Preparing for the return:
What the fundamentals point to the exchange rate in Brazil until the end of 2021

July 2020
• We revised our projection for the exchange rate from R$/US$5.50 to R$/US$ 5.20 at the end of 2020 and from R$/US$ 5.50 to R$/US$ 4.90 at the end of 2021.

• Reasons:
  • Sinking of global and domestic risks associated with the pandemic in the medium term.
  • Gradual return of commodity prices.
  • Relative maintenance of the interest differential until the end of 2021.

Ended last Wednesday, the first half of 2020 will go down in history as the beginning of the period of greatest uncertainty in the lives of people, governments, and, consequently, the global financial markets. The coronavirus pandemic brought it out quite explicitly as in periods of risk aversion, the most secure assets predominated. The US currency was the refuge for the allocation of assets chosen by all parts of the world and Brazil was not left out. The movement was wide open in our exchange rate in recent months.

The purpose of this article is to update the evidence on the fundamentals that operate under our R$/US$ exchange rate and, based on such variables, to project the dollar on a quarterly basis until the end of 2021.

Despite the R$/US$ quotation breaking nominal records in recent weeks, the exchange rate for the macroeconomic perspective must also be observed in the real perspective, that is, the one that is expressed considering the Brazilian inflation (IPCA) as well as the American (CPI). Considering the range since the 2000s, the mid-May record was lower than the price seen during the 2002 elections.
In the last three months, we observed a degree of volatility in our currency at a historically high level, making us question whether our exchange rate is “detached” from the fundamentals of the economy. Atypical financial conditions (such as the global uncertainty indicator) help explain 0.50 cent depreciation in just one week. Looking back, the depreciation of our currency was already being seen throughout 2019 with the intensification of the China - United States trade war and escalated to a level never seen before by the effects of the pandemic.
In recent quarters, the fundamentals that guide the theoretical framework of the oscillations between the American and Brazilian currencies have shown a significant change in trajectory. Here it is worth remembering some idiosyncratic aspects of the Brazilian economy that must be considered to explain our exchange rate, such as; the high relevance of mineral and agricultural commodities in our export basket; the theory of interest parity under the differential metric of Brazilian swaps with American securities; the Brazilian productivity that can be measured in this context on the terms of trade (export / import) indicator in the global trade chain and the country-risk level that can encompass risks associated with the political and fiscal environment and the dynamics of the northern currency American compared to other central economies (movement illustrated through the DXY index). Evidently, not all macroeconomic variables can explain currency volatility as a whole and, therefore, even aiming to reduce daily changes, the structuring of the modeling starts with quarterly frequency starting in January 2000.

1. **DXY Index**

The DXY index measures the strength of the dollar against a basket of six currencies (Euro, Yen, Pound, Canadian Dollar, Swedish Krona, Swiss Franc) and denotes the relative value of the American currency in the global market. Since the first quarter of 2018, DXY has shown appreciation and ended the first half of 2020 10.8% higher than the historical median since 2000.
2. Terms of trade

Terms of trade indicator that deals with the ratio between the prices of products exported to the price of products imported by Brazil is intended to compare the country’s trade with the rest of the world. Given the relevance of commodities in this index and even with the whole crisis imposed by the coronavirus, there is a level of "tt" at the end of the second quarter close to the historically observed average, which has relatively benign and feasible implications with the appreciation scenario of the real.

3. Commodities

The Brazilian production of commodities strictly follows international prices and these indices are measured by the Commodity Research Bureau Reuters/Jefferies (CRB-RJ) - an indicator that provides information on future commodities markets such as oil - and by the United Nations FAO index, which estimates prices on food products on a global scale. These indicators can impose global supply and demand sensitivity for such goods and have significant predictive power for fluctuations in the R$/US$ exchange rate. At the end of the second quarter, with the weak global demand for oil reflected in the price of US$/Brent barrel, which fell at levels observed almost 20 years ago, the CRB/RJ indicator is about 50% below the historical average. The demand for food products remains relatively stable. The expectation of a resumption of global economic activity and, consequently, of increased demand for oil, imposes an appreciation bias for our exchange rate.
4. Interest Rate Differential

In 2016, Brazil began a process of micro and macroeconomic reforms that significantly impacted our neutral interest curves. Among them are the creation of the TLP, which removed the cost of half-price of contracts granted by BNDES, the creation of the spending ceiling, which impose a limit on public spending, the implementation of the Cadastro Positivo, which reduces the asymmetry of information for interest on households, and the pension reform, which stabilized the trajectory of the highest mandatory spending in the Federal Government. All these measures were fundamental for the monetary policy of the Central Bank to reduce the basic interest rate of the economy to historical minimum levels. This higher level of interest in the past was enough for certain maintenance of foreign flows in fixed income financial assets in Brazil, helping to appreciate our exchange rate.

Structurally, the differential between Brazilian interest rates (SELIC) and American interest rates (FED Funds) fell from an average of 15 years (between 2002 and 2016) from 12.1 percentage points to an average of 2017 to date of 5.4 pp This difference is currently at 2.1 percentage points. And despite this new reality of structurally lower interest rates, the differential of the Brazilian basic interest rate with a group of emerging countries gain relevance and is less attractive to foreign capital that opts for risk-free assets, as shown in the graph below. Since the middle of 2018, this difference has been negative for Brazil, which partly explains the flight of foreign capital to other countries.
5. Risk

Finally, the most relevant factor in recent months: the risk measure. In the current economic literature, several domestic and global risk indicators are made available to the public. From March 2020 to the end of June, they all had the same characteristic, record levels of historical maximum record in the degree of uncertainty. As previously mentioned, the uncertainty index measures the degree of uncertainty in terms of not only economic, but also media and government policies. For the purpose of explaining the Brazilian exchange rate, the option for risk indices more associated with the financial markets has a better predictive performance. Globally, VIX has a good feature to reflect investment decisions and in the domestic sphere, the 5-year CDS indicator collected by Bloomberg for contracts in the financial market is the best risk measure for Brazil.
The greatest lack of predictability about the exchange rate is precisely in the Brazilian risk variable. At present, there is high global uncertainty in the health field about the developments in the numbers of cases and deaths caused by COVID-19 and whether and when there will be a vaccine that will allow the world to return to "normal" dynamics. On the domestic side, doubt surrounds the theme of an increase in risk premiums for Brazilian sovereign bonds due to the increase in the debt / GDP ratio caused by measures to combat the pandemic. The expectation is that in the medium / long term the Brazil risk will return to levels close to the average seen in 2019.

The graph above shows the relationship between the currencies of emerging countries against the dollar from 2017 to today and depicts the composition of the structural elements of our exchange that were previously mentioned. With the exception of the Turkish Lira and the Argentine Peso, countries that had more significant domestic crises, the real depreciated by almost 40% in the period and this dynamic will not change without gains in productivity in the Brazilian economy and this necessarily passes through structural reform agenda such as tax and administrative.
Since the beginning of the spread of the new coronavirus in western countries in early March, risk has been the main reason for the daily fluctuations in the R$/US$ exchange rate. The graph below illustrates the correlation between the CDS and the depreciation of the real in the past four months.

Given the high degree of uncertainty in the Brazilian economy and the maintenance of the dollar’s volatility at historically high levels, the scenario may be revised marginally in the next months.
For the coming months, considering the macroeconomic elements such as:

i) Depreciation expectation of the US currency (DXY) close to 5.0% from the levels observed in the second quarter of 2020 until the end of 2021.

ii) Reduction of global and domestic uncertainty; we projected Brazil's 5-year CDS close to 180 points by the end of 2021.

iii) Return of the Brent oil prices, positively affecting our export basket. For now, we expect the CRB / RJ index to accelerate to the 180 points.

iv) Interest differential between BZ - US relatively unchanged for the next quarters and its reduction starting from the end of 2021

Disclaimer

This material was prepared by XP Investimentos CCTVM S.A. ("XP Investimentos" or "Company") and should not be considered as a research material for the purposes of article 1° of CVM Instruction 598/2018. All opinions, projections and estimates constitute the judgment of the author as of the date of transmission and these, plus any other information contained herein, are subject to change without prior notice. The Company does not support or oppose any political parties, political campaigns, candidates, or public officials. Furthermore, XP Investimentos is not permitted to give corporate funds, property or other resources to political parties or candidates and will not reimburse any shareholders, directors, officers, employees, and licensors for such contributions or expenditures. XP Investimentos and its affiliates, parents, shareholders, directors, officers, employees, and licensors will not be liable (individually, jointly, or severally) to you or any other person as a result of your access, reception, or use of the information contained in this communication.

Past performance is no guarantee of future results. Therefore, nothing in this report constitutes a representation that any investment strategy or recommendation contained herein is suitable or appropriate to a recipient’s individual circumstances or otherwise constitutes a personal recommendation. This report is published solely for information purposes, it does not constitute an advertisement and is not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. This material (including any attachments) is confidential, may contain proprietary or privileged information and is intended for the named recipient(s) only.