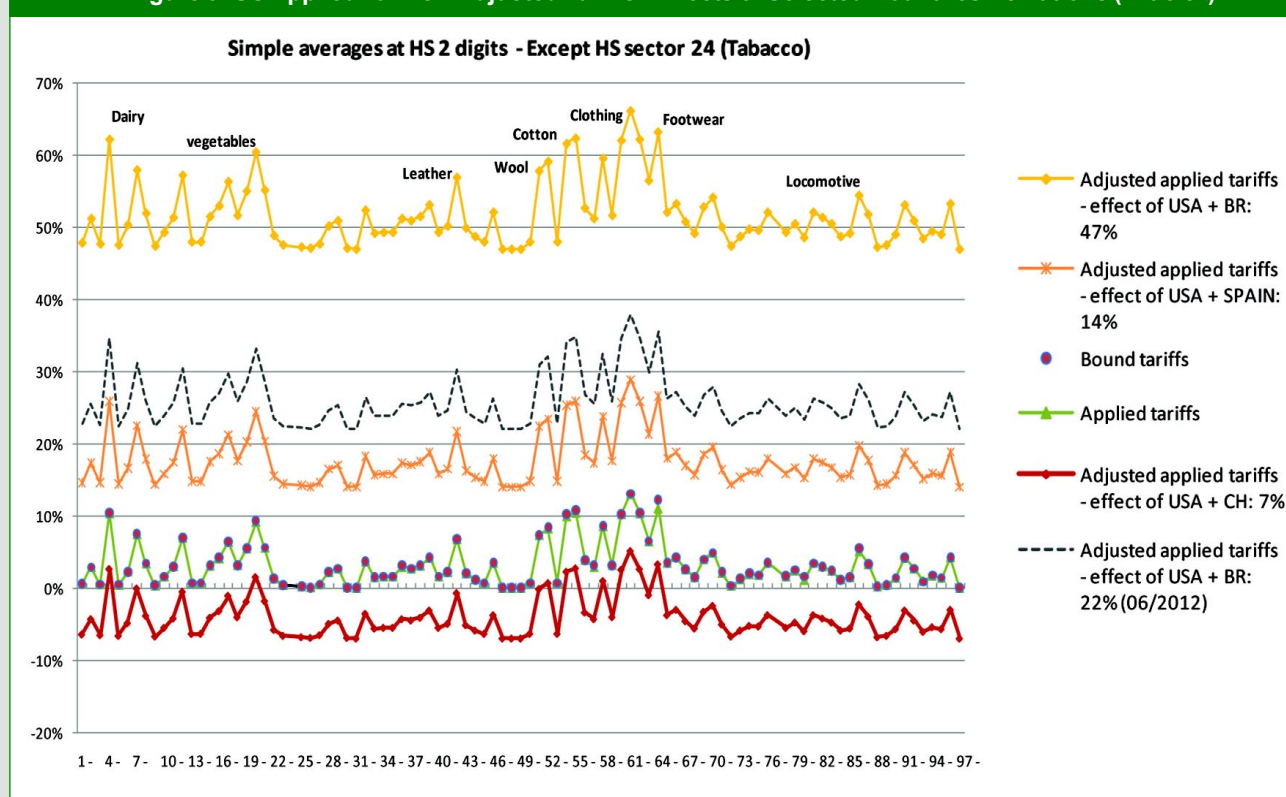
*The specific duties and charges included in the Schedules relating to contracting parties members of the International Monetary Fund, and margins of preference in specific duties and charges maintained by such contracting parties, are expressed in the appropriate currency at the par value accepted or provisionally recognised by the Fund at the date of this Agreement. Accordingly, in case this par value is reduced consistently with the Articles of Agreement of the International Monetary Fund by more than twenty per centum, such specific duties and charges and margins of preference may be adjusted to take account of such reduction; provided that the CONTRACTING PARTIES (i.e., the contracting parties acting jointly as provided for in Article XXV) concur that such adjustments will not impair the value of the concessions provided for in the appropriate Schedule or elsewhere in this Agreement, due account being taken of all factors which may influence the need for, or urgency of, such adjustments.*

The provision recognises the effects misaligned exchange rates have on tariffs, affecting the negotiated level of market access. Negotiations under Article II:6 have occurred nine times during the GATT era, between 1950 and 1975, allowing the raise of bound specific tariffs of Benelux countries of Belgium, Luxembourg and the Netherlands, Finland (thrice), Israel, Uruguay (twice), Greece and Turkey.

With the end of the gold exchange standard, the GATT contracting parties created a Working Group whose objective was to adapt the existing mechanism in Article II:6 to the new reality of floating exchange rates. From 1978 to 1980, the Working Group met and issued, in January 1980, the *Guidelines for Decisions under Article II:6(a) of the General Agreement (L/4938, 27S/28-29)*. This document reaffirmed the importance of maintaining the mechanism in order to neutralise the effect of exchange rate devaluation on specific tariffs of contracting parties and kept the threshold of 20 per cent of exchange rate misalignment as a base for the renegotiation.

It should be noted that this threshold was considered reasonable based on the level of the tariff rates at that time. Due to the decrease of tariff rates levels, a new exchange rate misalignment threshold could be negotiated in order to allow a tariff renegotiation of the current systems of floating or administrated exchange rates.

Figure 3: US Applied Tariffs x Adjusted Tariffs - Effects of Selected Countries Deviations (Article I)



The second consequence of undervalued currencies on tariffs is that these countries are benefiting from a wider market access in other countries than they had negotiated for in the WTO, harming the balance of negotiations.

Another serious issue related to the effects of misalignments on tariffs is the creation of different degrees of openness faced by a given country in other markets. Calculating the combined effect of several exchange-rate misalignments (overvaluation and undervaluation) to a given tariff profile (applied tariffs), each country will present a different set of tariffs against exports of exporting countries. In other words, considering the new “adjusted tariffs”, each exporter will face a different market-access situation in a specific market, depending on which country he exports his products to.

In the American market, for instance, if one considers the tariffication of both currency misalignment of the US and the misalignments of countries like China, Brazil and Spain, it can be verified that Chinese products face a much larger market access – with many negative tariffs, representing an incentive to exports, – than Spain, while Brazil faces the narrowest market access, with tariffs charged well above US regular applied and bound tariffs (Figure 3).

## Conclusion

This reality brings into question the effectiveness of the Most-Favoured-Nation (MFN) principle established by GATT Article I, that “any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.”

Persistent exchange-rate misalignments cannot but create potentially infinite variations of market-access conditions among WTO members. This situation is directly the opposite of what the multilateral system sought with the establishment of the MFN principle, that aimed to assure that no particular country would have a commercial advantage in its trade with another contracting party, which otherwise could raise tensions and divert trade

The effects of misalignments are also distorting many other rules and instruments negotiated under the WTO, such as antidumping, subsidies, safeguards, rules of origin, GATT articles I, II, III, and XXIV.

The WTO can no longer ignore what is happening behind its magnificent structure of complex trade rules. The persistence of opposite exchange-rate misalignments, of countries with overvalued currencies and others with undervalued ones, for long periods is eroding the objectives of the rules-based multilateral trading system.

The core principles of WTO’s construction – transparency, predictability and confidence – are under question. The strengthening of trade rules, with the negotiation of instruments to neutralise the effects of exchange rates, is fundamental to the existence of the WTO. Otherwise, the WTO might become a diplomatic-juridical fiction – void of economic reality.

---

## References

- Auboin, Marc and Michele Ruta, *Currencies and trade: Looking at the recent literature*, VoxEU.org, 13 November 2011
- Thorstensen, Vera, Emerson Marçal and Lucas Ferraz, *Impacts of Exchange Rates on International Trade Policy Instruments: The Case of Tariffs*, Journal of World Trade, Vol. 46, Issue 3, 2012

---

© CUTS International 2013. This Briefing Paper is produced by CUTS to inform, educate and provoke debate on issues of trade and development. Readers are encouraged to quote or reproduce material from this paper for their own use, but as the copyright holder, CUTS requests due acknowledgement and a copy of the publication.

---

This Briefing Paper has been researched and written for CUTS Centre for International Trade, Economics & Environment, D-217, Bhaskar Marg, Bani Park, Jaipur 302 016, India, Ph: 91.141.228 2821, Fx: 91.141.228 2485, E-mail: citee@cuts.org, Web Site: www.cuts-international.org, www.cuts-citee.org.

---