

Department of Economics and Finance

*Chair: Money and Banking*

**From currency wars to a possible monetary  
union: the case of Argentina and Brazil**

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## **Introduction**

Since the creation of the Euro in Europe, Latin America has emerged as a region where new currency agreements are frequently discussed. The countries in this region seek to reduce the dominance of the United States on their economies, as the US has historically exerted significant influence on Latin American countries. The adoption of a common currency among Latin American countries would improve economic integration among participating nations, provided that certain conditions are met.

The benefits of a shared currency include increased trade, which would promote economic growth and stability. A common currency would eliminate exchange rate fluctuations and provide stability for governments planning long-term projects with partner economies. The idea of monetary integration in Latin America has been proposed in the past, but concrete results were not achieved. Some countries have only engaged in commercial agreements, with the issue of a common currency remaining a mere hypothesis. However, Brazil and Argentina - the two largest economies in the region - have recently resumed talks on the implementation of a currency agreement, potentially to be extended to other economies in the region. The proposed name for this currency project is SUR.

There are many obstacles to overcome on the road to currency integration. The experience of the Euro shows how long and complex the journey can be, as well as what the benefits and costs of a single currency are.

In the first part of this thesis, the topic of currency wars will be discussed and the differences between short-term and long-term costs and benefits will be analysed. Subsequently, the theory of Optimal Currency Areas will be used to understand what characteristics countries must have and what criteria they must meet in order for a monetary union to be favourable and lasting.

In the second part, the economies of Argentina and Brazil will be specifically addressed. In addition to presenting the history of their economies from 1960 to 2016, as well as their respective fiscal and monetary policies, the various commercial agreements made in recent years between them and other countries in the region, and a previous attempt at a single currency, will be illustrated. Then, their main current economic indicators, relevant for any currency agreements, will be described in order to see how close or far their economies are from each other today.

To this end, the experience of the Euro is relevant in indicating the most important macroeconomic factors to be analysed and the necessary timeframes for a single currency project.

Planning all the steps that the two economies need to take is fundamental. A wrong decision or a right one at the wrong moment can jeopardize the whole project, so extreme caution is required to deliver a well-structured and long-lasting program. However, Argentina and Brazil do not have to start from scratch. Their economies have been linked to each other in the past, sometimes more closely and sometimes more distantly, and have even been in conflict. Many treaties to promote integration have been signed, such as LAFTA, LAIA, and Mercosur, which have already

facilitated integration and will be analyzed in depth later in this text. As the Latin quote by Cicero, 'historia magistra vitae,' emphasizes, it is crucial to examine past attempts and learn from mistakes as well as successes.

To establish a single currency between Argentina and Brazil, they should rely on the European experience and plan how to create the proper conditions. A deep analysis of the European Economic Area (EEA) Agreement carried out by Argentine and Brazilian authorities could be helpful. This agreement will be explained, along with past agreements between Argentina and Brazil, to see how far the two economies are from the Euro experience.

Finally, the concrete possibilities of an agreement between the two countries regarding the creation of a common unit of account, which is currently under discussion, will be referred to, also using the first comments gathered among international observers.

## **PART I - COMMERCIAL AND CURRENCIES WARS**

### **1. Currency wars: the predominance of the US dollar**

The term "currency war" refers to a country's policy of intentionally devaluing its own currency to advance its interests at the expense of other nations (Rickards, 2011). While the term was coined by the Brazilian Minister of Finance, Guido Mantega, in 2010, notable instances of currency wars occurred in the 20th century, specifically during the 1930s and in 1971. The significance of currency wars lies in their potential detrimental effects. In the best-case scenario, countries simply siphon off growth from one another. However, at worst, they can lead to recessions, and in extreme cases, even trigger invasions and wars due to the competition for resources.

The currency war of 2009, following the Global Financial Crisis of 2007-2008, could have had even greater consequences compared to those of the previous century, given the exponential growth of globalization, derivatives, and leverage. The initiation of the currency war during those years can be attributed to the Federal Reserve's response to the Global Financial Crisis. To prevent deflation, the central bank implemented a Quantitative Easing policy, which involved printing money to purchase bonds, thereby driving up their prices, reducing interest rates, and stimulating investments and growth. Although this policy was implemented at the national level, its effects rippled across the globe due to the United States' position as the largest economy. With more US dollars in circulation, the purchasing power of the currency decreased,

resulting in weaker dollars for foreign creditors. Consequently, many countries sought to reduce their dependence on the US dollar.

In his book, Rickards (2011) delves into this topic and describes his participation in an experiment conducted by the Pentagon to analyse potential outcomes. The purpose of the experiment was for the United States to anticipate responses from other countries involved in the currency war and strategize accordingly. Numerous meetings took place at the Applied Physics Laboratory (APL) starting in September 2008, with the participation of leading experts. The actual experiment occurred on March 17th and 18th, 2009. The experiment was structured as follows: major participants such as Russia, China, and the United States each had their own "cell." Japan, South Korea, Taiwan, and Vietnam were grouped together in a cell referred to as the Pacific Rim. Europe and the IMF formed the Gray Cell, which had a limited impact on the game. Lastly, the White Cell acted as the referee, determining which countries gained or lost power relative to others. Participants of the experiment were divided into groups, with each group representing a cell and assuming the role of the government of their assigned country. The experiment consisted of three rounds, with the first two rounds taking place on March 17th and the final round on March 18th.

The first move, conducted by Russia, aimed to challenge the hegemony of the US dollar by considering a return to the gold standard or the adoption of a new currency to diminish the importance of the dollar. Surprisingly, neither the US nor China responded to this move. Japan, however, made a slight shift in favour of Russia. At the conclusion of the first round, the white cell provided a partial score. The US lost a marginal amount of power as Japan deviated slightly from its influence, China maintained its

position without taking any action, and Russia faced significant penalties as its move did not yield immediate benefits.

In the second move, the focus shifted to the economic collapse of North Korea, a country relatively independent and less closely linked to the other participants. Additionally, China sold all its gold reserves to Russia in exchange for hard currency. The results from the white cell were clear: the collapse of North Korea, being an isolated nation, had a relatively neutral impact on the economies. As a result, the power balance between the US and China remained largely unchanged. On the other hand, Russia gained significant points by acquiring gold. Although the outcome of Russia's move remained uncertain, it strengthened its position by introducing an alternative to the US dollar.

On the morning of the 18th, Russia went a step further by calling for an end to the dominance of the US dollar and expressing its intention to seek an alternative currency. Remarkably, this was not part of the experiment but a reflection of reality. The experiment had successfully predicted the events unfolding in the real world. As a result, the experiment put the US a few steps ahead of reality. The experiment continued that day, and the third move took place. It involved Taiwan moving away from the emerging alliance with China. In response to China's warning to any country supporting Taiwan, the US explicitly supported Taiwan. Simultaneously, Russia not only invited countries from the Gray Cell to join the alternative currency but also offered support to China in the Taiwan situation in exchange for their adherence to the new currency. At the end of the day, Russia emerged as the country that gained the most national power, China experienced modest gains, and the US was positioned as the loser.



While Russia failed in diminishing the predominance of the US dollar, the experiment proved to be highly valuable in understanding the potential outcomes of a currency war and how they can impact global economies by shifting the balance of national power and potentially triggering recessions. The idea of reducing dependence on the US dollar is currently a relevant topic in some countries. According to Rickards, the threats explored by the Pentagon in the 2009 experiment are becoming increasingly plausible. The future sustainability of the US dollar is being questioned, and Rickards presents four potential alternatives for its replacement.

Firstly, a multiple reserve currencies system is considered the least likely option. Secondly, subordinating the US dollar to the Special Drawing Rights (SDR), an international reserve asset created by the IMF and supported by several G20 countries' finance ministers, is proposed as another possibility. Thirdly, a return to the gold standard is suggested as an ideal alternative that would provide a higher level of stability by reducing uncertainties surrounding inflation, interest rates, and exchange rates. Lastly, the most alarming scenario is chaos, which is considered a realistic but catastrophic outcome.

The significant attention given to the US dollar stems from its unique role in currency wars, distinguishing it from other currencies. Its central position makes it a pivotal player in any potential currency conflict.

## **2. Currencies devaluations: the effects in the short and long term**

Throughout history, countries have used currency exchange rates as a tool to promote their commercial interests by devaluing their own currency. The reasons behind a monetary authority's decision to devalue the currency adopted by one or multiple countries can be either financial or macroeconomic in nature. (International Monetary Fund, 2009) Financial motives for a competitive currency devaluation impact the international account, which is comprised of the International Investment Position (IIP), the Balance of Payments (BoP), and other changes in financial assets and liabilities accounts.

The IIP is a snapshot of a country's ownership of foreign assets and liabilities at a specific point in time. It shows the value of a country's financial assets, such as foreign currency reserves, stocks, and bonds, held by residents of an economy that are claims on non-residents and liabilities of residents to non-residents, such as foreign loans and bonds held by domestic residents. The difference is the IIP net position, which is an important indicator of a country's financial position and its ability to service its external debt. Changes in a country's IIP can affect its exchange rate and the value of its currency. It is important to note that the IIP represents only a part of the national balance sheet since it does not include financial positions among residents and nonfinancial assets and liabilities held in positions with non-residents. If we want to compare IIP across two different periods, we use the integrated IIP, which links an opening IIP with a closing one.

The Balance of Payments (BoP) represents transactions between residents and non-residents over a specified period, usually a year. It is divided into

two main categories: the current account, which measures trade in goods and services and income flows, and the capital and financial accounts, which record investment and borrowing flows. The current account is further divided into the goods and services account, the primary income account, and the secondary income account. The goods and services account shows transactions in goods and services, while the primary income account shows amounts payable and receivable in return for providing temporary use to another entity of labor, financial resources, or non-produced nonfinancial assets. The secondary income account shows redistribution of income, that is, when resources for current purposes are provided by one party without anything of economic value being supplied as a direct return to that party.

The capital account shows credit and debit entries for non-produced nonfinancial assets and capital transfers between residents and non-residents. The financial account shows net acquisition and disposal of financial assets and liabilities. In principle, the current account, capital account, and financial account should be in balance. The financial account determines the way in which the net balance (lending to or borrowing from non-residents) is financed, and therefore, it must be equal to the sum of the current account and the capital account. In other words, the current account is equal to the difference between the financial account and the capital account. However, while the financial account reports net values, the current account and the capital account are expressed in gross terms. A BoP  $> 0$  indicates that the IIP is increasing (so that total foreign assets are increasing relative to total foreign liabilities), whereas a BoP  $< 0$  indicates that the IIP is decreasing.

Overall, the Balance of Payments and International Investment Position are important indicators of a country's external financial position, and changes in these indicators can be affected by currency devaluation.

As far as the macroeconomic reasons are concerned, theoretically, this makes prices of domestic products more competitive on international markets, favouring exports. Furthermore, prices of imported goods become higher, reducing demand for more elastic goods and, at the same time, favouring domestic consumption of national products. Obviously, the trade balance and the country's wealth seem to benefit from all this. According to Pettinger (2009), a lower current account deficit (or a greater current account surplus) will result from this. However, the effects of devaluation depend on both the price elasticity of demand and the current state of the global economy. In fact, an inelastic demand involves a small quantitative variation both in exports and imports. (Krugman, Obstfeld, & Melitz, 2012) The effects on the trade balance would be determined by the Marshall-Lerner condition, which states that if the absolute sum of a country's export and import demand elasticities is greater than 1 the balance of trade improves immediately. If the sum is instead lower than 1, there is an immediate worsening of the current account after a depreciation because import and export orders are placed in advance. Since exports are measured in domestic output do not change, whereas imports rise. It takes several months, usually around twelve, to reach an improvement when compared with the starting position. This phenomenon is called the "J Curve" because of the shape of the curve in a graph which measures time on the x-axis and current account (in domestic output units) on the y-axis.

Furthermore, if the global economy is contracting, it is likely that demand for exports will not increase as expected by the country devaluing its currency. However, as we will see later in this text, experiments show that this is not always the case. A weaker currency has a positive impact on both the real estate and capital markets, which makes consumers willing to increase their spending given the "wealth effect": people spend more when house and stock prices are increasing, as they feel that their wealth has increased. In addition, stock markets become less expensive for foreign investors and, as a result, foreign direct investment increases. We can identify three main reasons why countries devalue their currencies. Each of them has also a potential disadvantage. Therefore, countries should pay extreme attention to the effects of their devaluation policies.

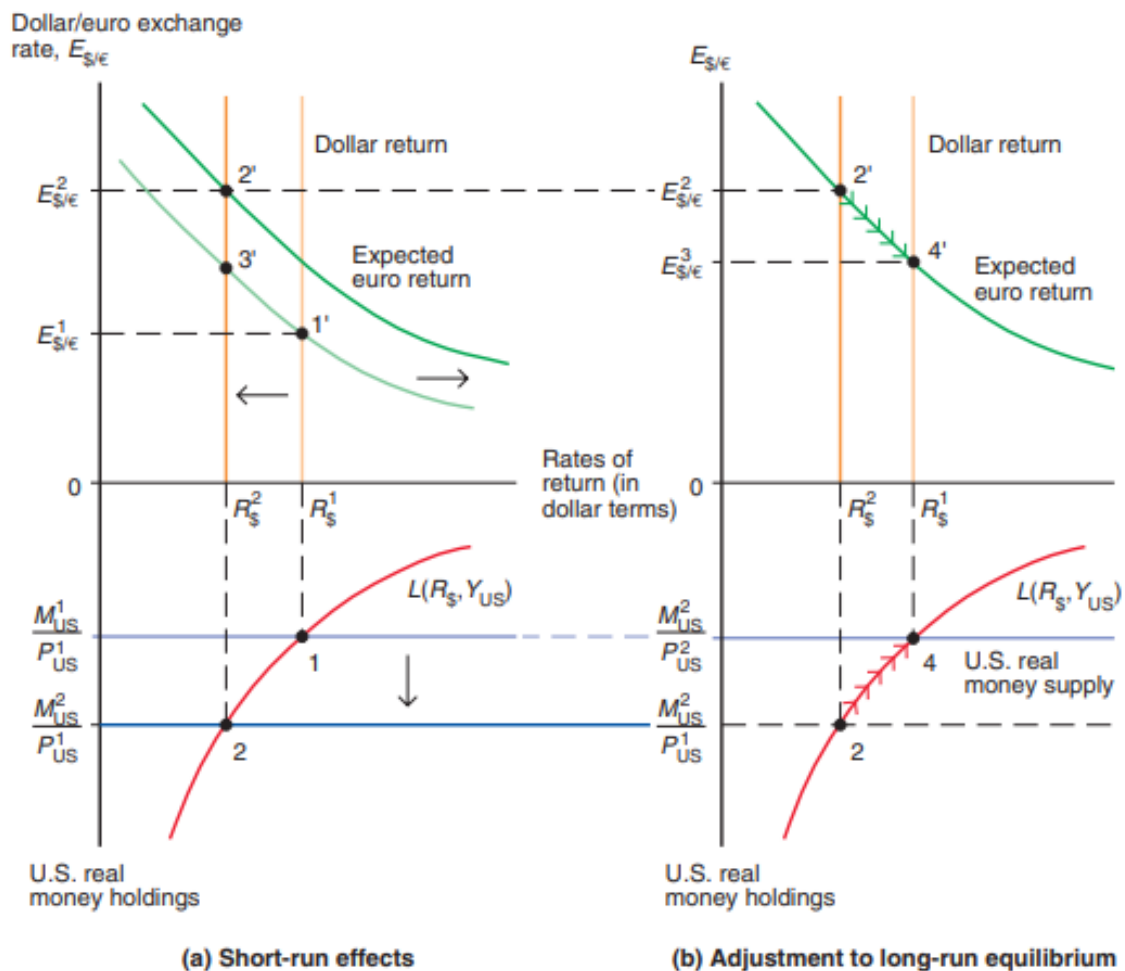
Furthermore, a devalued currency leads to both a better balance of net exports, which in turn reduces trade deficits but increases the weight of foreign-currency-denominated loans, and to lower real weight of debt faced by the government, since it has to pay lower capital and interest on its debts (however, if the the country has a lot of debts denominated in foreign currencies, payments become more expensive instead of cheaper).

In any case, managing currency exchange rates proves to be a tool for trade wars, in addition to the use of barriers and customs duties.

To manipulate the exchange rate, central banks governing currencies can operate in the currency market by buying or selling currencies, both foreign ones to promote their appreciation and their own by increasing the quantity of money in circulation and then selling significant quantities to devalue exchange rates. The expansion of the monetary base can be accompanied by a reduction in interest rates to make returns on

investments in the national currency less competitive. In addition, it should be considered that expectations of currency devaluation, communicated through these initiatives, further favour its devaluation. (Krugman, Obstfeld, & Melitz, 2012) We can see these effects on the exchange rate graphically by combining the money market and the forex market. Together they constitute the asset market.

Figure 2.1



Source: (Krugman, Obstfeld, & Melitz, 2012)

We show the effects by considering the US as the domestic market and Europe as the foreign market. The bottom part of the graph represents the money market, which is rotated by 90 degrees. The horizontal line

represents the money supply in real terms ( $M^s/P$ ) of the domestic market, which is independent of the rate of return and set by the money authorities. The red curve represents the demand for money, which is positively correlated with output and negatively correlated with the rate of return.

The top part of the graph represents the forex market. The vertical yellow line represents the rate of return on domestic deposits, while the downward-sloping green line represents the expected dollar return on euro deposits.

The left graph in the figure shows the short-run effects. An increase in the money supply shifts the blue line downward, resulting in a decrease in dollar returns, an increase in the exchange rate, and a dollar depreciation, as shown by point 3'. The same effect can be achieved with a decrease in demand for US dollars (not shown in the graph), which shifts the red line to the left. To reach equilibrium in the money market, lower interest rates are required, as at the previous interest rate, there would be an excess of lenders over borrowers. The lower interest rate, again, depreciates the US currency.

When we consider expectations in the model, an expected dollar depreciation leads to an increase in expectations on euro-denominated deposits, and the green line shifts to the right. This results in a higher exchange rate, as indicated by point 2'.

The graph on the right shows the long-run effects, which are different from the short run because prices are allowed to adjust. An increase in the money supply has no effect on long-term interest rates and output, as the

former are independent of the money supply, and the latter depends on factors such as labor and capital. Thus, an increase in the money supply will lead to a proportional increase in the price level, since  $M^s/P = L(R,Y)$ . This equation states that the money supply in real terms must be equal to the demand for money. As already mentioned, the right part of the equation is unaffected by an increase in the money supply. To keep the equation in balance, prices have to rise by the same proportion as the money supply. This is shown in the graph by an upward shift in the money supply in real terms and a consequent increase in dollar returns. The exchange rate decreases, and the US dollar appreciates. However, since we incorporated expectations into the model, point 4', which is higher than point 1', will be reached. Again, after a sharp rise in the exchange rate in the short run, we observe a subsequent appreciation of the domestic currency. This phenomenon is defined as "interest rate overshooting".

Furthermore, the increase in the prices of imported goods with inelastic demand produces further inflationary pressures. A typical example of inelastic demand concerns energy products, essential for national production, whose price increase resulting from currency devaluation affects production costs and therefore the prices of finished products, with their increase and the nullification of the benefits of the previous currency devaluation. Regarding goods with more elastic demand, such as equipment and machinery, the reduction of imports has negative effects on the productivity of the economic system. Therefore, the effects of devaluation are not as good as expected in the short term, and even negative in the long term. To defend the trade balance, the country must therefore resort to a new devaluation, in a pernicious spiral for the national economy.



In addition to the increase in inflation and decrease in productivity, currency devaluation exposes countries to further risks (Hayes, 2022). First, companies face higher hedging costs due to increased volatility in markets. This, in turn, negatively impacts foreign investment. Second, the effects of partner countries' reactions in trade must be considered, as they respond to sudden currency aggression with tools at their disposal: trade barriers and tariffs, commercial dumping actions, countermeasures on exchange rates, etc. These protectionist measures aim to counteract what is known as "Beggar-Thy-Neighbor": a set of policies pursued by a country seeking to stimulate its domestic economy and slow down those of other countries. This begins a vicious cycle that leads to uncertainty in global markets. When one country responds to another country's currency devaluation by devaluing its own currency, it is known as a "currency war." Although the term was first coined only in 2010 by Brazil's former Minister of Finance, Guido Mantega, the practice of competitive devaluation for economic gain has been ongoing since World War I. One of the earliest examples occurred in the late 1920s between Britain, France, and the US.

A currency war can be initiated not only by a country that devalues its own currency, but also by preventing a currency from appreciating during economic expansions (Włodarczyk, 2014). Furthermore, a weaker currency makes the country less attractive to investors and foreign workers, who for example send money to their families in their country of origin. According to this reasoning, immigrants seeking work would rather work in a country whose currency is strong. Companies in the country that devalued the currency are forced to increase wages to attract foreign workers to offset the negative effects of the devaluation. Additionally, if wage growth in that country is stagnant, real wages

decrease, as inflation would increase at a higher rate than wages (Pettinger, 2019). The negative aspects of currency devaluation are not yet over. Włodarczyk (2014) identifies at least three other risks of currency devaluation: increase the risk of speculative bubbles in many asset markets; lead to excessive expansion of credit markets and consequent inability of debtors to repay their debts; income redistribution from wage earners to those who earn from profits, with the latter having a greater propensity to save and further reduce aggregate demand, and from the private sector to the government, through the fiscal effect.

In their study, Ojuolape, Yusuf, Alabi, and Oladipupo (2015) conducted two cointegration tests - the Pedroni co-integration test and the Johansen co-integration test - to evaluate the impact of devaluation on the long-term relationship between exchange rate and output. They used the fully modified OLS regression to estimate co-integrating vectors and employed the error correction model (ECM) to analyze the effects in the short run. The study focused on seven developing countries - Ghana, Mexico, Malaysia, Pakistan, Philippines, Singapore, and South Africa - which devalued their currencies between 1981 and 2010.

The Pedroni test and the Johansen test both tested for the null hypothesis that exchange rate and output are not co-integrated. While the Pedroni test considered co-integration across all panels, the Johansen test also considered individual panels. The null hypothesis was rejected at all levels of significance in the Pedroni test, indicating a relationship between exchange rate and output in the long run. The Johansen test provided the same result, with the null hypothesis across all panels rejected at 1%. In addition to the Pedroni test, the Johansen test confirmed the link between

exchange rate and output for each country when considered alone, and not across all panels.

The ECM model results showed no correlation between exchange rate and output growth for all the countries in the study except for South Africa, which indicated a positive relationship. The study concluded that there is an insignificant relationship between gross domestic product growth and devaluation in the short term, whereas the two variables are negatively correlated in the long term. This theory contrasts with Krugman and Taylor (1978), who suggest that the initial effect of devaluation is an improvement in trade. However, Krugman and Taylor agree with Ojuolape, Yusuf, Alabi, and Oladipupo (2015) on the existence of reversal effects in the long run.

The reason behind the reversal effects is the redistribution of income from wage-earners to profit-earners, which increases the marginal propensity to save and decreases aggregate demand (Saibene & Sicouri, 2012). Additionally, the higher the initial trade deficit, the more contractionary the effects of devaluation, due to worsened terms of trade that give rise to net real transfer to foreigners.

### **3. The benefits of currency agreements**

Following the considerations outlined so far, it becomes clear that the effects of currency wars produce long-term damage to the economies of all countries involved. The instability of monetary values, both domestic due to inflation, and external due to devaluations, is highly detrimental to

economic growth as it generates uncertainty among productive and commercial operators, which is the main enemy of sound and useful medium and long-term economic planning.

However, currency wars are often used as a quick fix to give a flashy boost to a nation's economy, instead of implementing more challenging initiatives aimed at addressing the structural characteristics of the economy with appropriate economic and sectoral policies. These policies can improve the productivity of the system by utilizing production factors in a more rational and efficient manner. Unfortunately, short-sighted governments or those with a narrow, short-term perspective often resort to currency wars, especially in situations of political instability and the search for immediate electoral gains. In the past, Latin American governments have frequently used this approach, while countries such as the United States, United Kingdom, and France, among others, can rely on more stable, long-lasting governments that can make plans with a long-term perspective.

Implementing structural changes takes time and may appear harmful at first glance. However, policies that may seem detrimental in the short term can deliver significant benefits in the long run. In developed countries, governments with longer terms in office can wait for policies to take full effect, including the short-term costs and long-term benefits. In contrast, in developing countries with more frequent changes in government, policies may be interrupted as soon as they deliver bad results, preventing the longer-term benefits from being realized.

Overall, it's important to recognize that currency wars may seem like a quick and easy solution, but they often do more harm than good.

Governments should instead focus on implementing sound economic policies that promote long-term growth and stability, rather than short-term gains.

It is in the interest of countries to identify and implement initiatives that prevent resorting to currency wars. The first step in this direction is the pursuit of agreements with major trading partners, such as customs agreements and the creation of free trade areas, to avoid the adoption of barriers and customs duties. The further development of these initiatives aimed at avoiding the establishment of trade wars is the search for currency agreements to avoid their use as a currency war tool, with which countries commit to mutually controlling exchange rates. The creation of a common unit of account can follow the control of exchange rate fluctuations, based on which commercial exchanges can be regulated. The last step in this path is the creation of a single currency, applicable in all countries involved.

(Optimum Currency Areas: Benefits and Limitations, s.d.) The idea of a common currency or different currencies linked through a fixed exchange rate gained significant interest about fifteen years after the end of World War II. The adoption of a single currency would eliminate exchange rate fluctuations and currency instability, thereby reducing the use of currency as a tool for trade wars. Additionally, member countries could specialize in production and benefit from stable prices, leading to increased trade among them. A single market would be formed, with member countries enjoying economies of scale, saving time and money by eliminating the need to exchange currency on the foreign exchange market. This concept gained prominence in the 1960s and attracted the attention of many famous economists.

#### **4. Optimal Currency Areas (OCA)**

(Horvath, 2003) In 1961, Canadian economist Robert Mundell published his groundbreaking theory on Optimal Currency Areas (OCA), earning him the title of "father" of this topic. Mundell's work emerged at an opportune time, shortly after the Bretton-Woods exchange rate arrangements were established in 1944, which led to the prevalence of fixed but adjustable exchange rates. By the 1950s, prominent economists began to question the wisdom of fixed exchange rates and conducted studies on the merits of flexible exchange rates. This was the central theme of Mundell's research, which concluded that flexible exchange rates were preferable to fixed ones unless the countries formed an OCA.

Mundell's findings were of great interest to monetary authorities, and many countries subsequently abandoned fixed exchange rates in favor of flexible ones. The most notable example of this occurred in 1971 when US President Richard Nixon abandoned the gold standard to devalue the US dollar. This reform allowed currencies worldwide to float freely, rather than being pegged to gold. However, it also triggered competitive devaluations, a "Beggar-Thy-Neighbor" policy, and a currency war that resulted in speculative attacks on currencies and currency crises in many parts of the world.

In his paper, Mundell also addressed the question of how large an area using a common currency should be. The term "currency area" can refer to either an area in which countries share a common currency or an area where countries have fixed exchange rates, as opposed to flexible exchange rates.

Contrary to traditional thinking, according to Mundell, a country may benefit from abandoning its own currency in favour of a new one that is common to other countries. This can lead to a more efficient outcome by improving trade among countries and promoting integration of capital markets. Thus, multiple benefits could arise for all the economies sharing a common currency.

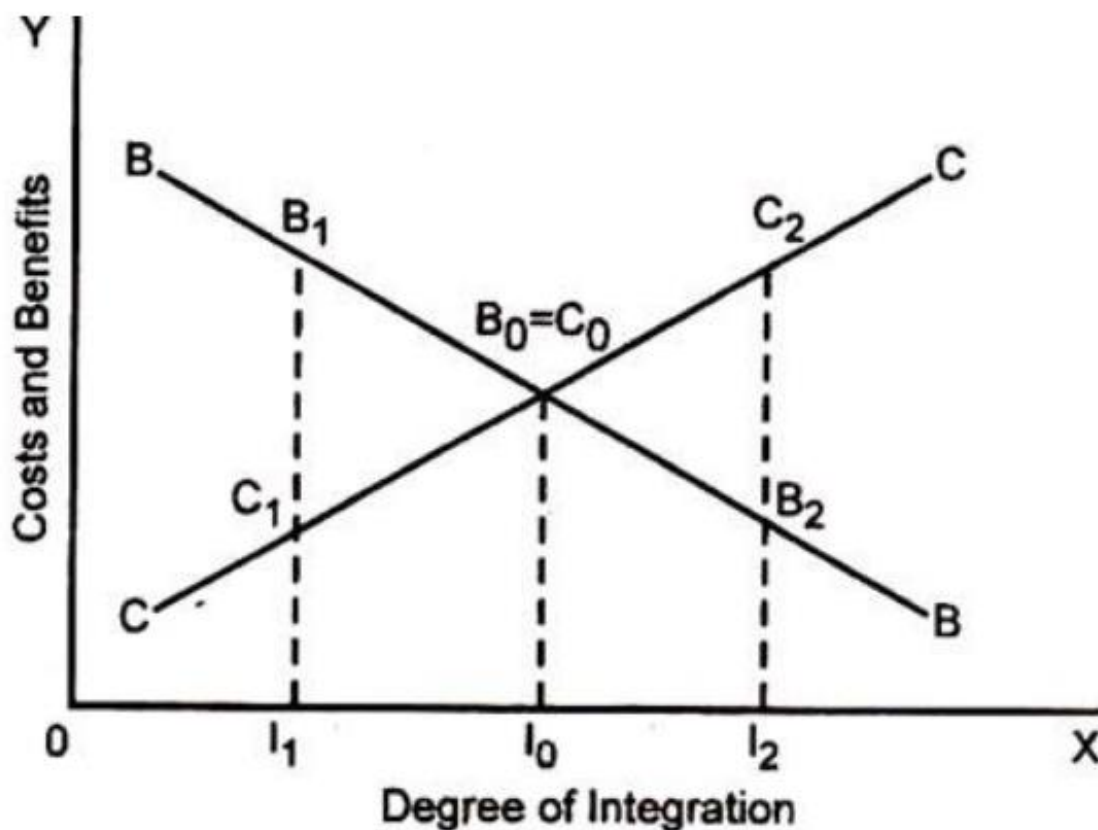
Mundell has enumerated four essential characteristics to classify a country as optimal to be part of a currency area. Failure to meet these requirements could potentially result in costs outweighing benefits. The four criteria are the following:

- High labour mobility, which encompasses low administrative, cultural, and institutional barriers.
- Capital mobility and wage flexibility, which entails unrestricted movement of capital based on supply and demand.
- The capacity to transfer funds from less affected countries to more vulnerable regions during periods of economic shock, but this could prove politically challenging.
- Similar business cycles, as the existence of a central bank would require a singular monetary policy for all participating nations. If this is not the case, for two countries which display different business cycles, the implementation of the same monetary policy may prove favourable for one while disruptive for the other.

(Optimum Currency Areas: Benefits and Limitations, s.d.) According to Mundell, the “degree of integration” among countries determines their suitability for joining a currency area. The following graph shows on the y-axis the costs and benefits faced by a country joining a currency area,

and on the x-axis its degree of integration. As we move towards the right side of the graph, the level of integration decreases. At the rightmost point of the graph (point  $I_2$ ), the cost curve  $C$  is above the benefits curve  $B$ , indicating that countries should not join a currency area. On the other hand, at the leftmost point (point  $I_1$ ), the benefits outweigh the costs, making it ideal for countries to join a currency area. The point where the two curves intersect (point  $I_0$ ) represents a balance between costs and benefits.

Figure 4.1



Source: (*Optimum Currency Areas: Benefits and Limitations, s.d.*)

Mundell's theory on whether a country should adopt fixed or flexible exchange rates has been the subject of numerous debates and controversies in the field of economics. Despite differing opinions among



economists on certain aspects of his theory, Mundell's research remains a masterpiece and of significant importance to the field of economics. His innovative approach to this topic has generated valuable insights and understanding, and his work continues to influence economic thought and policy.

Giersch's (1973) analysis builds on Mundell's consideration of labour mobility as a requirement to explain fixed exchange rates. Giersch argues that since labour mobility is a function of time and very high in the long run, the whole world should be considered an optimal currency area in the long run. Corden (1973) stresses the importance of labour mobility in the short run when countries face asymmetric shocks, but he denies the significance of long-run capital mobility.

McKinnon (1963) considers the degree of openness of fundamental importance, expressed as the ratio of tradables to non-tradables. The higher the ratio, meaning the greater number of tradables relative to non-tradables, the more suitable the country is to adopt fixed exchange rates. Thus, an open economy should rely more on fiscal and monetary policies than on exchange rates to resolve disequilibria in balance of payments. However, McKinnon's reasoning assumes that the world price level is held constant. If this were not the case, a country having fixed exchange rates would experience a deterioration of its domestic economy in case of external instability. McKinnon's position is contested by Giersch (1973), who argues that the more open an economy, the more it needs flexible exchange rates, as McKinnon lacks to assume changeable prices in the world.

Kenen (1969) highlights that a high degree of product diversification is required to make shocks less asymmetric. In other words, he argues for a low degree of specialization. As an extreme counterexample, imagine two countries that specialize in producing only two products, of which only one requires oil as a factor of production. Assume now that the price of oil spikes up, all other things being equal. This shock would only affect the country specialized in the production of the good that requires oil, and, hence, it is asymmetric. Indeed, the more integrated the economies, the more they specialize, which contradicts Kenen's main point.

Haberler (1970) argues that it is the similarity of policy attitudes rather than the characteristics of the economies (such as labor mobility, degree of openness, product diversification, etc.) that makes two or more countries suitable to have a common currency. Similarly, Ingram (1969) claims that economic variables only ease and accelerate the pace of adjustment towards a common currency, but what really matters is the government's commitment. Thus, central authorities' firmness is the most critical factor.

Fleming (1971) points out the need for similar rates of inflation among economies.

Vaubel (1990) argues that the most important factor is to have a high real exchange rate flexibility.

According to Frankel and Rose (1997), similar business cycles are the consequence rather than the requirement of joining a common currency since countries will have the same monetary policies and increased trade among them.

In conclusion, we concur with Horvath (1973) when he observes that there is no standardized scientific method for defining an optimal currency area and for measuring the costs and the benefits. Economists may have different views on assessing whether two or more countries should rely on flexible or fixed exchange rates (or a common currency). Although economists have not agreed on the requirements for an OCA, in practice, the biggest experience of the creation of a common currency for multiple countries is the Euro. Given its success, despite the challenges it faced in the past and it is currently facing, we can refer to it to value new potential experiences of common currency.

For the implementation of initiatives aimed at restricting or preventing free fluctuations of exchange rates between currencies, some requirements are necessary to make such restrictions possible and lasting, otherwise they are destined to be unrealistic, ephemeral and ultimately harmful. The convergence of fundamental macroeconomic values of individual economies of countries involved in currency agreements, as well as essential indicators of their respective public finances, constitute the first requirements for the success of currency agreements.

## **PART II - THE CASE OF ARGENTINA AND BRAZIL: FROM CURRENCY WARS TO TALKS ON A POSSIBLE MOENTARY INTEGRATION**

### **5.The economies of Argentina and Brazil**

Throughout their histories, Argentina and Brazil have maintained a complex relationship that has varied in strength over time. At times, they have worked together to form agreements, while at other times they have engaged in fierce competition, with each country attempting to undermine the other's economy. In this section, we provide a brief overview of these two nations.

#### **5.1. Argentina**

With a population of almost 47 million people, Argentina boasts the third largest economy in Latin America, after Brazil and Mexico (Rios, 2023). In 2021, the International Monetary Fund estimated Argentina's GDP at \$630.7 billion, with a per capita GDP of \$13,620. (Workman, 2023) Argentina has a diverse range of trading partners, including Brazil, China, the United States, India, and Chile, for both imports and exports. The country's main exports include cereals, food industry waste, vehicles, oil, meat, and gems and other precious metals, which together account for more than two-thirds of its total exports. (Del Rizzo & Mingolla, 2023) However, Argentina is currently grappling with a severe drought period that is inflicting detrimental effects on its exports.

In April 2023, Argentina made a significant announcement regarding its commitment to raise interest rates by six basis points in a single instance, increasing them from 91 to 97. As demonstrated previously, such a hike in Argentine interest rates is expected to result in a strengthening of the Peso against the US dollar. Additionally, the country is actively engaged in negotiations with the IMF to secure a loan of 44 billion dollars ahead of schedule, in accordance with the Extended Fund Facility. This program aims to provide financial assistance to countries experiencing Balance of Payments difficulties.

Notably, Argentina is grappling with a substantial challenge in the form of inflation, which reached a staggering 109% in April 2023. This soaring inflation can be attributed to the country's inability to secure foreign borrowing, thereby relying on the issuance of new money as a means of financing its operations.

## 5.2. Brazil

Brazil, the fifth largest country in the world, is also the fifth most populous, with almost 215 million inhabitants as of 2021 (Delivorias, 2022). According to the International Monetary Fund's 2021 estimates, Brazil's GDP was \$1,608 billion, with a per capita GDP slightly over \$16,000. The country's economy is driven by its manufacturing industry, which exports automobiles, electronics, and consumer goods, as well as by its agricultural sector, which is a major exporter of products such as soybeans, coffee, sugar, meat, and cotton. Brazil also has a significant mining industry and is one of the world's largest exporters of niobium, iron ore, manganese, quartz, gold, and gems. The country's largest trading partners include China, the United States, and Argentina.

Despite its economic successes, Brazil continues to struggle with poverty and inequality. The Gini coefficient, a measure of income inequality, rose from 0.5 in 2002 to 0.674 during the COVID-19 pandemic, reflecting a significant increase in inequality. The rising unemployment rate, which peaked at 14.40% in 2021, likely contributed to this trend. Inequality is also a spatial issue, with poverty rates in the northern region significantly higher than those in the south. Furthermore, there is an ethnic dimension to the problem, as white individuals earn considerably more than Black individuals. Brazil's regressive consumption tax system exacerbates the conditions of the poor, and an estimated 33.1 million people suffer from hunger, making it one of the country's most pressing issues.

## **6. Argentine and Brazilian economies from 1960 to 2016**

Through an analysis of the economic data and monetary and fiscal policies implemented by respective authorities between 1960 and 2016, a few years before the economies were hit by the Covid-19 pandemic, it is possible to gain insight into why a common currency project had not been realized yet.

### 6.1. Argentina's economic history from 1960 to 2016

For the sake of simplicity, Buera & Nicolini (2019) divided Argentine recent economic history into four subperiods: 1960-1976 in which the economy grew at a satisfying pace; 1977-1990 characterized by stagnation; 1991-2001 of less volatile economy and high growth rates;

2002-2016 started by a crisis, but in which the economy recovered fast until 2010, when stagnation started again until 2016.

- 1960-1976: This period was characterized by a heavily regulated domestic financial market and the government's inability to finance its debt externally. As a result, foreign debt was considered an inadequate way to finance fiscal deficits, and the government relied heavily on seigniorage as its main source of revenue. In 1962, Argentina abandoned the fixed exchange regime in favor of a floating one, leading to a 60% currency devaluation and a 30% increase in inflation. The same year, the country experienced its second military coup after World War II, only seven years after the previous one. After a third coup in 1966, inflation fell to a single-digit rate by the end of the decade. In 1973 and 1974, new policies of price controls generated shortages of products, as demand was rising but prices could not be adjusted. When these policies were removed in 1975, prices spiked, causing an enormous increase in the rate of inflation to 700%. In 1976, the fourth and last military coup in the span of 20 years took place, and an authoritarian regime was established, considered as one of the most terrible in Latin American history. The volatile economy during these years can be attributed to inefficient fiscal and monetary policies carried out by governments that lacked power and trust, and that changed too frequently to pursue a long-term strategy.
- 1977-1990: During this period, there was a reduction in trade barriers, and the domestic market became more deregulated, making external and internal debt financing a feasible option to fund government expenditures. As a result, seigniorage was significantly reduced. The financial sector saw an influx of banks

and intermediaries due to the less regulated domestic market. To control inflation, the country adopted a crawling-peg regime that involved preannounced peso devaluations against the US dollar, with exchange rate insurance in place in case of devaluations. However, the plan faced challenges, leading to increased fiscal expenditures and a currency mismatch between assets and liabilities. The unregulated financial sector led to many unperforming loans and a banking crisis, resulting in the nationalization of debts and increased government fiscal deficits, leading to a default on government debt in 1982. The government was then forbidden external access to debt until the 1990s, and seigniorage again became the primary source of financing. The Austral Plan was introduced in 1985 to tackle inflation, which initially succeeded, but inflation started to rise again in 1989, leading to the introduction of the Bonex Plan. This plan converted private peso short-term deposits into ten-year dollar-denominated bonds, resulting in a decrease in short-term liabilities for the banking sector and increased investments in longer-term projects. The Bonex Plan effectively reduced inflation, and the government never defaulted on the repayment of Bonex bonds.

- 1991-2001: Argentina underwent significant economic reforms. One of the most notable changes was the establishment of the Currency Board in 1991, which implemented a fixed exchange rate system pegged to the US dollar and granted independence to the Central Bank. As a result, the government could no longer rely on seigniorage to generate revenue and had to turn to domestic debt financing due to restrictions on foreign debt. Despite these challenges, Argentina achieved a budget surplus within just three years, thanks in part to a policy shift from a pay-as-you-go pension



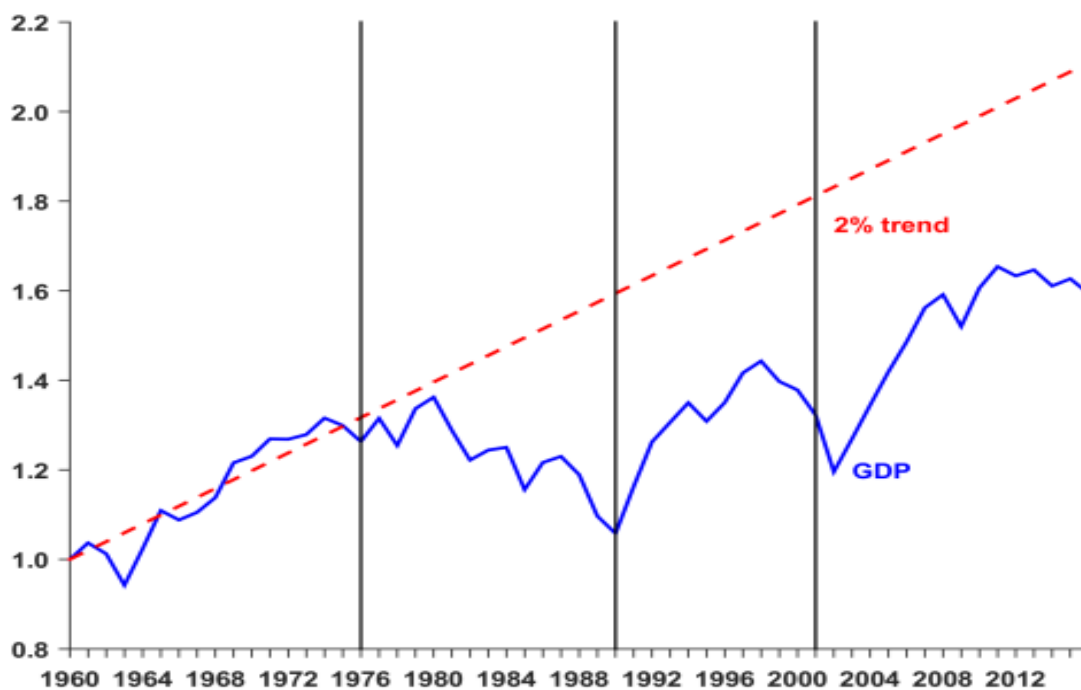
system to a private one, which reduced government expenditures. By 1993, external financing was reopened and the sovereign budget was in the black. However, in 1995, Argentina experienced a bank run that caused a 4% decline in total output and resulted in a debt-to-GDP ratio of around 25%. Due to the restrictions imposed by the Currency Board mandate, the Central Bank was unable to act as a lender of last resort during the crisis. Nevertheless, the bank run was resolved within six months, far less severe than initially expected. In 1998, Argentina faced another crisis as the government struggled to manage high interest payments on its external debt, which accounted for 4% of GDP. This, combined with a recession, led to a loss of confidence in the economic system, and another bank run occurred in 2001. Unfortunately, this crisis was even worse than the 1995 event, as a credit crunch exacerbated the situation. By November 2001, the banking sector's deposits had fallen by more than three-quarters from their pre-crisis levels. After an unsuccessful attempt to freeze deposits, Argentina defaulted on its foreign debt, and the Currency Board was abandoned in 2002. This resulted in the most severe depression in the country's history.

- 2002-2016: From 2002 to 2016, Argentina faced a major economic crisis, marked by soaring unemployment and poverty rates exceeding 40%. A major cause of the negative Argentinian current account was the asymmetric conversions of banks assets and liabilities, with dollar-denominated deposits being transformed to pesos at an exchange rate of 1.4, while dollar-denominated loans were transformed to pesos at an exchange rate of 1.0. Additionally, the federal government absorbed the debt of provinces, and high expenditures were incurred to finance poverty relief plans. Despite

this dire situation, the government implemented appropriate policies at the right time, which led to a speedy recovery and the resumption of country growth. However, the Global Financial Crisis hit Argentina in 2008, leading to a fiscal surplus turning into a deficit that reached a value of six percent by 2016. Since foreign debt financing was not allowed until 2016, the government resorted to financing public expenditures through seigniorage. This resulted in a large increase in the monetary base, leading to a steady increase in inflation that reached a level of 25% by 2016. In 2016, foreign debt financing was once again allowed.

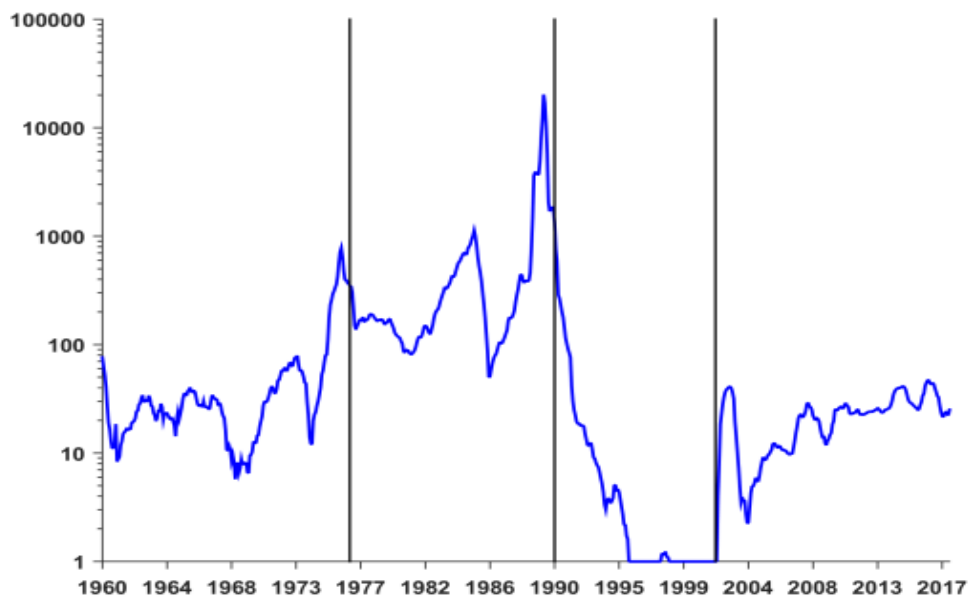
The following graphs show some of the most important macroeconomic variables such as per capita GDP, inflation, government deficit and public debt for the period under study.

*Figure 6.1: Log of per capita GDP*



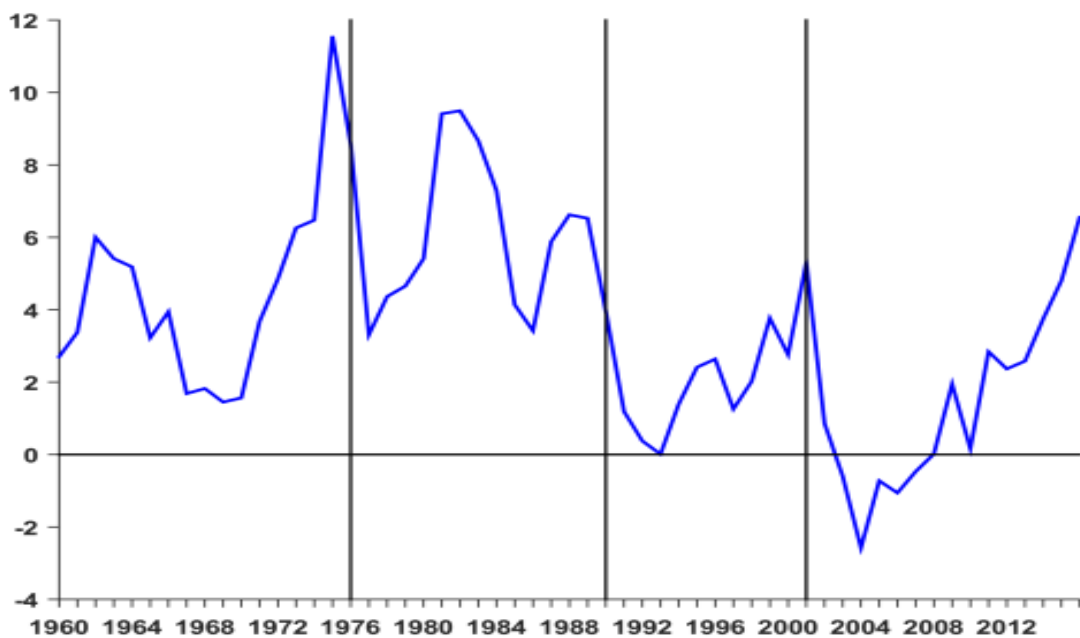
*Source: (Buera & Nicolini, 2019)*

Figure 6.2: Inflation, log scale



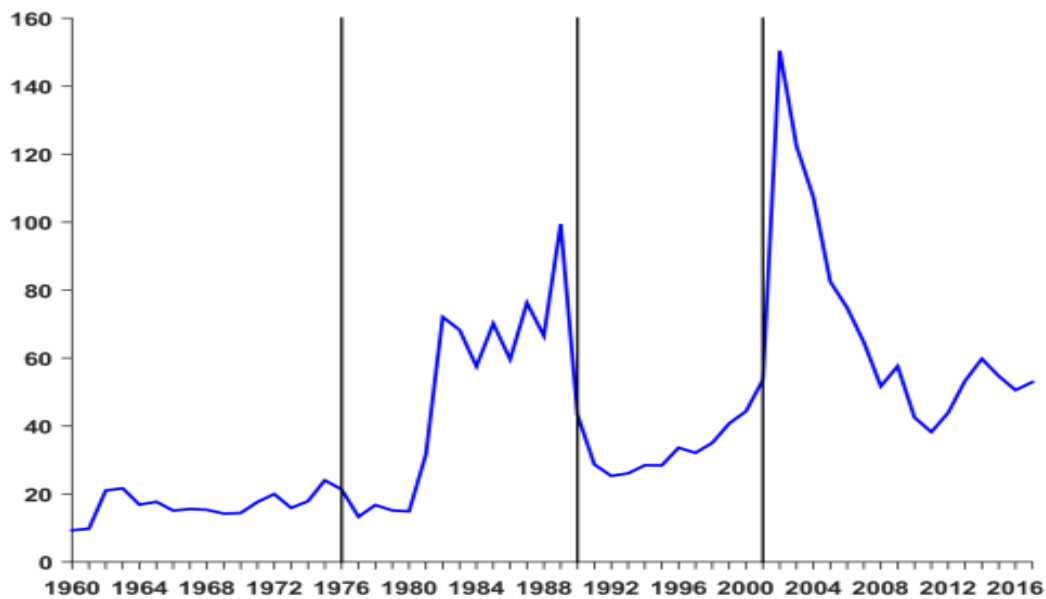
Source: (Buera & Nicolini, 2019)

Figure 6.3: Government deficit, percent of GDP



Source: (Buera & Nicolini, 2019)

Figure 6.4: Total public debt, percent of GDP



Source: (Buera & Nicolini, 2019)

## 6.2. Brazil's economic history from 1960 to 2016

Similar to how Buera & Nicolini (2019) divided Argentina's recent history into subperiods, Ayres, Garcia, Guillen, & Kehoe (2019) can also divide Brazil's recent history into distinct timeframes. Between 1960 and 1980, Brazil experienced a period of rapid economic growth, but it was marked by significant instability. From 1981 to 1994, Brazil saw no economic growth and continued to experience high levels of instability. Finally, from 1995 to 2016, Brazil experienced moderate growth and a more stable economic environment.

- 1960-1980: Between 1960 and 1980, Brazil experienced a period of significant economic growth, but also faced rising inflation and fiscal deficits. In 1963, this culminated in a recession, which prompted the government to seek out new ways to finance its

spending beyond relying solely on seigniorage. In 1964, a military coup overthrew President Joao Goulart, citing concerns that he was leading the country towards communism. The subsequent right-wing military regime lasted for 21 years. During this time, the government introduced the PAEG program, which aimed to reduce inflationary pressure. The program was successful in achieving its goals, and GDP growth rates increased by over 10%. This period came to be known as "Brazil's economic miracle." However, the oil crisis of 1973 had a significant impact on Brazil's economy. To address the crisis, the government made investments to boost domestic oil production, but the budget was mismanaged. As a result, rising inflation, budget deficits, and increased reliance on seigniorage once again became major issues. Despite the benefits of the PAEG program, the oil crisis offset much of the progress that had been made, and the well-being of Brazilians became a distant memory. A second oil crisis in 1979 prompted the government to increase the money supply to stimulate production. However, this led to a decrease in interest rates and an increase in inflation, which rose from around 50% to over 100%.

- 1981-1994: During these years, the Brazilian government made several attempts to stabilize the economy in the face of hyperinflation that exceeded 100%. However, the focus of these efforts was to reduce external imbalances rather than inflation itself, and most of the plans failed. The exception was the Real Plan, which has remained in place to this day. The first of these attempts was the Cruzado Plan, launched in February 1986. The plan involved changing the currency from Cruzeiro to Cruzado and pegging it to the US dollar for the first time. Prices were frozen, unemployment benefits were introduced, and the Central Bank of

Brazil kept interest rates low to encourage low expectations. However, stores quickly ran out of stock as demand for products increased and prices were not allowed to rise, leading to an increase in the monetary base that outpaced inflation. In an attempt to offset domestic product scarcity caused by frozen prices, the government increased imports, further worsening external imbalances. The plan was replaced in July 1987 by the Bresser Plan, which maintained frozen prices but increased prices for public services. Its goal was to keep inflation at 15%, but this target was not achieved. The Summer Plan appeared to be the optimal solution, but it was not implemented due to a lack of political power. This period was characterized by a tight monetary policy that kept interest rates high and inflation at 70%. In March 1990, the Collor Plan I aimed to reduce money supply by confiscating deposits on savings accounts for eighteen months. While the money aggregates were successfully reduced, the plan faced popular resistance. The subsequent Collor Plan II led to permanent and significant changes, such as increased productivity and trade with other countries through the creation of the Mercosur trading bloc in 1991. Despite these changes, the Brazilian economy experienced a recession during this period. The Real Plan was introduced in 1994 and marked a departure from the previous plans in terms of pre-planning policies. The plan was well-structured, with new or increased taxes on the fiscal side, high required reserves and limits to money supply, and high interest rates (above 30%) on the monetary side. The Unidade Real de Valor (URV), a parallel currency to the Cruzeiro Real, was also introduced. Its exchange rate was adjusted daily to express prices in real terms. A few months after its creation, the URV was converted to the Real,

which is still in use today. The plan successfully reduced hyperinflation that had plagued the country for years.

- 1995-2016: Between 1995 and 2016, Brazil experienced its lowest inflation rate in history, hovering around 8% per year. In 1997, due to high interest rates, foreign direct investment grew by 140% compared to the previous year. (Evangelist & Sathe, 2006) In response to rising unemployment rates, 14% over the previous year, an increasingly negative debit position with foreign investors, as Brazil owed \$244 billion or 46% of GDP to them, and a current account deficit, which accounted for 4.2% of GDP and was financed not only with financial inflows but also with depletion of reserves held with the central bank, the government introduced important reforms in 1999. These reforms included the adoption of an inflation-targeting regime, which is still in use today, and the abandonment of the Real's peg to the US dollar in favour of a floating exchange rate. The International Monetary Fund's attempt to prevent the Real from depreciating by lending Brazil \$41.5 billion was unsuccessful, and in January of that year, the Real was devalued by 8%. By the end of the month, it had reached a 66% devaluation against the US dollar. This devaluation had a positive impact on the economy, with improvements in the current account position and a decrease in unemployment rates, but it also strained Brazil's relationships with neighbouring countries, particularly Argentina. At the same time, debt held in US dollars increased. (Ayres, Garcia, Guillen, & Kehoe, 2019) In 2002, Luiz Inácio Lula da Silva won the presidential election and implemented policies to decrease the money supply, increase interest rates, and let the exchange rate appreciate. Despite the restrictive monetary policy, the country benefitted from a spike in commodity prices, becoming

a major global exporter of raw materials such as soybeans and coffee. In 2003, the current account position turned positive for the first time in years, and Brazil experienced an increase in GDP per capita and a fiscal surplus that lasted until the 2007 financial crisis. However, the government's response to the crisis - increasing public expenditures to finance investments - ultimately led to a negative fiscal position, with fiscal deficits representing 7% of GDP by 2016. As a result, Brazil's economic position never fully recovered to its pre-2007 prosperity.

As for Argentina, the following graphs show some of the most important macroeconomic variables such as per capita GDP, inflation, government deficit and public debt for the period under study.

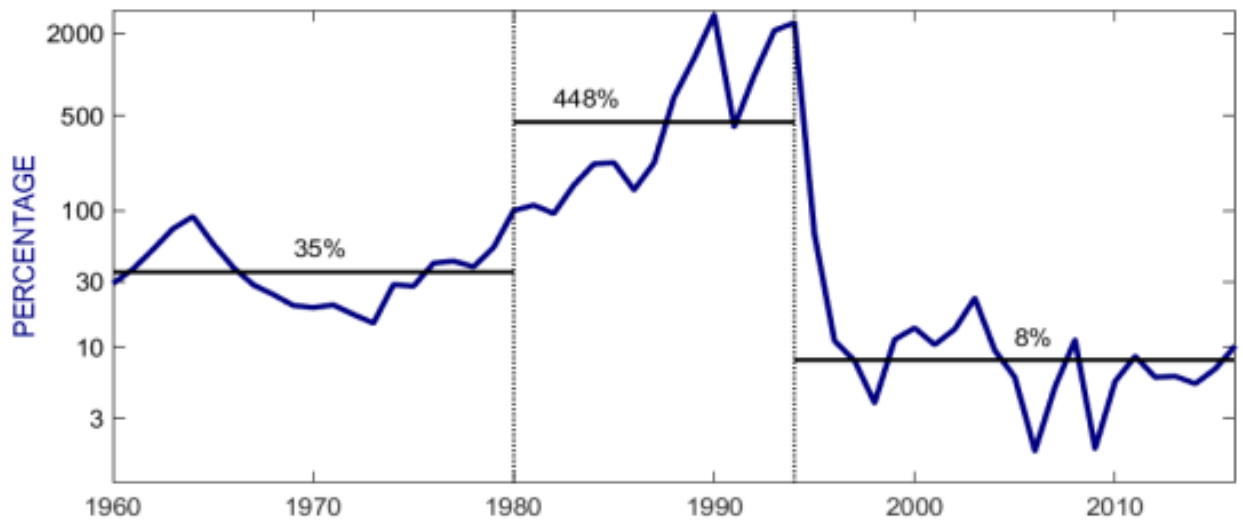
Figure 6.5: Log of per capita GDP



Source: (Ayres, Garcia, Guillen, & Kehoe, 2019)

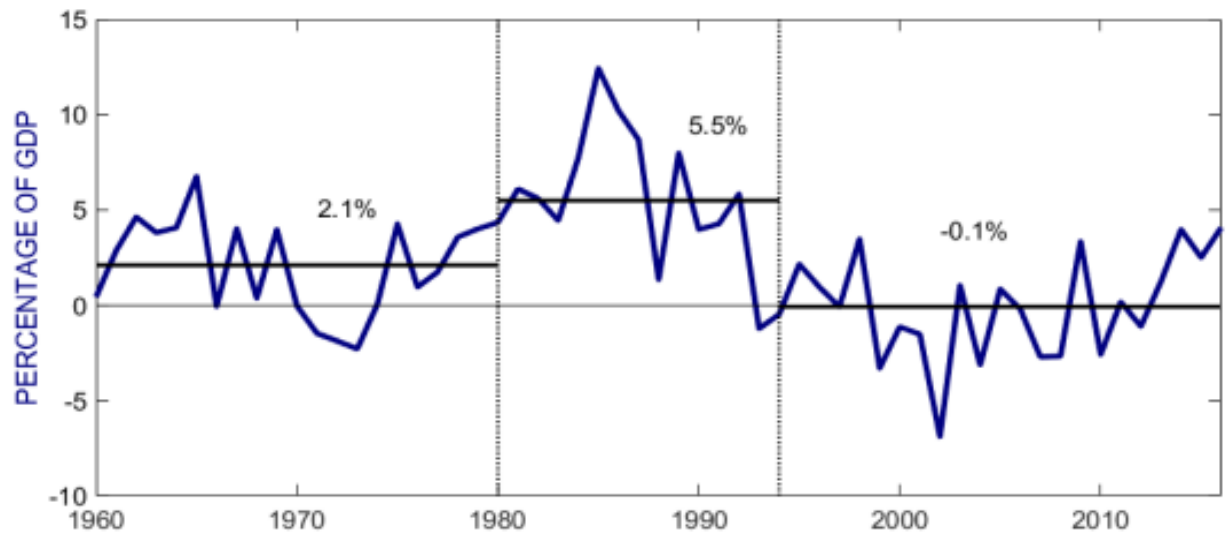


Figure 6.6: Inflation, log scale



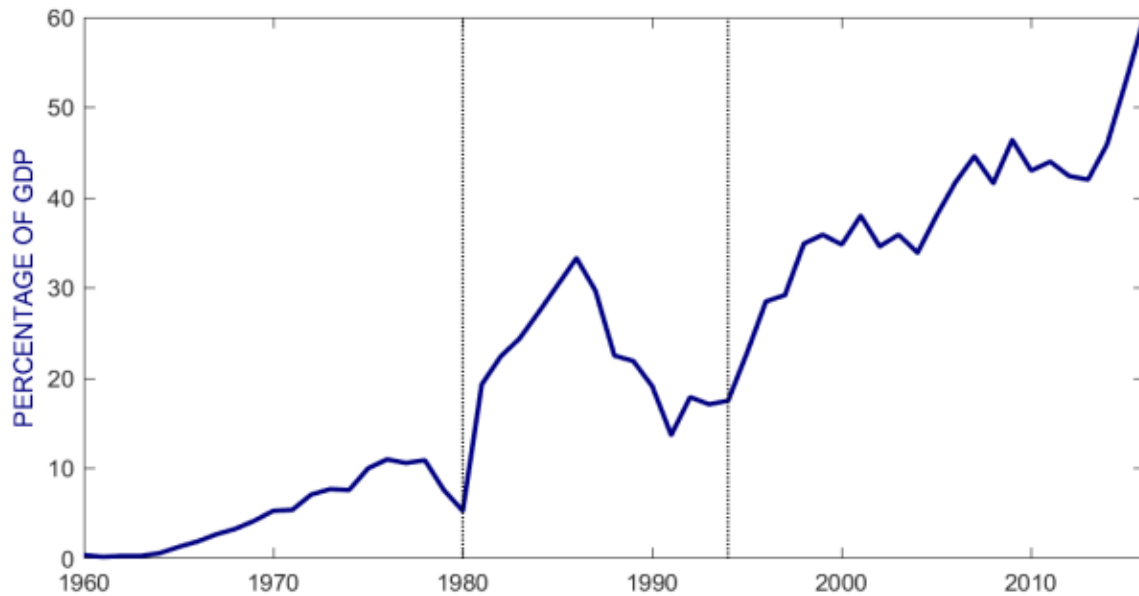
Source: (Ayres, Garcia, Guillen, & Kehoe, 2019)

Figure 6.7: Government deficit, percent of GDP



Source: (Ayres, Garcia, Guillen, & Kehoe, 2019)

Figure 6.8: Total public debt, percent of GDP



Source: (Ayres, Garcia, Guillen, & Kehoe, 2019)

The aforementioned analyses shed light on the reasons why Argentina and Brazil have not yet established a common currency. According to Mundell's criteria, the necessary conditions for such an initiative to succeed have not been met, as the fiscal and monetary policies of the two countries have not been sufficiently aligned. Consequently, a sustainable project based on the adoption of a shared currency has not been developed.

## 7. Trade agreements and an attempt of currency agreement

Argentina and Brazil have attempted multiple times to reach trade agreements and establish a common currency to mitigate the negative

effects of currency and commercial wars and promote integration. Unfortunately, most of these efforts have failed to materialize beyond mere intentions. In the following sections, we will examine the most significant agreements that have been signed between Argentina and Brazil, as well as the most notable attempt to establish a common currency.

### 7.1. LAFTA

The Latin America Free Trade Association (LAFTA) was the first trade agreement in the history of Latin America. It was signed in 1960 in Montevideo, Uruguay, by eight nations, including Argentina and Brazil, and later expanded to include eleven countries, with Mexico being the only non-Latin American member (Loureiro & Schor, 2018). Although LAFTA aimed to establish a free trade area, it did not evolve into a common market, which may have contributed to its demise in 1980. Bolivia, Colombia, Ecuador, and Peru began leaving LAFTA in 1969 to join the Andean Pact, a parallel project that established a common market. The Andean Pact, now known as the Andean Community, is still in effect today. However, despite LAFTA's failure, the participating countries continued to recognize the value of trade agreements. The Latin American Integration Association (LAIA) was established as a replacement for LAFTA, with more relaxed terms that allowed for sub-regional agreements involving LAIA member countries. Examples include Mercosur, a trade agreement signed in 1991 among Argentina, Brazil, Paraguay, and Uruguay; the previously mentioned Andean Community; the Pacific Alliance (CEPAL), formed in 2012 by Chile, Colombia, Mexico, and Peru.

There is a lack of consensus among scholars regarding the effects of the Latin American Free Trade Association (LAFTA). While some view it as a failed attempt at economic integration, others recognize its role in increasing trade between member countries and promoting diversification in traded products. To determine the validity of these opposing viewpoints, a closer examination of the historical relationship between Argentina and Brazil is necessary.

Prior to the outbreak of World War II, trade between Argentina and Brazil was limited, as both countries relied heavily on other major trading partners, with Argentina trading primarily with the UK and Brazil trading primarily with the US. This was largely due to the limited range of products available for trade between Argentina and the US. Argentina was a major exporter of wheat, beef, and their derivatives, which were also key exports for the US. In contrast, Brazil's major exports at the time were coffee, pinewood, and rice. Bilateral trade between the two countries was imbalanced, with Brazil relying more heavily on Argentina's exports than vice versa. Put simply, Brazilian exports to Argentina represented a smaller share of Argentine imports relative to the share of Argentine exports that represented Brazilian imports.

The outbreak of World War II brought significant changes to the bilateral trade relationship between Argentina and Brazil. Brazil emerged as a major competitor to the UK in terms of exports to Argentina, with textiles replacing English products. Similarly, in the post-war period, Argentina faced increased competition from the US and Canada in wheat exports. At the same time, Brazilian textile exports experienced a significant decrease, with coffee and pinewood once again becoming the largest exports, accounting for 62.5% of total Brazilian exports in the 1950s. As a

result, bilateral trade between the two countries decreased, with Argentine exports to Brazil declining relatively more than Brazilian exports to Argentina. This decline had two main causes. In Argentina's case, the drop in export value to Brazil was due to a decrease in wheat exports. In Brazil's case, the value of exports decreased as a result of the Korean War in 1953, which caused a drop in primary commodity prices. Coffee, Brazil's major exported product, experienced a price decrease of almost 36% between 1952 and 1960.

The Treaty of Montevideo of 1960 established the Latin American Free Trade Association (LAFTA), which led to a significant increase in bilateral trade between Argentina and Brazil. IMF data showed that Brazilian exports to Argentina increased by 19%, while Argentine exports to Brazil increased by 16%. These figures were not only high in absolute terms, but also relative to the rest of the world, with exports increasing by 7% and 5%, respectively. Therefore, LAFTA seemed to play a crucial role in boosting bilateral trade, contrary to the arguments of some scholars who saw it as a failed attempt at economic integration. However, by the early 1970s, the pace of growth in bilateral trade had slowed down. Brazil's exports to Argentina were rising at 12% per year, compared to 19% in the 1960s. The reason for this was likely due to an increase in world trade, as Brazil's and Argentina's exports to the rest of the world were rising at a much higher pace of 23% and 20%, respectively. This trend was also related to the abandonment of LAFTA by some countries in favor of the Andean Pact in 1969, which caused a loss of credibility and stability for LAFTA. Similar downward trends were observed among other countries that were part of the agreement. Ultimately, LAFTA dissolved in 1980, in favor of the Latin American Integration Association (LAIA), as it was no longer seen as a viable solution to improve

commercial relationships between member countries. By 1980, only 14% of trade could be attributed to the Treaty of Montevideo of 1960.

In addition to increasing the volume of trade, LAFTA also had a significant impact on the diversification of goods and services traded between member countries. Brazil's traditional exports, such as coffee and pinewood, were replaced by more capital-intensive and technologically advanced products. Likewise, Argentina's export portfolio shifted from being dominated by wheat to a broader range of products, including fruits. These changes reflect how economic integration can lead to increased specialization and more efficient allocation of resources among member countries.

## 7.2. LAIA

The Latin American Integration Association (LAIA) was established by the Treaty of Montevideo in 1980, as a replacement for the previous agreement, LAFTA, but with more flexible terms. LAIA allows for a greater number of member countries to enter into trade and tariff deals with each other, while still being part of the overall agreement. This has made LAIA a more attractive option for countries looking to increase regional integration, compared to LAFTA. The original members of LAIA were the same as those of LAFTA, with Cuba joining in 1999 and Panama in 2011. LAIA's primary objective is to promote socio-economic development in the region and establish a common market by eliminating trade barriers. To promote unbiased growth among member countries, nations are divided into a hierarchy, with Argentina, Brazil, and Mexico being among the highest-tier countries due to their economic development. From the 1980s to the 1990s, multiple reforms were signed

to promote trade, and by the start of the new decade, LAIA members had signed 104 bilateral trade agreements, resulting in increased trade (Knes, s.d.). LAIA still exists today and Nicaragua is likely to become its fourteenth member state soon.

### 7.3. Mercosur

Mercosur was established in 1991 with the Treaty of Asuncion, signed by Argentina, Brazil, Paraguay, and Uruguay. Although the bloc's membership has remained stable since then, Venezuela was suspended from 2016 after violating Mercosur's rules on democracy and human rights, and Bolivia is currently waiting for Brazilian approval to join (Council on Foreign Relations, 2021).

Mercosur's goals have always been clear and well-defined: to create a common market, stimulate development, and promote democracy. To achieve these objectives, the bloc implements common trade policies towards other countries, allows residents to live and work anywhere within its borders, and has even discussed the possibility of a common currency.

In its early years, Mercosur appeared successful in achieving these goals, helping to reduce competitiveness between Argentina and Brazil, which together represent around 90% of the bloc's output and 95% of its population. However, the positive effects of Mercosur began to decline in the late 1990s and early 2000s, with Brazil's currency devaluation and Argentina's sovereign debt crisis.

Today, Mercosur's situation is not as optimal as it was twenty years ago. Disagreements among member states have weakened political integration, with Uruguay and Brazil seeking to establish a Free Trade Area with China, which

Argentina opposes due to concerns about cheap imports. The Covid-19 pandemic has also damaged the economies of Mercosur countries, with Brazil and Argentina's GDPs declining by 4% and 10%, respectively.

Despite these challenges, Mercosur remains one of the world's largest economic blocs, with an aggregate GDP of \$1.9 trillion (2020 data). While the bloc currently comprises only the four founding members, several other South American countries are associate members and enjoy tariff reductions but do not have voting rights or free access to Mercosur markets.

At the top of Mercosur's decision-making process is a rotating presidency, which changes every six months among its member countries. Below the presidency, the Common Market Council consists of foreign and economic ministers who coordinate policies, while the Common Market Group focuses on macroeconomic policies. The Parlasur serves as the parliament, and the FOCEM manages infrastructure projects within the bloc. FOCEM raises funds from the four member countries based on their respective GDPs. Brazil and Argentina contribute 60% and 30% of the funds, respectively, while Paraguay and Uruguay each contribute 5%.

Over the years, Mercosur's trade relations with other countries have shifted. In the bloc's early years, it had close relationships with Bolivia, Israel, Chile, and Peru. However, in more recent years, Mercosur has pursued trade agreements with India and Egypt. Currently, its biggest goal is to become a major trading partner with the European Union (EU). In 2019, the process began under the leadership of former Brazilian President Bolsonaro. The deal with the EU would reduce tariffs on approximately 90% of Mercosur's exports, but many European countries have expressed opposition due to concerns over Brazilian deforestation in



the Amazon Rainforest, a problem that has worsened under Bolsonaro's administration.

#### 7.4 International trade

The agreements analysed so far have played a significant role in boosting trade between Argentina and Brazil. In this section, we will examine the trade positions of both countries with respect to each other and the rest of the world. Detailed data on their international trade can be found in the tables and graphs at the end of the section.

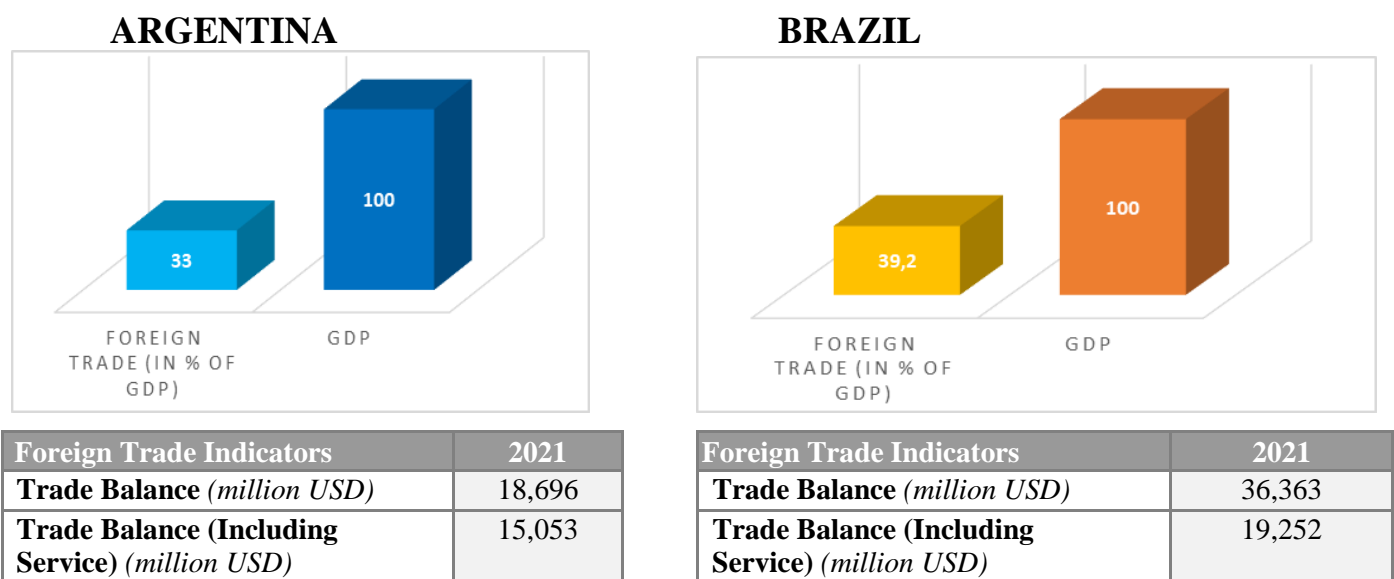
Argentina has historically had a relatively closed economy, but international trade now accounts for 33% of its GDP, according to World Bank estimates. Brazil remains Argentina's primary trading partner for both exports and imports, but in recent years, Argentina has focused on expanding trade with major countries and trading blocs worldwide, including the US, Europe, and China. Argentina's main exports include maize, oilcake, soybeans and their derivatives, motor vehicles, and wheat, while its main imports are auto parts and accessories, petroleum oil and gas, soybeans, and telephone sets. The country's most traded services include travel, transportation, computer and information, and royalties and fees. Although Argentina's trade balance in goods is positive, its current account position deteriorates when services are taken into account, as the country imports more services than it exports (World Bank).

Brazil's economy heavily relies on trade, which accounts for almost 40% of its GDP. The country ranks among the top thirty exporters and importers worldwide. Brazil's main exports are iron ores, soybeans, petroleum oils, sugar, and oil cake, while its main imports include

petroleum oils, auto parts and accessories, human and animal blood for therapeutic uses, petroleum gas, and minerals. China, the United States, Argentina, Germany, Chile, and India are Brazil's largest trading partners. Despite being the largest economy in Latin America and the ninth largest in the world, Brazil remains one of the most closed economies in relation to other developed nations, with a low number of exports per capita. Brazil's trade balance is positive when considering goods alone, but when services are factored in, the current account worsens, as imported services exceed exported services. The country's most traded services include travel, transportation, computer and information.

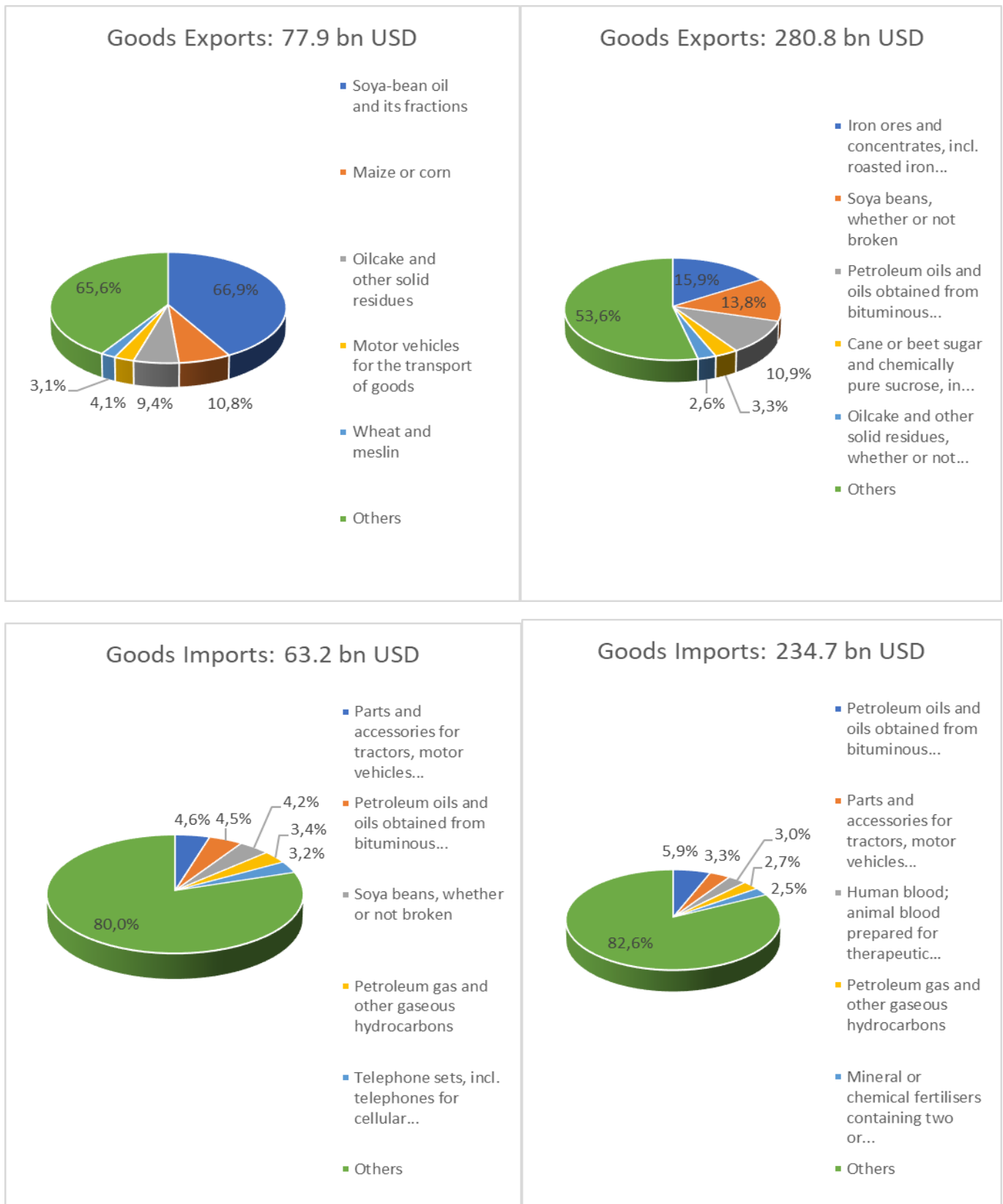
### International trade 2021

Figure 7.1



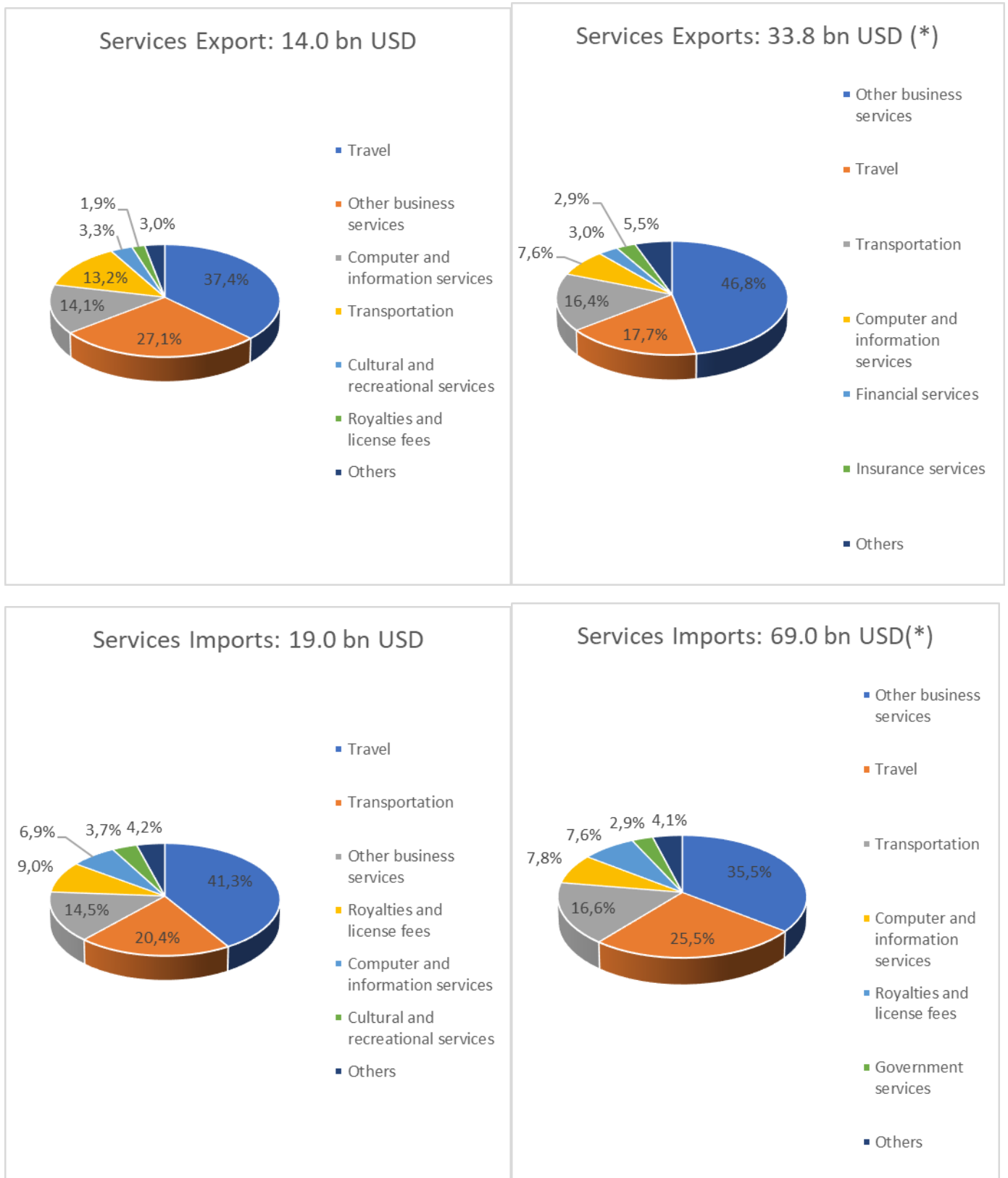
Source: World Trade Organisation (WTO)

Figure 7.2



Source: Comtrade

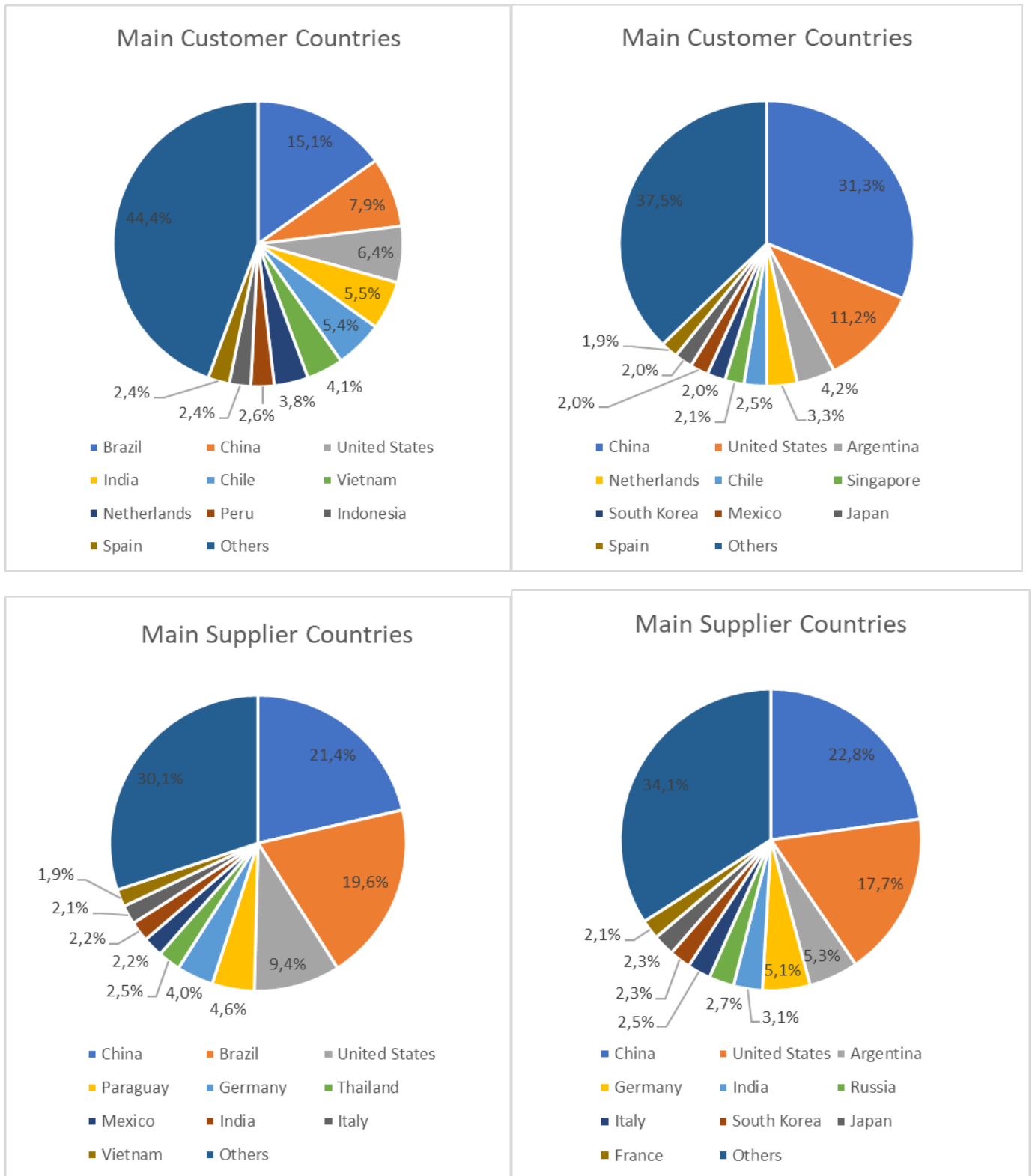
Figure 7.3



Source: United Nations Statistics Division

(\*) Year 2019 – Latest Available Data

Figure 7.4



Source: Comtrade

## 7.5. EEA Agreement

Having established the historical and current state of the two economies, we now turn our attention to a potential solution that could benefit both Argentina and Brazil: the EEA Agreement. This agreement serves as a valuable example of the steps that need to be taken and the policies that need to be enacted in order to foster a positive economic relationship. By exploring this agreement, we can gain insight into how the two countries can work together to achieve mutual benefits and promote sustainable growth.

The EEA Agreement is a treaty that comprises 27 EU Member States, as well as Iceland, Liechtenstein, and Norway. It ensures the free movement of goods, services, people, and capital among the participating countries, and establishes unified policies in areas such as competition, transport, energy, and economic and monetary cooperation (European Commission).

However, the EEA Agreement does not cover fish and agricultural products, which can be subject to tariffs. Moreover, the agreement does not establish a specific value for tariffs on goods imported from third countries, so each member country is free to set its own tariffs.

In addition to the free movement of goods and services, the EEA Agreement includes rules on competition in the internal market, which are applied equally to all member countries. These rules cover four areas: the elimination of agreements that restrict competition and the abuse of dominant market positions, the regulation of mergers between firms, the

liberalization of monopolistic economic sectors, and the prohibition of state aid that would distort competition.

Turning to the current situation, it's worth noting that Mercosur has already made significant progress in removing trade barriers, but it has not yet established rules on competition. While the EEA Agreement provides an example of how policies can be established to facilitate trade, it's important to remember that each economy has unique characteristics, and Argentina and Brazil are not obligated to replicate everything in the agreement. Rather, the EEA Agreement should be used as a guideline, and policies should be adapted to suit the specific needs of each country. What works for the 30 countries in the EEA Agreement may not necessarily work for Latin American countries, and the establishment of a common currency may require different policies altogether.

### 7.6. Gaucho

Argentina and Brazil have explored the possibility of sharing a common currency on several occasions, although it has never been a realistic prospect. However, there was one instance when the proposal seemed more viable than previous attempts, and the two countries came closer to an agreement. This was in July 1987, when the governments of Argentina and Brazil initiated the "Gaucho" project, a currency intended to facilitate interregional payments and promote integration between the two regions. The currency was named after the "Gaucho," a folk symbol that represents the typical horseman who inhabited both countries.

On July 17th, 1987, Argentinian President Raúl Alfonsín and Brazilian President José Sarney met in Viedma, Argentina, to lay the foundation for

the common currency project by signing Protocol Number 20. The protocol established the name of the currency and stipulated that its value would be determined by both central banks, which would have the authority to issue and back the Gaucho with a reserve fund.

However, as time passed, the plan was gradually abandoned, especially after Brazil introduced the Brazilian Real as its new currency in 1994. Consequently, the Gaucho project ceased to be a concrete possibility.

## **8. The Brazilian currency devaluation of 1999**

Despite Mercosur still being an active trade bloc, it faced a significant crisis following Brazil's currency devaluation in 1999, which nearly led to the abandonment of the agreement.

By 1999, the Brazilian economy accounted for over 35 percent of Latin America's GDP. The devaluation was rooted in the failures of previous stabilization plans. After the introduction of the new currency, the Real, at a rate of 80 cents to the US dollar, it quickly reached parity in just six months, resulting in a 20 percent increase in inflation (Bulmer-Thomas, 1999). This led to a decline in exports and a rise in imports, shifting the current account position from positive to negative.

Complicating matters further, the government at the time, led by President Fernando Henrique Cardoso, struggled to implement fiscal discipline. Brazil faced alarming levels of budget deficits, which reached 8.4 percent of GDP by 1998. The Real came under attack, and the head of the Central



Bank, Gustavo Franco, resigned. Arminio Fraga was appointed as the new governor of the Central Bank and opted for a floating exchange rate. As a result, the Real devalued by around 30 percent by the summer of 1999.

Initially, the devaluation generated inflationary pressures, but the government swiftly increased interest rates to 50 percent per year to control inflation. With the price level under control, Brazil benefited from a devalued currency in terms of trade balance. However, the high interest rates raised concerns about a potential sovereign default on repayments. Since banks held a significant proportion of government paper as assets, non-performing loans posed a serious threat and froze credit throughout the economy. Fortunately, Brazil managed to avoid this scenario, especially as interest rates fell sharply by 22 percent on an annual basis by the end of June. Additionally, new taxes were introduced and existing ones were increased to finance government expenditures and reduce the trade deficit.

In the international context, all of Brazil's trading partners were heavily affected by the devaluation. Imports from Brazil increased while exports to Brazil decreased. Among the Mercosur countries, Argentina was particularly impacted since it used to send around 30 percent of its exports to Brazil. Argentina had to seek new commercial partners to overcome this challenge. Adding to Argentina's difficulties, presidential elections were scheduled for October 1999, which heightened instability in the country along with falling domestic production and rising unemployment rates. For the first time since Mercosur's establishment, interregional trade decreased, and anti-dumping measures were adopted to prevent excessive penetration of Brazilian exports into the other three member countries' economies. These measures contradicted the principles of Mercosur,

which aimed to promote interregional trade. Despite these challenges, Mercosur managed to survive as it represents more than just a trade agreement.

The economic consequences of the Brazilian devaluation were catastrophic for Argentina, leading to another recession in 2002. Among the various crises Argentina had experienced, this was by far the most damaging. Restoring a stable relationship with Brazil became crucial for Argentina's recovery. Revitalizing Mercosur would increase exports for Argentina, boosting employment and promoting growth. However, this required one condition: a devaluation of the Argentine Peso, which eventually occurred, marking the beginning of Argentina's recovery (Uchitelle, 2002).

In summary, the relationship between the two major Latin American economies, Brazil and Argentina, faced fragmentation and Mercosur was on the brink of collapse after the Brazilian devaluation. However, since then, Argentina and Brazil have progressively grown closer, to the extent that their respective governments have begun discussions about a common currency. This idea is currently taking shape.

However, according to Costamagna (2014), the devaluation of Brazil's currency in 1999 may not have yielded the desired consequences. Brazil devalued its currency as a means to enhance its trade balance, a practice commonly employed in less developed countries. The author of the paper focuses on the correlation between real exchange rates (RER) and trade balance (TB) in Argentina and Brazil from 1990 to 2010. To analyze this relationship, he conducts a study that employs the Johansen and Juselius co-integration test and vector error correction models (VECM). The study

considers TB as the dependent variable, while national income, foreign income, and RER serve as independent variables. The regression also includes a constant term and an error term. The objective of the study is to provide further evidence on the short- and long-term effects of real exchange rates on trade balance, given the existing conflicting literature. Costamagna divides the 20-year study period into two subperiods for each country: 1990-2001 and 2002-2010 for Argentina, and 1990-1999 and 2000-2010 for Brazil. The Marshall-Lerner condition for the long run and the J-Curve for the short run are tested.

However, the expected outcomes were not realized in the respective historical periods under investigation. In the case of Brazil, for instance, the trade balance improved during the period of currency appreciation but worsened during depreciation. These results can be explained by the J-Curve and the Marshall-Lerner condition. According to the J-Curve, depreciation initially leads to increased import prices and no changes in export and import volumes, resulting in a short-term deterioration of the trade balance. However, considering the long run and allowing for volume adjustments, the trade balance improves. The Marshall-Lerner condition states that currency devaluation improves the trade balance in the long term only if the absolute value of both export and import demand elasticities is higher than price elasticities.

Regarding Argentina, the trade balance is negatively correlated with domestic GDP during the period of currency appreciation (1990-2001) and unexpectedly positively correlated with both domestic and foreign output during the period of currency depreciation (2002-2010), indicating that exports and imports moved in tandem.

For Brazil, in the first subperiod under study (1990-1999), which involved an appreciation policy, the results exhibited the anticipated negative correlation between domestic GDP and trade balance. In the second subperiod (2000-2010), characterized by floating and appreciating rates, the trade balance was negatively correlated with domestic GDP and positively correlated with foreign GDP.

Now, let's examine the effects of RER. Real exchange rates showed a positive correlation with the trade balance during periods of depreciated exchange rates in both countries. The Marshall-Lerner condition was verified during the second subperiods for both countries, when Argentina had a depreciating exchange rate and Brazil had a floating and appreciating one. In contrast, this condition did not hold for Brazil's first subperiod, indicating that the trade balance worsened under a fixed exchange rate regime. Furthermore, no evidence of the J-Curve phenomenon emerged for either country. Both countries experienced an improvement in their trade balances in the short term. As the J-Curve was not observed during any period under study, the study concluded that exports were responsive to competitive currency devaluations. In summary, the Marshall-Lerner condition was confirmed only under depreciation policies, while the J-Curve pattern was not observed in either country. However, while Argentina's trade balance worsened in the long term under a depreciation policy but improved under a fixed and appreciated RER, Brazil's trade balance worsened in the long term under a fixed and depreciated RER and improved under floating and appreciating policy.

By drawing insights from this study and applying them to the Brazilian devaluation of 1999, we concur with Costamagna (2014) that competitive

currency devaluation may not be the most effective strategy for enhancing international competitiveness. Additionally, countries run the risk of getting trapped in a cycle of devaluations if the desired results are not achieved.

## **9. Current data of the two economies**

We now describe how Argentine and Brazilian economies have developed after 2016 and their current situations, and we analyse the feasibility of a common currency between them. The findings, if confronted with those required by Mundell and the subsequent economists, can suggest the countries' authorities what was misled in the past and in which direction to move now in order to make the countries more aligned towards the goal of a common currency.

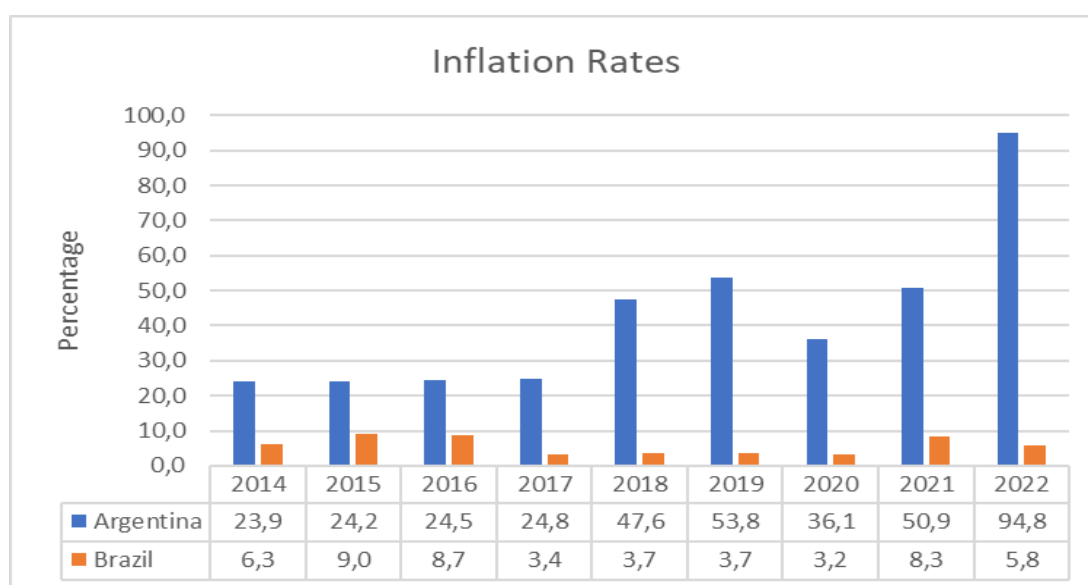
Beyond the necessary, years-long path of progressive political, commercial, and economic integration, currently found only in part in the recent history of Brazil and Argentina, the experience of the European Union and the Euro can indicate which values are relevant to consider in the two economies in order to hypothesize requirements, timing, and methods of increasing monetary integration between the two countries, possibly extendable to other neighbouring states.

### **9.1. Inflation**

The inflation differential between Brazil and Argentina appears to be the biggest obstacle for a possible monetary integration between the two

countries. While in Brazil, the annual price variation has been aligned with that of the major world economies for years, in Argentina, prices are growing abnormally. From annual levels of 20-25% recorded until 2017, it has increased to 50% in 2019-21 and even 95% in 2022.

Figure 9.1



Source: OECD and IMF

## 9.2. Interest rates

The level of interest rates is evidently affected by the enormous inflation differential between the two economies. While in Brazil, interest rates are comparable to those of the major world economies, in Argentina they have been absolutely out of proportion for years and cannot be compared with "normal" ones. It is enough to observe the values of the refinancing rate set by the Argentine Central Bank, which is the pivot of all interest rates. While in 2020 it oscillated between 10% and 15%, in 2021 it reached a level of 40-45%, before falling to values between 20% and 25% in 2022. The BCRA (Banco Central de la República Argentina, BCRA)

constantly manipulates interest rates to contain the increase in the monetary base, in pursuit of its monetary policy objectives.

The Argentine law ensures the BCRA's autonomy from government directives. However, the mandate assigned to the Bank by Argentine legislation is of a so-called "dual" type, which sets as objectives of its monetary policy the maintenance of price stability and financial stability, as well as the pursuit of full employment and sustainable economic growth. Therefore, the BCRA is obliged to provide liquidity for public debt to avoid excessively high interest rates, resulting in an expansion of the monetary base, inflation growth, and currency devaluation.

It should also be considered that given the dramatic conditions of inflation and therefore financial stability in the country, despite the BCRA's formal independence, the government can indirectly influence its decisions through the appointment of board members and control of its budget.

Unlike the BCRA, the Central Bank of Brazil (BCB) has a single mandate. The mandate of the BCB is to maintain price stability and financial stability, in accordance with the law and the government's monetary policy. That is, it does not have to deal with employment levels. However, it must act in line with the government's monetary policy. In practice, inflation targets are set by the government and not by law. Its independence can be said to be limited: it has a certain degree of autonomy, but it is not completely independent of the Brazilian government and parliament. However, in recent years, it has pursued a rather restrictive monetary policy, managing to ensure sufficient price stability (in accordance with international conditions) and, therefore, exchange rate stability. Even during the recent global inflation spikes (in

2021-22), the BCB has been at the forefront of restrictive monetary policy and interest rate hikes, to manage financial stability.

### 9.3. Exchange rates

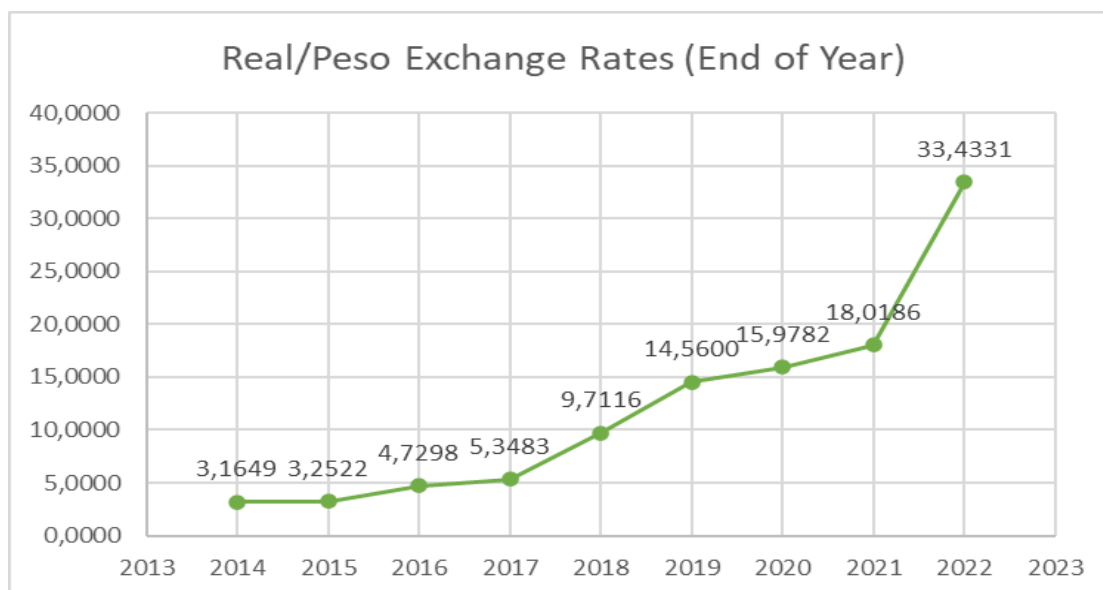
The exchange rate between the Brazilian real and the Argentine peso has been volatile in the last 30 years. There have been periods of strong depreciation of the Argentine currency against the Brazilian real, followed by periods of recovery. The exchange rate has been influenced by factors such as economic policy, political stability, economic growth, and conditions in the international market. For example, during the 2001 economic crisis in Argentina, the peso underwent a strong devaluation against the real.

From 2006 to 2022, the Argentine peso showed increasing weakness against the Brazilian real, with particularly sharp drops in the biennia of 2018-19 and 2021-22. So much so that by the end of 2022, more than 33 pesos were needed to purchase one real, compared to 1.5 pesos at the end of 2006.

On the international markets, during the same period, between 2006 and 2022, the real more than halved its value against the US dollar (with spikes of revaluation, however, in 2008 and 2011): by the end of 2022, 5.2 reals were needed to buy one US dollar, compared to 2 at the end of 2006, while the peso recorded a constant decline (by the end of 2022, 172 pesos were needed to buy one US dollar, compared to 3 pesos required at the end of 2006).



Figure 9.2

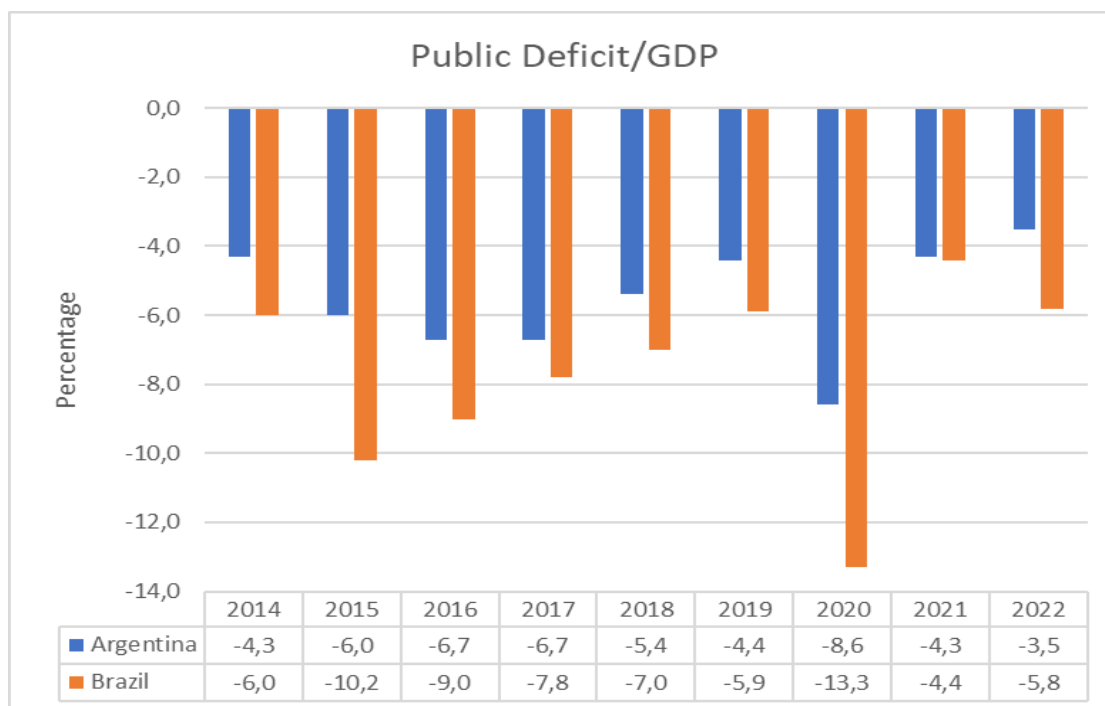


Source: Wise Web

#### 9.4. Governments' current accounts

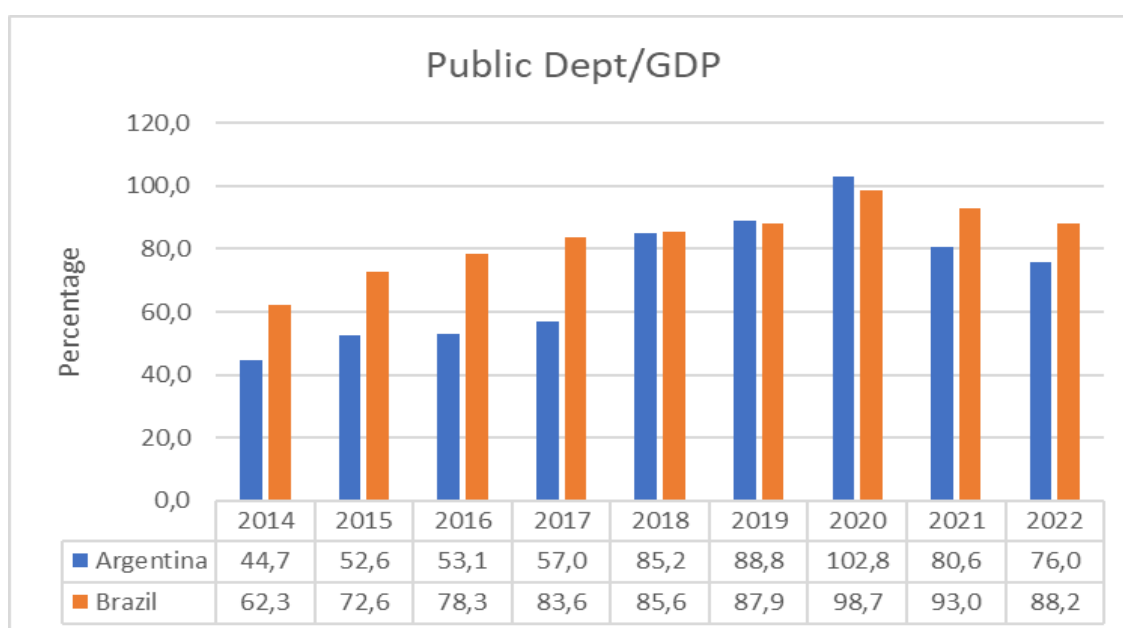
Regarding the levels of annual public deficit as a percentage of GDP, and public debt, the conditions of Brazil and Argentina are currently not as distant as they are for inflation and interest rates. It should be noted, however, that Argentina has been in situations of financial default in the last two decades, with consequent forced restructuring of its state debt. Therefore, the credibility of the two public finances on financial markets is quite different. Unlike Brazil, Argentina encounters significant difficulties in placing its debt securities, especially internationally, with consequent criticalities for the monetary policy of its Central Bank (BCRA), which is constantly forced to choose between raising interest rates and expanding the monetary base, within its "dual" mandate of containing the inflation rate, but also pursuing full employment.

Figure 9.3



Source: IMF

Figure 9.4



Source: IMF

## **10. The new hypothesis: SUR**

The idea of a common currency has been on the agenda of government officials since the creation of Mercosur in 1991. However, this idea has never materialized and has remained a theoretical concept.

Recently, a new proposal for a common currency has emerged. In 2022, Luiz Inácio Lula da Silva, a member of the left-wing Workers' Party, was elected as the President of Brazil, succeeding Jair Messias Bolsonaro. Lula is no stranger to the position, having already governed the country between 2003 and 2010. With Lula's return to the presidency, relations with Argentina have resumed, as Alberto Ángel Fernández, the Argentine President since 2019, also belongs to a left-wing party, Frente de Todos.

In 2019, shortly after his election, Bolsonaro, who belonged to the right-wing Liberal Party, proposed the idea of a common currency with Argentina. The proposal was accepted by the Argentine President at the time, Mauricio Macri, who belonged to a center-right political party called Republican Proposal. Despite the support of both right-wing leaders, the plan did not progress beyond meetings of their respective finance ministers. This was due to the opposition of the Central Bank of Brazil, which considered that entering into such a project with an unstable economy like Argentina's would be too risky. Moreover, Brazil's plan to isolate itself from other Latin American countries, as evidenced by its departure from CELAC in 2019, contradicted the idea of a common currency as a means to promote integration.

Despite the unsuccessful attempt of Bolsonaro and Macri to establish a common currency, Lula made it one of the main goals of his presidential

campaign in 2022, along with re-joining CELAC. After winning the elections in November 2022, Brazil resumed its membership in CELAC, and Lula officially became the President on January 1, 2023. On January 23, 2023, during a summit of CELAC, Lula presented the project for a common currency, named Sur.

The main idea behind the Sur is to reduce Argentina and Brazil's dependence on the US dollar. A common currency would decrease operating costs and external vulnerability caused by US monetary policies, contain inflation, and promote integration by increasing commercial and financial flows between the two countries. Unlike the Euro, the Sur would not replace the Brazilian Real and Argentine Peso, at least in the short run. Instead, it would function as a common currency with the Brazilian Real having a higher weight than the Argentine Peso in the determination of the exchange rate because it is more liquid in the international market. The Sur would serve as a unit of account for boosting interregional trade, while Argentina and Brazil would continue to use their own currencies for internal transactions and adopt the Sur for trading between themselves.

Currently, when the two countries want to trade, they must convert their currencies into US dollars and then translate them into the other country's currency. This process is time-consuming and exposes them to volatility in case of US dollar fluctuations against either of their currencies. Under the Sur, the exchange rate would be pegged to a range of prices, similar to the ECU in Europe for 20 years before the introduction of the Euro (Capurro, 2023).

Brazil's finance minister, Fernando Haddad, and foreign minister, Mauro Luiz Iecker Vieira, are actively working on the Sur project. Haddad, who previously proposed a digital common currency, believes in the efficiency of sharing a currency and has shifted his focus to Sur. Vieira acknowledges the benefits and necessity of a common currency but is more cautious about the project's long-term implementation. Argentine President Fernandez supports the project and emphasizes Argentina's commitment to it, but ultimately, the project's realization primarily depends on Brazil. Argentine Minister of Economy, Sergio Massa, agrees with Vieira's cautious approach and highlights the importance of studying critical issues such as the role of central banks and fiscal policies to ensure a successful implementation of the Sur.

## **11. Costs of having a single currency**

In addition to bring benefits, a single currency produces a set of consequences to which both Argentina and Brazil are not prepared yet. Thus, they can be dangerous for a country and they can damage its economy, if it does not cope with it in a proper way. They include: the loss of monetary policy autonomy, which can be detrimental to either economy in case of different necessities and economic conditions; exacerbated economic imbalances between countries, as some countries may be more competitive than others in certain industries, leading to disparities in trade and capital flows; difficulties in adjusting to the new currency and consequent economic instability, especially without fiscal integration; loss of national identity; increased debt burden for countries, given that countries with weaker economic performance may find it more

difficult to borrow money, as they are perceived as higher risk borrowers; exit difficulties, limiting the flexibility of countries to respond to changing economic circumstances; disparities in unemployment and economic growth rates within the regions, if countries present structural differences; social tensions; lack of democratic control, since decisions about monetary policy are made by unelected central bank officials.

Considering these costs, as well as the existing macroeconomic disparities between Argentina and Brazil, many renowned economists have expressed skepticism as they learned about the project taking shape. They believe that both countries are not yet ready to embark on such a complex undertaking. Their skepticism stems from various factors. Rai (2023) underlines the historically unstable economies of both countries, frequent currency changes, disparities in current inflation rates and differences in central banks' autonomy (where the Argentine central bank prints money at the government's request, while the Brazilian central bank operates independently). Frieden (2023) stresses the reduced flexibility in each country's monetary policy. These reasons highlight the infeasibility and inconveniences of adopting a single currency from Brazil's perspective.

However, Pozo (2023) highlights Brazilian concerns about the possibility of Argentina strengthening its relationships with other countries at the expense of their existing alliance. This potential outcome poses a threat to Brazil's primary objective of expanding its influence and dominance in Latin America. Brazil recognizes that enhanced trade is essential for achieving this goal. Therefore, despite the concerns and the perceived inconvenience of the Sur project from the Brazilian perspective, it is still being actively discussed and considered. This is because Brazil sees the potential benefits of closer economic integration and recognizes the

importance of not allowing Argentina to solidify stronger alliances with other nations, which could hinder Brazil's regional aspirations.

This perspective helps to balance the costs and challenges that Brazil would face in adopting a single currency, as it highlights the strategic considerations and the broader geopolitical implications for Brazil's position in Latin America.

## Conclusions

The project under consideration represents a significant potential economic impact, with estimates suggesting it could account for 5% of global GDP, on par with the current contribution of the Euro (Bonotti, 2023). However, it is important to note that the process of aligning macroeconomic policies and goals took around 35 years for European member countries to achieve. Currently, Argentina and Brazil are quite far apart in terms of their economic conditions, with Argentina experiencing 100% inflation and a significant depreciation of the Peso, while Brazil has a lower inflation rate of 5.8% and a stronger currency. These differences are reflected in their monetary and fiscal policies, with Argentina printing money to balance its budget deficit, while Brazil has an independent central bank that contributes to a less volatile currency. The feasibility of the project is particularly contingent on Argentina's ability to alter the autonomy of its central bank and reform its monetary policy (Capurro, 2023). Without such interventions, inflation is likely to remain persistently high, as the government will be reluctant to impose the necessary internal austerity measures and restrictive budget policies needed to contain inflation and stabilize the exchange rate. In order to address the issues the country is facing, the Argentine authorities must exhibit courage in taking this step, recognizing that increasing the quantity of money in circulation may be an easier approach but not an effective solution.

(Cancelliere, 2014) Central bank independence has been an important factor for many countries in achieving economic stability and growth. Italy's experience of 1981 provides a useful example of this. At that time, Italy was experiencing high levels of inflation, which was seen as a major



obstacle to its integration into the European Union. In order to address this issue, the government of Italy decided to grant independence to its central bank, the Bank of Italy, separating it from the Department of the Treasury. This separation of powers between the central bank and the government was significant, as it allowed the Bank of Italy to operate without political interference and focus on controlling inflation. The new central bank governor, Carlo Azeglio Ciampi, was given broad powers to implement monetary policy, including the ability to raise interest rates, which helped to bring inflation under control. In addition to providing greater monetary stability, the central bank's independence also helped to establish the credibility of the Italian government and its commitment to sound economic policies. This was critical in convincing other European countries to allow Italy to join the European Union and eventually adopt the Euro as its currency. Overall, Italy's experience demonstrates the importance of central bank independence in achieving economic stability and growth. By granting independence to the Bank of Italy, Italy was able to control inflation, establish credibility with other countries, and eventually join the European Union, all of which helped to pave the way for economic growth and prosperity (Cancelliere, 2014).

While separating the central bank from the government would be a crucial step for Argentina in developing a common currency with its neighbour, it is not the only requirement. Alignment of macroeconomic variables and increased trade among countries are also fundamental. Moreover, Argentina and Brazil must exercise caution in deciding which steps to take and when to take them. The European Economic Area (EEA) Agreement offers a successful model for a monetary union and could provide guidance, but modifications are necessary due to the differences in the structures of the Latin American economies.

Hastily implementing the project could have detrimental consequences, with short-term benefits but medium- and long-term economic developments leading to an unsustainable monetary union. To avoid these costs, the countries must be patient and recognize that they are entering into a project that requires time to deliver benefits. A well-planned and gradual approach is crucial to ensure the success of the monetary union in the long run. The countries must carefully weigh the costs and benefits of each step and proceed accordingly. By doing so, they can establish a stable and prosperous economic union that benefits both countries in the long term.

Argentina also owes over \$40 billion to the IMF, while Brazil has around \$300 billion in foreign exchange reserves. Given these disparities, the potential benefits of a joint currency may be more significant for Argentina, as it could help stabilize their currency fluctuations. For Brazil, the benefits may come in the form of increased regional influence (Busch, 2023). Nonetheless, analysts suggest that the project may face challenges given the current disparity in benefits and the potential for opposition from the Brazilian National Congress.

Both Argentina and Brazil have a high export capacity for commodities, but they differ significantly in terms of their fiscal stability and industrial structure. Nevertheless, commercial flows between the two countries have increased by 21% in 2022 compared to the previous year, reaching a value of 26.4 US billion dollars. While this increase indicates growing cooperation and integration, trade between the two countries represents only 6% of their respective GDPs, which is currently insufficient.

Although the project initially involves only Argentina and Brazil, there are plans to extend the unit of account, which could potentially become a currency, to all the four countries of Mercosur and later to all 33 Latin American countries of CELAC. However, the countries involved in this initiative are presently too far apart in terms of their economic, political, and ideological differences. By initiating work on the project now, there is potential for it to take shape in the future, but it is important to acknowledge that it will require a significant amount of time and effort.

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